

## Europass Curriculum Vitae



### **Personal information**

First name(s) / Surname(s) | **Dimosthenis Sarigiannis** 

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Fax(es)

E-mail denis@eng.auth.gr

Nationality | Greek

Date of birth | 22/12/1966

Gender | Male

Work experience

Dates | 22/06/2018 - to date

Occupation or position held Professor of Environmental Engineering, School of Chemical Engineering, Aristotle

University of Thessaloniki

Main activities and responsibilities

Director of the Technologies Department, the Environmental Engineering
Laboratory and the HERACLES Research Center for the Exposome and Health.

Main focal areas of my research are:

 Chemical hazard and risk assessment – classification and labelling of chemical substances and preparations

 Environment and health – development of integrated systems for the assessment of environmental pollution impact on public health

 Advanced technologies of environmental pollution monitoring and management, and for human exposure assessment to environmental chemicals

 Industrial ecology – design of industrial systems aiming to reduce ecological footprint and public health impact

Name and address of employer | Aristotle University of Thessaloniki, University Campus, Thessaloniki 54124,

Greece

Type of business or sector University

Dates 3/12/2010 - 21/06/2018

Occupation or position held | Associate Professor of Environmental Engineering, School of Chemical

Engineering, Aristotle University of Thessaloniki

Main activities and responsibilities

Director of Environmental Engineering Laboratory. Main focal areas of my research are:

- Chemical hazard and risk assessment classification and labelling of chemical substances and preparations
- Environment and health development of integrated systems for the assessment of environmental pollution impact on public health
- Advanced technologies of environmental pollution monitoring and management, and for human exposure assessment to environmental chemicals
- Industrial ecology design of industrial systems aiming to reduce ecological footprint and public health impact

Name and address of employer

Aristotle University of Thessaloniki, University Campus, Thessaloniki 54124, Greece

Type of business or sector

University

Dates

1/10/2015 – to date

Occupation or position held

Associate Professor of Environmental Health Engineering, Institute for Advanced Study of Pavia, Italy

Main activities and responsibilities

Director of Environmental Health Laboratory. Main focal areas of my research are:

- Chemical hazard and risk assessment classification and labelling of chemical substances and preparations
- Environment and health development of novel technologies and methods to unravel the exposome
- Advanced technologies for environmental health monitoring and human biomonitoring
- Translational research towards the development of public health prevention programs

Name and address of employer

Institute for Advanced Study of Pavia (IUSS), Palazzo del Broletto – 15, Piazza della Vittoria, 27100 Pavia, Italy

Type of business or sector

ctor University

Dates

16/02/2009 - 30/11/2010

Occupation or position held

Scientific Coordinator at the Institute for Health and Consumer Protection (IHCP) of the European Commission's Joint Research Centre, and Research Director for Consumer Products and Nutrition

Main activities and responsibilities

Coordination of the scientific activities of the Institute for Health and Consumer Protection (ca. 300 scientists) in direct support to the Institute Director. Coordination of the policy aspects of the IHCP work on consumer products and nutrition – maintenance of trusted relationships with customers and stakeholders. Scientific leadership and management of 12 international and Europe-wide research projects.

Name and address of employer

Institute for Health and Consumer Protection, Joint Research Centre, European Commission–Ispra (VA), Via E. Fermi 1, 21021, Italy

Type of business or sector

European Research Centre

Dates

01/01/2008 - 15/02/2009

Occupation or position held

Research Director, Consumer Product Safety and Quality and European Reference Laboratory for Food Contact Materials

Main activities and responsibilities

Leading a team of 40 scientific officers, contractual agents and DNEs, with an annual budget of ca. 2.5 m€ including laboratories and assessment techniques for testing the safety of chemicals in articles. Acting also as liaison with the Joint Research Centre units contributing to the Chemicals Safety Regulation (REACH) and the Globally Harmonized System for Classification and Labelling of Chemical substances, implementation process and providing support to the Consumer Policy, the Textiles labelling directive and the Food and Feed safety Regulation and the Environment and Health Action Plan.

Name and address of employer

Physical and Chemical Exposure Unit, Institute for Health and Consumer Protection, Joint Research Centre, European Commission—Ispra (VA), Via E. Fermi 1, 21021, Italy

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Type of business or sector | E

European Research Centre

Dates

01/11/2005 - 31/12/2007

Occupation or position held

Research Director, Human Exposure to Environmental Stressors and Health Effects

Main activities and responsibilities

I was leading a team of 39 scientific officers, contractual agents and DNEs, with an annual budget of ca. 900 k€ including laboratories and assessment techniques for estimating human exposure to environmental agents and the respective health effects. Acting also as liaison of all JRC units contributing to the REACH and the GHS CLP implementation process and providing support to the Environment and Health action plan.

Name and address of employer

Physical and Chemical Exposure Unit, Institute for Health and Consumer Protection, Joint Research Centre, European Commission– Ispra (VA), Via E. Fermi 1, 21021, Italy

Type of business or sector

European Research Centre

Dates

01/02/2004 - 31/10/2005

Occupation or position held

Main activities and responsibilities

I was leading a team of 35 scientific officers and auxiliaries, being responsible for coordinating and managing the scientific and technical support of the JRC to the Community legislation on safety of chemicals, including the risk assessment and classification & labelling procedures for new and existing chemicals and biocides, harmonized development of testing methods, secure management of the EU database cluster on chemical substances. Coordination of the work of Member States and Candidate Countries in the technical implementation of the chemicals safety legislation. Provision of support to the REACH Regulation Implementation Projects. Responsible for managing on behalf of the Director the JRC support to the development of the EU Sustainable Chemistry Platform.

Research Director, Assessment of Chemicals/European Chemicals Bureau

Name and address of employer

Institute for Health and Consumer Protection, Joint Research Centre, European Commission—Ispra (VA), Via E. Fermi 1, 21021, Italy

Type of business or sector

University - Researcher

Dates

1/11/2001 - 31/01/2004

Occupation or position held

Assistant to the Joint Research Centre Director General, responsible for scientific affairs

Main activities and responsibilities

Responsible for managing on behalf of the Joint Research Centre Director General (ca. 2500 scientists) the following dossiers:

- Environment and Health Strategy and Action Plan,
- · EU Climate Change Strategy,
- Sustainable Chemistry Platform,
- REACH Regulation (EU Chemical Safety legislation),
- · Classification and Labeling of chemical substances,
- Hydrogen and Fuel Cells Platform,
- Global Monitoring for Environment and Security,
- Consumer Policy,
- Civil Protection,
- response to threat of terrorism,
- Environmental Technologies action plan,
- GMOs legislation,
- Forest Focus.

Coordination and representation of the JRC in the interservice group on REACH within the European Commission, following both the scientific, technical and policy aspects of the development of the legislation.

Development of the JRC initiative on the European Human Envirogenomics Project to understand the gene-environment interactions and their link with human susceptibility to environmental stressors.

Name and address of employer

Joint Research Centre, European Commission, square de Meeus, 8, B-1050, Brussels

Type of business or sector

European Research Centre

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For more information on Europass go to http://europass.cedefop.europa.eu © European Communities, 2003 20060628 Dates 1/11/2000 - 31/10/2001

Occupation or position held Strategy Manager

Main activities and responsibilities | Responsible for the definition, implementation and monitoring of the scientific

strategy of the Institute for Health and Consumer Protection in particular with regard to integrated health risk assessment of environmental stressors and the EU White

Paper on chemicals safety

Name and address of employer | Institute for Health and Consumer Protection, Joint Research Centre, European

Commission-Ispra (VA), Via E. Fermi 1, 21021, Italy

Type of business or sector | European Research Centre

Dates 1/09/2000 - 31/10/2001

Occupation or position held | Scientific advisor to the Minister of the Environment

Main activities and responsibilities Part of the high-level Greek delegation at The Hague and Bonn conferences on the

Kyoto protocol as advisor to the Minister;

Part of the Greek delegation at the Environment Councils in 2000 and 2001 as advisor to the Minister. In this capacity contributed to the Council debate on the White Paper on Chemicals Safety. Responsible for the Greek government's initiative on facilitating the harmonized penetration of alternative vehicles in the internal market. Responsible for the national position paper at the Gothenburg summit on sustainable development.

Responsible for the bilateral co-operation programmes with Balkan countries on waste management, sustainable development and climate change

Responsible for the national policy initiatives on sustainable management of waste from electrical and electronic equipment

Responsible for the creation of the Hellenic Centre for Innovation and Sustainable Development in Athens, Greece with environmental technology transfer and climate

change mitigation and adaptation policies as a main objective.

Name and address of employer | Ministry of the Environment, Spatial Planning and Public Works, Hellenic

Government, Athens, Greece

Type of business or sector | Government

Dates 1/04/1997 - 31/10/2000

Occupation or position held Head of sector

Main activities and responsibilities | Dynamic modeling of complex systems to highlight the technology-environment

interface. Implementation of complex socio-economic / environmental systems (input/output) models and life cycle analysis to assess the environmental and health externalities of novel energy technology. Data and model fusion incorporating satellite, ground-based environmental monitoring with modeling for integrated

strategic environmental assessment.

Integrated comparative assessment of advanced energy systems with regard to

their economic/ environmental performance

Design and implementation of an integrated information system for on-line control of the risk due to hazardous goods transport in support of the Italian Ministry of the

Environment

Name and address of employer Risk Management and Decision Support Unit, Institute for Systems, Informatics and

Safety, Joint Research Centre, European Commission – Ispra (VA), Via E. Fermi 1,

21021, Italy

Type of business or sector | European Research Centre

Dates 1/04/1996 - 31/03/1997

Occupation or position held | Auxiliary scientific officer

Main activities and responsibilities Design of the waste recycling system currently employed in Lisbon for integrated

waste management (EUREKA programme)

Name and address of employer | Industry and Environment Unit, Institute for Systems, Informatics and Safety, Joint

Research Centre, European Commission - Ispra (VA), Via E. Fermi 1, 21021, Italy

Type of business or sector | European Research Centre

Dates 1/04/1994 - 31/03/1996

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Occupation or position held Post-doctoral fellow

Main activities and responsibilities Complex socio-technical and environmental systems modelling for EU policy

support with particular reference to regional development and innovation.

Industry and Environment Unit, Institute for Systems, Informatics and Safety, Joint Name and address of employer

Research Centre, European Commission – Ispra (VA), Via E. Fermi 1, 21021, Italy

Type of business or sector European Research Centre

> Dates 1/5/1992 - 30/09/1992

Occupation or position held Visiting scientist

Main activities and responsibilities Consulting and conceptual design of an advanced dynamic simulation code for the

modeling and automation needs of the tritium processing pilot plant

Los Alamos National Laboratory. Tritium Systems Test Assembly. Los Alamos, NM Name and address of employer

87545.

Type of business or sector Research

> 1/08/1991 - 31/03/1994Dates

Occupation or position held Graduate student researcher

Main activities and responsibilities Development and application of advanced computational schemes for the efficient

modeling, simulation, optimization and safety analysis of integrated chemical process systems resulting in Doctoral Dissertation. Application of this methodology to the investigation of the optimal design (principally with regard to public health and safety) for the fuel processing plant in currently under design Magnetic Fusion

Reactors. Contribution to the design of the fuel cycle of ITER.

University of California at Berkeley, CA, USA Name and address of employer

Type of business or sector University

> 1/09/1990 - 31/07/1991 Dates

Occupation or position held Researcher

Main activities and responsibilities Modeling and automatic control scheme design of for the control of particulate

emissions in cement kilns (funded by Lafarge-Coppee SA.).

Name and address of employer Laboratoire de Genie et Informatique Chimiques, Ecole Centrale Paris, Chatenay-

Malabry 92295, France.

Type of business or sector University

> Dates 15/08/1989 - 30/06/1990

Occupation or position held Research Assistant

Main activities and responsibilities Exploratory comparative study of the safety and environmental aspects of the fuel

cycle for magnetic fusion reactors resulting in Master's Thesis

Fusion Environmental and Safety Group, University of California at Berkeley, Name and address of employer

Berkeley, CA 94720.

Type of business or sector University

> 25/03/1989 - 14/07/1989 Dates

Occupation or position held Researcher

Development of a relativistic chemical database focused on supramolecular Main activities and responsibilities

chemistry and application of information theory to the assessment of

crystallographic data analysis algorithms.

Laboratoire de Physique, Centre Pharmaceutique, Universite de Paris XI, Name and address of employer

Chatenay-Malabry, France

Type of business or sector University

> **Dates** 1/06/1988 - 31/08/1988

Occupation or position held Research Assistant

Main activities and responsibilities Assessment of microwave spectroscopy techniques as a tool for on-line quality

control of soy proteins.

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Name and address of employer R&D Dept. of AARHUS OLIEFABRIK S/A, Denmark

Type of business or sector | Industry

Dates 1/03/1988 - 30/04/1988

Occupation or position held Research Assistant

Main activities and responsibilities | Computer simulation and molecular graphics of the inclusion of essential oil

molecules into cyclodextrin and other organic hosts.

Name and address of employer | Laboratoire de Physique, Centre Pharmaceutique, Universite de Paris XI,

Chatenay-Malabry, France

Type of business or sector University

Dates 1/09/1988 - 25/03/1989

Occupation or position held Research Assistant

Main activities and responsibilities | Development of mathematical and computational tools for the design and analysis

of sustainable bio-technologies for the production of bio-energy and high-added

value products resulting in M.Eng. Thesis

Name and address of employer | Bio-resources Technology Group, Department of Chemical Engineering, National

Technical University of Athens, Greece

Type of business or sector University

classification

**Education and training** 

Dates | 1991 – 1994

Title of qualification awarded PhD in Engineering (advisors: Prof. John P. Holdren and T. Kenneth Fowler)

Principal subjects/occupational skills Health risk assessment and safety optimization of advanced fuel cycles. Modeling and safety optimisation of the fuel processing system in magnetic fusion reactors.

Environmental risk assessment of complex hazardous information, chemical

process and energy systems, energy and environmental economics

Name and type of organisation providing education and training University of California at Berkeley, Berkeley, CA, USA

Level in national or international (44 Physical Sciences) Level 6, PhD

Dates 1989 – 1990

Title of qualification awarded MSc. In Energy and Resources (advisor: Prof. John P. Holdren)

Principal subjects/occupational skills Safety and risk assessment of energy, information and industrial technologies; covered natural resource and energy economics and environmental management policy,

business administration

Name and type of organisation providing education and training University of California at Berkeley, Berkeley, CA, USA

Level in national or international classification (44 Physical Sciences) Level 6, MSc.

Dates | 1984 – 1989

Title of qualification awarded M.Eng. in Chemical Engineering (advisor: Prof. E.G. Koukios)

Principal subjects/occupational skills All the main modern subjects of Chemical Engineering: Analytical, Computational, Statistical, Organic, Inorganic, Physical, Theoretical, Experimental and Protein

Chemistry, Process Engineering, Industrial Economics and Macroeconomics,

Operations Research, Chemical plant design and optimisation.

Name and type of organisation providing education and training National Technical University of Athens, Greece

Level in national or international classification (44 Physical Sciences) Level 6, MSc.

Personal skills and competences

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## Mother tongue(s)

#### Greek

# Other language(s) Self-assessment

European level (\*)

age(s) Englis

English, French, German, Spanish, Italian

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Understanding			Speaking			Writing	
Listening		Reading	S	Spoken interaction		ooken production	
EN	Excellent	Excellent		Excellent		Excellent	Excellent
FR	Excellent	Excellent		Excellent		Excellent	Excellent
D	Excellent	Excellent		Very good		Very good	Excellent
ES	Excellent	Excellent		Excellent		Excellent	Excellent
I	Excellent	Excellent		Excellent		Excellent	Excellent

### Language

(\*) Common European Framework of Reference for Languages

Social skills and competences

Team spirit; Good ability to adapt to multicultural environments, gained though my 21 years of work experience in several countries. Good social communication skills; gained through my involvement in many inter-institutional and international research projects.

Organisational skills and competences

More than 15 years of management experience at the European Commission from head of sector to Institute strategy manager, Assistant to the Director General, Research Director (with 40-strong teams). President of the grant holders (research fellows) association of the Joint Research Centre (1995).

Technical skills and competences

Good knowledge of analytical, spectroscopic and physical/chemical analysis techniques. Expert in biochemical, physiology-based pharmacokinetic and statistical modelling. Applied toxicology, advanced epidemiology and risk assessment and management. Cost-benefit analysis, dynamic economic modelling.

Computer skills and competences

Main skills include long-time experience in structured and object-oriented programming.

20 years of programming experience in Fortran, Basic, C, C++, and metalanguages such as DYNAMO++, AcslXtreme, @Risk, Matlab, Simulink, MCSIM, ArcGIS, R; 7 years of experience in Unix, MS-DOS, and MS Windows environments.

Artistic skills and competences

Piano, saxophone, musical composition.

Other skills and competences

Specialist in safety in the chemical industry, professional education diploma, Department of Chemical Engineering, National Technical University of Athens, Greece

European Registered Toxicologist, European Society of Toxicology Member, US Society of Toxicology

Senior Member, American Institute of Chemical Engineers

Driving licence

Greek driving license with European use with category of vehicle B. US driving license issued from the state of California.

## Additional information

### OTHER PROFESSIONAL ACTIVITIES

2015 – to date: Director of the HERACLES research center on the Exposome and Health in the frame of the Interdisciplinary Research and Innovation Center of Aristotle University of Thessaloniki (AUTH)

2016: Fellowship Selection Committee on behalf of the Onassis Foundation.

2015 – to date: Expert evaluator for research projects in environment and health on behalf of the Ministry of Research in Slovenia and in Ireland.

2013 – to date: Temporary Advisor to the WHO on combined exposure to indoor stressors, human biomonitoring, endocrine disrupting chemicals, environmental health economics, waste and health

2015 – to date: National representative of the Hellenic Government in the European Human Biomonitoring Initiative of the European Commission

2015 – to date: Member, Environment Committee, Aristotle University of Thessaloniki, Greece

2015 – to date: Member, International Relations Committee, Aristotle University of Thessaloniki, Greece

2014 - to date: Vice-President, Hellenic Society of Toxicology

2014 - to date: Chair, Scientific Committee of Citizens' Inspectorate for Sustainable Development

2014 - to date: Member, Advisory Board, Benaki Institute for Plant Pathology

2013 – to date: National expert representing the Hellenic Government in the Program Committee on the Environment and Climate Change of the Horizon 2020 research program of the European Commission

2013 - to date: President, Mediterranean Scientific Association for Environmental Protection

2011 - to date: Editor-elect, Journal of Human and Ecological Risk Assessment

2011: Chair, Evaluation Committee of the Unit Peritox (Perinatality and Toxic Risks) of the University of Picardie Jules Vernes (Medical School), on behalf of the French Agency for the Evaluation of Research and of Higher Education Establishments.

2010 - 2013: President of the Board of Directors, Aegean Energy Agency, los, Greece.

2010 – to date: Editor, Journal of Pharmacogenomics and Pharmacoproteomics, (Omics Publ. Group)

2006 – to date: Member of the Board of Directors and Visiting Professor at the Master's Programme on Environmental Chemical Risk and Toxicology, University of Pavia Medical School

2006-2011: Programme evaluator, French National Research Programme on Sustainable Chemistry and French National Agency for Academic Research

2004 – 2010: Member of the Scientific Committee on Chronic Risks, French National Institute for Industrial and Environmental Risk (INERIS)

2004 - 2010: Member of the EU Health and Environment Working Party

2004 – 2010: Member of the European Commission Interservice Group on the Consumer Policy

2015 – to date: Associate Editor of the international journal Food and Chemical Toxicology

2004 – to date: Associate Editor of the international journal Focus: Water, soil, air pollution (Wiley)

2004: Guest Editor, Fresenius Environmental Bulletin (PSP Publ.)

2003: Project evaluator for the research platform on advanced catalysis for sustainability of the Dutch government

2002 - 2008: Member of the EU Health Security Committee

2002 – 2003: Secretary of the European Commission expert group on chemical intermediates

2002 - 2004: Secretary of the JRC Scientific Committee

2001 - 2002: Project evaluator for the Growth and Information Society Technologies programmes of FP5 RTD Programme in the EU

2001: Member of the evaluation and recruitment committee for specialized scientific staff in climate change research for the European Commission's Joint Research Centre

2000 – 2004: Representative of the European Commission to the International Energy Agency working group on hydrogen systems integration.

1997 – to date: Reviewer for: Journal of Hazardous Materials, Fresenius Environmental Bulletin, CLEAN: Water, Air, Soil Quality, Environment International, Journal of Applied Remote Sensing, Journal of Hazardous Materials, Environmental Research, Food and Chemical Toxicology, Toxicology, Toxicology Letters, Science of the Total Environment, Atmospheric Environment, Journal of Environmental Management, Journal of Air Pollution, Journal of Exposure Science and Environmental Epidemiology.

### TEACHING EXPERIENCE

2017 – to date: Visiting Professor at the graduate school on toxicology at University of Paris Descartes

2017 – to date: Professor at the MSc program on Pharmacological Research and Drug Development at the School of Pharmacy of Aristotle University of Thessaloniki.

2017 (February 7-10): Co-director and organizer of the international training school on industrially contaminated sites and public health in Thessaloniki under the auspices of WHO and the Italian Public Health Institute (ISS)

2016 – to date: Director and Professor of the PhD program on Environmental Chemical Risk, School for Advanced Study (IUSS), Pavia, Italy

2016 – to date: Professor at the MSc programs on (a) occupational, environmental and pharmacological risk assessment and management and (b) on environment and health at the Medical School of the University of Athens, Greece

2015 – to date: Professor at the Master's program on Toxicology, University of Crete, Greece

2015 to date: Professor at the MSc program in Chemical Engineering at Aristotle University of Thessaloniki

2015 – to date: Professor on Environmental Risk, International Master's program on Understanding and Managing Emergencies, Institute for Advanced Study (IUSS), Pavia, Italy

2016: Visiting Professor at the International Summer School on the Exposome organized by the Rollins School of Public Health at Emory University (Atlanta, GA, USA).

2015 – to date: Professor at the Master's program on Toxicology, University of Thessaly, Greece

2015 – to date: Associate Professor of Environmental Health Engineering, School for Advanced Study of Pavia, Italy.

2006 – to date: Visiting Professor at the M.Sc. Programme on Toxicology and Environmental Risk, University of Pavia Medical School

2010 – to date: Associate Professor of Environmental Engineering at the Aristotle University of Thessaloniki, with particular emphasis on environment and health and chemical risk assessment

2002: Invited Lecturer on information fusion for modeling spatial environmental phenomena, graduate programme on Geo-informatics, Department of Geography, University of the Aegean.

1998: Invited Lecturer on energy conservation and EU environment and energy policy, Interdepartmental graduate programme on Energy Engineering, Aristotle University of Thessaloniki.

1992: Invited Lecturer on thermodynamics of energy systems at the Department of Urban Studies and Planning, Massachusetts Institute of Technology.

1991: Graduate Student Instructor on interdisciplinary energy analysis at the Energy & Resources Group, University of California, Berkeley.

1990: Teaching Assistant on energy efficiency at the Physics Dept, University of California, Berkeley.

#### MEMBERSHIP IN PROFESSIONAL SOCIETIES

- 1. Society of Biological Engineering, since 2014.
- 2. Society of Environmental Toxicology and Chemistry, since 2011.
- 3. EUROTOX, since 2011.
- 4. Vice-President of Hellenic Society of Toxicology, since 2014.
- 5. International Society for Environmental Epidemiology, since 2009.
- 6. Society of Toxicology, since 2008.
- 7. International Society for Exposure Science, since 2005.
- 8. Air & Waste Management Association, since 2003.
- 9. American Association for the Advancement of Science, since 2000.
- 10. Mediterranean Scientific Association for Environmental Protection, since 1995, member of the Executive Board since 2003, secretary-general since 2005, President since 2013.
- 11. President of the JRC grant holders association, 1995
- 12. Senior Member, American Institute of Chemical Engineers, since 1993.
- 13. American Physical Society, since 1991.
- 14. Technical Chamber of Greece, since 1989.
- 15. European Federation of Chemical Engineers, since 1989.

#### **RECENT AWARDS**

Excellence Prize: Aristotle University of Thessaloniki, January 31, 2017. Award for international scientific recognition of toxicological contributions to the safety of chemicals and drugs.

Excellence prize: Aristotle University of Thessaloniki, in Thessaloniki, March 31, 2016. Award for the highest received amount of Funding from competitive European Comission funded Projects for the years 2014-2015 among all members of the AUTH academic community (2500 Professors).

Bo Holmstedt Award: the Federation of European Toxicologists and European Societies of Toxicology and the Bo Holmstedt Foundation awarded me with the prestigious Bo Holmstedt prize for the toxicological contribution to the safety of chemicals and pharmaceuticals and more in particular the contribution on the development, application and integration of the exposome concept in toxicology. 14 September 2015, in Porto, Portugal.

Best poster award in the 18th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region took place from September 26 to 30, 2015 in Crete, Greece for the poster authored by E. Handakas, D. Sarigiannis, I. Manariotis, P. Yannopoulos, I. Zarkadas, titled "Decision support tool for urban solid waste management".

Excellence prize: Aristotle University of Thessaloniki, in Thessaloniki, September 21, 2011. For receiving award on the 50<sup>th</sup> Anniversary Annual Meeting and ToxExpo (Society of Toxicology) conference, from the Department of Mixtures toxicology. Presentation titled "*A computational framework for cumulative risk assessment*".

Award for the best presentation on the 50<sup>th</sup> Anniversary Annual Meeting and ToxExpo (Society of Toxicology) conference, from the Department of Mixtures toxicology. Presentation titled "*A computational framework for cumulative risk assessment*".

### **INVITED TALKS / CHAIRS**

Hellenic Association of Public Health and National School of Public Health, invited talk at the "12<sup>th</sup> Panhellenic conference of Public health and Health Services", in Athens, Greece, March 19-21, 2018. Lecture titled "The relationship between toxicity and chemical composition of aerosols in the ambient air of Greek cities; a crisis story".

Institute for Health Metrics and Evaluation and the Global Alliance on Health and Pollution, invited talk at the "2018 GBD-Pollution and Health Workshop", in Seeatle, USA, March 1-2, 2018. Lecture titled "Air pollution and the exposome".

Draeger Hellas, in Athens, Greece, January 26, 2018. Invited talk, lecture titled "Integration of data and methods towards health and safety".

Invited talk as Principal Investigator at the Workshop organised by the iGEM Greece 2017 team that was held in Thessaloniki, Greece, December 18, 2017. Lecture titled "**Synthetic biology and precision prevention**".

World Health Organisation, invited talk at the Workshop "Setting research priorities in environment and health" in Bonn, Germany, November 30 – December 1, 2017. Lecture titled "Research for precision prevention".

Institute for Global Health of Barcelona (ISGlobal). Invited talk at the "*HELIX Scientific Symposium*" organised by the and held in Barcelona, Spain, October 30 – 31, 2017. Lecture titled "*What have we learnt in HEALS and why does it matter?*".

Paris Descartes University in Paris, France, July 6, 2017. Invited talk, lecture titled "Investigating the exposome".

iGEM Greece 2017 team "*Triple Helix Aristotle Innovation Lab*" in Thessaloniki, Greece, July 13, 2017. Invited talk at the Lecture titled "*Health and Exposome Research: Assessing Contributors to Lifetime Exposure and State of health (HERACLES*)".

French Agency for Food, Environmental and Occupational Health & Safety (ANSES). Invited talk at the seminar "*INTEGRA*" in Paris, France, July 5, 2017. Lecture titled "*INTEGRA: Lifetime exposure assessment towards the development of the individual exposome*".

International Council of Chemical Associations' Long – Range Research Initiative (ICCA-LRI) and Joint Research Centre (JRC). Invited talk at the Workshop "Fit-For-Purpose Exposure Assessments For Risk-Based Decision Making" in Como, Italy, June 21 – 22, 2017. Lecture titled "Integrated Aggregate and Cumulative Exposure Assessment on Operationalizing the Exposome for Improving Chemical Risk Assessment Following the 21st Century Exposure Science Guidelines".

World Health Organisation, Sixth Ministerial Conference on "*Environment and Health*" organised by the World Health Organisation (WHO) Regional Office for Europe in close partnership with the United Nations Economic Commission for Europe and the United Nations Environment Programme, in Ostrava, Czech Republic, June 13 – 15, 2017. Lectures titled "*Exposome in urban settings: The HEALS paradigm*" and "*Modern research for circular economy*".

Aristotle University of Thessaloniki, 1<sup>st</sup> conference on *Regenerative Medicine:* "Stem Cells in Surgery" in Thessaloniki, 7-8 April 2017. Keynote lecture on "The exposome paradigm: beyond the nature vs. nurture dilemma in human health".

Aristotle University of Thessaloniki, Workshop on "*Health and safety in research labs*", in Thessaloniki, Greece, on March 15, 2017. Invited lecture on "*The importance of human biomonitoring for assessing occupational safety in research labs*".

National School of Public Health workshop on "Air pollution and health effects on public health", in Athens, Greece, on February 28, 2017. Invited lecture on "The exposome: A new tool for assessing the impact of cumulative exposure to environmental pollutants on public health".

Greek Chemists Association Workshop on "Food packaging", in Athens, Greece, on February 13, 2017. Invited lecture on "Cumulative Exposure of chemicals and public health – a new challenge of the 21st century industry".

Toxicology Symposium, in Larissa, Greece, on January 28, 2017. Invited lecture on "*EU-wide human biomonitoring program and the exposome*"

European Public Health Conference, in Vienna, Austria, on November, 9-12, 2016. Invited lectures on:

"Assessing health impacts of hazardous waste: the exposome paradigm";

"The exposome and health impact assessment";
"Bluehealth: the health benefits of the blue environment";
"Environment health inequities".

University of Crete Workshop "The role of scientists to inform and limit the impact on health and the environment from exposure to pesticides" held in, Heraklion, Crete, on November 4, 2016. Invited lecture on "Environmental pesticide exposure and impact on public health".

6th Panhellenic conference of Public Health and Social Medicine Forum, held in Athens, Greece on October 31-November 1, 2016. Invited lecture on "Environmental Health Inequalities associated with biomass emitted PAHs exposure".

2016 Annual International Society of Exposure Science Meeting, held in Utrecht, The Netherlands, on October 9-13, 2016. Invited lecture on "*Multiscale connectivity in HEALS - a high dimension biology approach to unravel the exposome*".

World Health Organization Workshop on "Waste, health, sustainability: what way forward", held in Bonn, Germany, on October 5-6, 2016. Invited lecture on "Integrated assessment of waste-related health impacts".

12th Conference of Greek inter-municipality Network of Healthy Cities, held in the Municipality of Milos, Greece, on July 8, 2016. Invited lecture on "*Environment and Health*".

Cyprus Technical University Workshop on "Environment and Health in Urban Agglomerations, held in Limassol, Cyprus, on July 4, 2016. Invited lecture on "*The exposome in Thessaloniki*".

Hercules Exposome Center, "*Emory Exposome Summer Course* in, Atlanta, US, on June 13-17, 2016. Invited lecture on "*The exposome in Europe*".

4th Workshop on "Holistic Analytical Methods for Systems Biology Studies" in Thessaloniki, Greece, April 17, 2016. Invited lecture on "Unravelling the exposome through integrated exposure biology".

"ENMF 2016 - Exploring Novel Medical Frontiers", held in Thessaloniki, Greece, April 10, 2016. Invited lecture on "*Cosmic ray exposome*".

Cyprus University, Department of Biological Sciences / Department of Chemistry in Nicosia, Cyprus, March 23, 2016. Invited lecture on "*Unravelling the exposome through integrated exposure biology*".

European Environmental Agency (EEA) workshop on "Activities on mixtures under the European Human Biomonitoring Initiative" held in Copenhagen, Denmark, February 9, 2016. Invited lecture on "*Mixtures Assessment: the exposome paradigm*".

American Institute of Chemical Engineers (AIChE) Annual Meeting, Salt Lake City, USA, November 8 to 11, 2015, Keynote lecture on "*Benzomics: A High Dimensional Biology Perspective to Benzene Health Risk*" at the Plenary: Optimizing Health, Safety & Environmental (HSE) Sustainably.

World Health Organization Workshop on Waste and human health: evidence and needs, Bonn, Germany, 5–6 November, 2015. Invited lectures on (a) "Health effects and health impacts of waste: evidence and case studies – Greece" and (b) "Assessing health effects and impacts: methods and strategies – exposome".

TurkhelTox, Smyrna, Turkey, October 21 to 24, 2015. Invited lecture on "High dimension exposome biology: a paradigm change in chemical risk assessment in the making".

European Society of Toxicology and Bo Holmstedt Foundation, Bo Holmstedt Award for outstanding contribution to Toxicological Sciences, Oporto, Portugal, September 13, 2015. Invited lecture on "*Exposome science for public health protection and innovation*" – Bo Holmstedt keynote lecture at the EUROTOX annual conference

Society for Cell Pathology and Toxicology, Paris, June 19, 2015. Invited lecture on "In silico methods for chemical mixture toxicity assessment".

University of Maryland, School of Public Health, College Park, MD, USA, April 9, 2015. Invited lecture on "*The connectivity approach to the exposome*" at the Public Health Research @ Maryland 2015 symposium.

Imperial College, South Kensington Campus, London, UK, March 16, 2015. Keynote lecture on "Application of 'omics' in studying the exposome: Health and environment-wide associations based on large population surveys" at the Environmental Exposure Science Symposium organized by Agilent Technologies.

European Environmental Agency (EEA) workshop on "Activities on mixtures under the European Human Biomonitoring Initiative", Copenhagen, Denmark, February 9, 2015. Lecture entitled "Mixtures Assessment: the exposome paradigm".

The Hamner Institutes for Health Sciences, Research Triangle Park, NC, USA, January 16, 2015. Invited lecture on "Linking the external and internal exposome for causal environment and health associations".

European Centre for Environment and Health, University of Exeter Medical School, workshop on Fostering sustainable environments for improving future health and well-being, December 3-4, 2014. Invited lecture on "Rendering the exposome operational for public health and well-being improvement".

HERCULES Exposome Research Center, Emory University, Atlanta, USA, November 20, 2014. Invited lecture titled "Multi-scale connectivity An integrated methodology to unravel the exposome".

Conference of the Society of Cell Pharmacology and Toxicology, Keynote lecture on *Systems Biology and its applications on Pharmaco-Toxicology*, University of Rennes, France, October 9-10, 2014.

WHO-International Program for Chemicals Safety (IPCS), Chair of working group on *Specific Risks* of the **Chemical Risk Assessment Network**, Paris, France, October 8-10, 2014.

International Workshop "*Expanding nuclear medicine frontiers*". September 27, 2014, Thessaloniki, Greece. Invited lecture titled "*Radiological exposome: lifelong ionising and non-ionizing radiation exposure and human health*".

NIEHS Exposure Science and the Exposome Webinar Series, July 14, 2014. Invited lecture titled "*HEALS – Health and Environment-Wide Associations via Large Population Surveys*".

WHO - Global Public Health workshop on the "Identification of risks of endocrine-disrupting chemicals: overview of existing practices and steps ahead". Chair of workshop. Bonn, Germany 7-8 July, 2014.

ICCA-LRI and JRC Workshop, "What Is Safe? Integrating Multi-Disciplinary Approaches for Decision Making about the Human Health and Environmental Impacts of Chemicals". Lugano, Switzerland, 17-18 June, 2014. Invited lecture titled "Modeling from external exposure dose down to internal doses – bridging the gap".

7<sup>th</sup> Toxicology and Forensic Medicine conference. April 26-27, 2014 Larissa, Greece. Invited lecture titled "*In silico toxicology; Quantitative structure*—activity relationship models (QSAR)".

Cyprus International Institute for Environmental and Public Health, "*Urban Water Symposium*". January 31, 2014, Nicosia, Cyprus. Invited lecture titled "*From water to human exposome*".

European Technology Platform on Industrial Safety (ETPIS) Workshop: *Environmental Health in Horizon 2020 building on the Cross-ETP on Industrial Safety*", Brussels, Belgium, November 27, 2013. Invited lecture titled "*The Exposome*".

Imperial College, Faculty of Medicine, School of Public Health, London, UK, November 15, 2013. Invited lecture titled "Health and Environment-wide Associations via Large Population Surveys to Unravel the Exposome".

University of California at Berkeley, Center for Occupational & Environmental Health, November 8, 2013. Invited lecture titled "Health and Environment-wide Associations via Large Population Surveys to Unravel the Exposome".

World Health Organization 2nd Symposium on "*Environmental Health and Economics*", Bonn, Germany, October 14-15, 2013. Invited lecture titled "*Key findings assessing the costs associated to health impacts of the austerity measures in Greece*".

World Health Organization training workshop on "Multiple exposures and risks: evidence review, knowledge transfer and policy implication", Bonn, Germany, October 16-18, 2013. Invited lecture titled "Combined or multiple exposure to health stressors in indoor built environments -An evidence-based review".

World Health Organization Symposium on "Human biomonitoring survey as a tool for assessing early life exposures to priority chemical pollutants". Bonn, Germany, September 18-19, 2013. Invited lecture titled "HEALS project - New research initiative to characterize environmental exposures and health effects in children".

49th Congress of the European Societies of Toxicology. September 1-4, 2013, Interlaken, Switzerland. Invited lecture titled "*GIS-based monitoring and chip technologies for improved exposure assessment*".

Technical Chamber of Greece Workshop on "Pollution from smog. The chronicle of poor choices, mistakes, impact, the solutions", Athens, Greece, March 27, 2013. Invited lecture titled "The dynamics of urban smog pollution and its impact on public health: Socioeconomic analysis of the problem".

International Summer School Socio-Economic Analysis for REACH Regulation, "*Integrated health risk assessment of environmental chemicals*". September 10-14, 2012, Pavia, Italy.

ICCA-LRI and UK HPA workshop, "*Technologies to Inform Chemical Safety Sciences*". June 12-13 2012, Budapest, Hungary. Invited lecture titled "*Emerging exposure science approaches and chemical safety assessment*".

1<sup>st</sup> Conference of Environmental Toxicology and Ecotoxicology (Rovaltain). June 14-15, 2010, Valence, France. Invited lecture titled "*How to approach the change of scale and level of biological organisation in predictive toxicology*".

Invited talk at the Karlsruhe Institute of Technology. May 27, 2010, Garmisch-Partenkirchen, Germany. Invited lecture titled "Satellite data for improved assessment of the health impact of air pollution".

International seminar "Ecological risk assessment". September 21-23, 2009, Novi-Sad, Serbia. Invited lecture titled "Regulatory Need for Integrated Risk and Health Impact Assessment – current approaches and new directions".

Annual conference of Italian Chemists Association. September 17, 2009, Milan, Italy. Invited lecture titled "Food safety and sustainability: the role of Chemistry - Consumer Protection and Sustainable Development Policies in Europe".

Cair4Health workshop. January 19, 2009, Brussels, Belgium. Invited lecture titled "*Indoor air pollution and health effects*".

Agilent research center, invited talk. October 16, 2008, Cupertino, CA, USA, -in web connection to other Agilent worldwide (Brazil and China). Invited lecture titled "New directions for risk assessment of chemical mixtures in consumer products".

11<sup>th</sup> Seminar of European Association of Metals (EuroMetaux) for "*Environment, health and safety*". October 8-9, 2008, Brussels, Belgium. Keynote lecture titled "*Particles in the air and health effects*".

11<sup>th</sup> International experts seminar on "New trends in toxicology of chemical compounds" organized by the International Science and technology Center in Moscow. September 22-25, 2008 Moscow, Russia. Invited lecture titled "Integrated Strategies for Toxicity Assessment of Chemicals and Mixtures".

2008: Πρόσκληση για ομιλία με θέμα, στο  $4^{\circ}$  Διεθνές Συνέδριο Metals and Genetics, στο Παρίσι, July 22-24, 2008, paris, France. Invited lecture titled "*Toxicogenomics biomarkers for Arsenic risk modifiers*".

Seminar on "*Blood-brain barrier drugs and toxic agents*", Medical School, University of Pavia. July 4, 2008, Pavia, Italy. Invited lecture titled "*Physiology – based biokinetic / dynamic models of the blood-brain barrier*".

Cair4Health workshop. June 19, 2008, Brussels, Belgium. Invited lecture titled "Integrated environmental health impact assessment with regard to air quality".

EU-US Biotechnology Task Force. June 5, 2008, Ispra, Italy. Invited lecture titled "New directions for risk assessment of chemical mixtures in consumer products".

Society for Environmental Geochemistry and Health. April 3-4, 2008, Athens, Greece. Invited lecture titled "New directions for risk assessment of environmental chemical mixtures".

47<sup>th</sup> Conference of Society of Toxicology. March 16-20, 2008, Seattle, WA, USA. Invited lecture titled "*Biology-based dose-response models for risk assessment of chemical mixtures*".

47<sup>th</sup> Conference of Society of Toxicology. March 16-20, 2008, Seattle, WA, USA. Invited lecture titled "*Modulation of gene expression by BTEX: Risk Assessment Implications*".

French national network for toxicologic research (ANTIOPE). February 8, 2008. Invited lecture titled "A biology-based modelling and toxicogenomics framework for health risk assessment: In silico research at the Joint Research Centre".

Cair4Health International workshop. December 13-14, 2007, Brussels, Belgium. Invited lecture titled "*Indoor air pollution and health effects*".

Annual conference of Italian Society of toxicology. October 26, 2007, Pavia, Italy. Keynote lecture titled "*Toxicity Characterization of traffic pollution: New study directions*".

International Symposium on Genes, Life and Man, organized by the Vatican. June 22-23, 2007, Vatican-Rome, Italy. Invited lecture titled "*Toxicogenomics and Biology-based Modeling for Risk Assessment of Chemical Mixtures*".

International forum for computational toxicology – US EPA. May 21-23, 2007, Research Triangle Park, North Carolina, USA. Invited lecture titled "Toxicogenomics and Biology-based Modeling for Risk Assessment of Chemical Mixtures".

International conference of nanotoxicology. April 23-25, 2007, Venice, Italy. Invited lecture titled "Carbon Nanotubes: comparative "in vitro" and "in vivo" toxicogenomic analysis".

International conference on Food chemical contamination neurotoxicity. December 5-9, 2006, Valencia, Spain. Keynote lecture titled "*Modelling complex mixtures of environmental contaminants for integrated health risk assessment*".

International conference on "*Environment and health*", Italian National Health Institute. October 17-18, 2003, Rome, Italy. Invited lecture titled "*A Human Envirogenomics Approach to Childhood Asthma*".

12<sup>th</sup> International MESAEP and SECOTOX conference on "*Environmental pollution and health impact in the Mediterranean area*". October 4-8, 2003, Antalya, Turkey. Invited lecture titled "*Spatial dimention of integrated assessment of environmental impact of human health*".

International workshop from Karlsuhe University European Institute for Energy Research on "Use of geographic information systems in renewable energy sources". June 16-18, 2003, Karlsruhe, Germany. Invited lecture titled "Integrated assessment of natural and technological biomass potential for energy in the enlarged European Union".

International conference on "Alternative automobiles", organized by NTUA and MBA programme of the Piraeus University of Finance. Invited lecture titled "*Alternative automobiles technologies*".

Johns Hopkins University Center for Civilian Biodefense Strategies and the Center for Transatlantic Relations International conference on "*Transatlantic* 

Synergies: Building Bridges for Biodefense". November 12, 2002, Washington, DC, USA. Invited lecture titled "Impact of research and technological development on susceptibility of EU in bioterrorism".

International Conference and Exhibition on Recycling and Energy, Rimini, Italy, November 6-9, 2002. Invited lecture on "*Renewable energy sources hydrogen production as an aviation fuel*".

11<sup>th</sup> International MESAEP and SECOTOX conference on "*Environmental Pollution and its impact on life in the Mediterranean region*". October 6-10, 2001, Limassol, Cyprus. Invited lecture titled "*Applying precautionary principle in human health and environment protection*".

17<sup>th</sup> CODATA conference. October 16-19, 2000, Baveno, Italy. Invited lecture titled "*Multi-disciplinary scientific information as a key for the integrated assessment of air quality*".

10<sup>th</sup> International MESAEP conference on "*Environmental Pollution and its impact on life in the Mediterranean region*". October 8-12, 1999, Alicante, Spain. Invited lecture titled "*Integrated systems of assessment and management of pollution in urban environments*".

International workshop on "*Renewable energy sources databases*". November 4-5, 1996, Oxford, UK. Invited lecture titled "*Object-oriented database technology for renewable energy information processing*".

Imperial College, Annual seminar of Process engineering Center. 1995, London, UK. Invited lecture titled "Integrated assessment of chemical technologies and processes for process design under uncertainties".

N.C.S.R. Demokritos seminar. 1994, Athens, Greece. Invited lecture titled "Fusion nuclear reactors safety".

Seminar of Chemical Engineering department of the research institute of chemical engineering and high temperatures chemical processing (University of Patra). 1994, Patra, Greece. Invited lecture titled "Integration of safety and environmental protection in synthesis of chemical processing systems".

Keynote lecture at the 80<sup>th</sup> Conference of the Italian Physical Society. 1994, Lecce, Italy. Lecture titled "*Risks from fusion energy production*".

#### ANNEX 1: RECENT RESEARCH ACTIVITIES ON ENVIRONMENTAL HEALTH

In all of the following projects I am or have been the principal investigator for the Joint Research Centre and the Aristotle University of Thessaloniki and chair of the overall scientific coordination committee:

1. PARC - Partnership for Risk Assessment (HORIZON EUROPE) - - Budget: 400,000,000 € / (2022 – 2029) (Leader of the WP for Concepts and tools and of the Greek National Hub)

The purpose of the Partnership is to drive innovation in chemical risk assessment and thereby enable the sustainable use and management of chemicals whilst protecting human health and the environment and contributing to a non-toxic environment by:

- a) strengthening the scientific basis for chemical risk assessment in the EU, by bringing risk assessors and managers together with scientists to accelerate method development, the generation of necessary data and knowledge, and
- b) facilitating the transition to next generation evidence-based risk assessment. Political agendas around the world are committed to address the UN Sustainable Development Goals (SDGs). Given that chemicals and waste affect all aspects of sustainable development, the sound management of chemicals and waste is essential and supports the implementation of many, if not all, SDGs.

This Partnership will also contribute with data generation, analysis and management approaches to support the European Strategy for Data21, in particular through its contribution to the Common European Green Deal data space that aims to use the major potential of data in support of the Green Deal priority actions such as the zero-pollution strategy. The Partnership will focus on addressing priority knowledge gaps for evidence-based chemical risk assessment, as identified by risk assessors and risk managers, and where research and innovation (R&I) activities bring added value.

2. URBANOME (HORIZON 2020) - Urban observatory for multi-participatory enhancement of health and wellbeing - - Budget: 4,974,015 € / (Coordinator) (2021 – 2024)

URBANOME aims at building a common EU Framework for evaluating comprehensively multi-sector policies in urban settings supporting the "Health in all Policies" approach of WHO. In this light the overall objective of URBANOME is to promote urban health, wellbeing and liveability, through systematically integrating health concerns in urban policies and the activities of urban citizens, on the basis of detailed and comprehensive evidence on environmental health determinants, the spatial distribution of these in the city, and the social distribution of their impact among different population groups, accounting for different life styles and behaviours. Integration of health concerns, environmental stressors and social equality in public and private activities help alleviate a wide range of contemporary urban challenges, specifically social cohesion and health inequality, and promote the transition of European cities to sustainable, climate proof, smart and inclusive urban economies. URBANOME brings together the complete set of environmental, social, and functional features of a city in an integrative analytical framework that would facilitate the identification of the main determinants of urban health and wellbeing and support co-creation and testing of policies and precision interventions designed to improve urban health and wellbeing through Urban Living Labs.

3. HERA – Health Environment Research Agenda (HORIZON 2020) - Προϋπολογισμός 2,500,000 € / (PI) (2019 – 2022)

Environmental degradation and pollution, climate change, and the destabilization of the ecosystem biodiversity, damage health and quality of life, and affect socially disadvantaged and vulnerable populations. Negative outcomes can be balanced by positive effects that healthy environments, such as green and blue spaces, can have on human and ecosystem health. Socio-economic costs are significant and public policies could develop preventive actions. HERA will set the priorities for an environment and health research agenda in the EU by adopting a holistic and systemic approach in the face of global environmental changes. Research will support decision-making and help attain the ultimate goal of protecting and improving ecosystem quality and human health. In HERA will identify both the environmental opportunities for health improvements and the major environmental problems and challenges. This ambitious objective will only be possible through a close and continuous interaction with numerous and diverse stakeholders in the wider environment and health area.

HERA specifically aims: 1) to proactively identify key sectors and policy areas in the field of environment and health that will benefit from additional scientific evidence in the next decade; 2) to develop a European medium-term research and innovation agenda covering key strategic research and policy aspects; 3) to propose strategies and tools to respond to the new and continuing challenges in environment and health nexus, by ensuring the engagement of stakeholders, increasing coordination and cross-fertilisation of ideas, and contributing to the European environment and health process and policy activities. HERA is structured in workpackages addressing policy needs, knowledge gaps, establishment of new guidelines, stakeholder community consultation and establishment of the research agenda. A specific activity focuses on knowledge transfer towards countries with less active research in environment and health.

## 4. OBERON - An integrative strategy of testing systems for identification of EDs related to metabolic disorders - Προϋπολογισμός 6,500,000 € / (PI) (2019– 2023)

Exposure to chemical substances that can produce endocrine disrupting effects represents one of the most critical public health threats nowadays. In line with the regulatory framework implemented within the European Union to reduce the levels of endocrine disruptors (EDs) for consumers, new and effective methods for ED testing are needed. The OBERON project will build an integrated testing strategy (ITS) to detect EDs-related metabolic disorders by developing, improving and validating a battery of test systems. It will be based on the concept of an integrated approach for testing and assessment (IATA), OBERON will combine 1) experimental methods (in vitro e.g. on 2D and 3D human-derived cells and tissues, and in vivo i.e. in zebrafish at different stages), 2) high throughput omics technologies, 3) epidemiology and human biomonitoring studies and 4) advanced computational models (in silico and systems biology) on functional endpoints related to metabolism. Such interdisciplinary framework will help at deciphering EDs based on mechanistic understanding of toxicity by providing and making available more effective alternative test methods relevant for human health that are in line with regulatory needs. Data generated in OBERON will also allow the development of novel Adverse Outcome Pathways (AOPs). The assays will be pre-validated in order to select the test systems that will show acceptable performance in terms of relevance for the second step of the validation process, i.e. the interlaboratory validation as ring tests. Therefore, the aim of the OBERON project is to support the OECD conceptual framework for testing and assessment of EDs by developing specific assays not covered by the current tests, and to propose an IATA approach for ED-related metabolic disorders detection, which will be submitted to the JRC and OECD community.

# 5. NEUROSOME - Exploring the neurological exposome (Marie Sklodowska-Curie Innovative Training Networks) - - Budget 3,493,845€ / (PI) (2017 – 2021)

The main objective of NEUROSOME is to develop an integrative biology-based framework starting from human biomonitoring data to unravel causal associations among the genetic predisposition, cumulative exposure to multiple environmental chemicals and neurological disorders. The project brings together beyondthe-state-of-the-art advances in human biomonitoring and systems biology, exposure monitoring and toxicological testing technologies and advanced tools for computational analyses of the exposure-to-health effect continuum following an exposome paradigm. The NEUROSOME methodology will be applied in population studies across different exposure settings to neurotoxicants (metals and persistent organics) in Europe. This will improve scientific knowledge on cause andeffect relations between environmental stressors and neurodevelopmental disorders taking into account exposure and health effect modification due to intrinsic (e.g. genetic susceptibility) and extrinsic (e.g. diet and socioeconomicstatus) factors. New standards for human biomonitoring data interpretation in conjunction with environmental and exposure information will be developed for ready use in chemical mixture risk assessment. The training goal is to produce a new generation of exposome researchers, trained in academia, applied research and industry, with transdisciplinary skills (environmental end exposure modelling, human biomonitoring, -omics technologies, high dimensional bioinformatics and environmental epidemiology,) and understanding of fundamental science and its direct application to environmental health challenges. To this aim NEUROSOME will focus on the provision of trans-disciplinary research training to young researchers through a combination of network-wide training programs and individual personalised training-through-research projects to deliver to the EU and the world a new cohort of researchers trained in cutting edge transdisciplinary environmental health sciences.

# 6. DOREMI (DOse Response of Mixtures) (CEFIC LRI) - - Budget 350,000 € / Coordinator (2018 – 2020)

The DOREMI study (DOse Response of Mixtures) proposes the development of a framework for the incorporation of exposure biology that combines human biomarkers and laboratory experiments into cell cultures to identify and characterize neurodevelopmental disturbance pathways. The purpose of the study is to understand the mechanism by which the combined exposure to chemical mixtures to which we daily come into contact in our everyday life, including potential neurotoxic substances such as heavy metals (mainly lead, mercury, cadmium and arsenic) and plasticizers (such as phthalates esters and phenols). A more specific goal of the study is to extract dose / response levels of the combined exposure of these compounds to children's neurodevelopment. Towards this aim, multi-omics analysis will be applied in both cohort biosamples and in vitro extracts aiming at the identification of the molecular mechanisms that associate co-exposure to plasticisers and heavy metals to neurodevelopmental disorders.

## 7. HBM4EU Human Biomonitoring Initiative (Horizon 2020) - - Budget 70,000,000 € / (PI) (2016 – 2021)

The European Human Biomonitoring Initiative (EHBMI) will establish and implement an ambitious European Joint Programme (EJP) and will provide policy makers with comparable and validated chemical exposure and health data at EU level. This will be done by integrating and building on previous and ongoing EU initiatives, national HBM programmes and studies (including cohorts, epidemiological studies and health surveys).

In contrast to former projects, the proposed programme will involve national programme owners and/or the national managers of those programmes, and include policy makers at national level. This inclusive approach, combined with the integration of HBM and environmental health research, will strengthen the EJP, enhance the sustainability of the initiative and amplify the impacts of the results.

In order to ensure that the knowledge we generate is targeted, timely and fit for purpose, we will establish a sustained dialogue with EU policy makers responsible for assessing and managing the risks to human health from chemical exposure via the environment, diet, consumer products and occupational exposure. Through effective communication and dissemination to policy makers, we will actively promote the exploitation of our results by policy makers in such a way as to impact positively on human health.

The overarching objectives will be achieved via the following specific goals, to be accomplished during the 5 year programme:

- **Objective 1**: Laying the foundations for a pan-European HBM platform that builds on national hubs and existing expertise;
- Objective 2: Developing a common methodology for the interpretation and use of HBM data in policymaking;
- Objective 3: Harmonising and optimising the practices of national HBM programmes, including sample collection, quality assurance and data management;
- **Objective 4**: Identifying gaps where further data are needed to inform current policy questions and design new, targeted studies to address these knowledge gaps;
- **Objective 5**: Including new HBM data and, where possible, existing HBM data in the European Commission's Information Platform for Chemical Monitoring (IPCheM)<sup>1</sup>:
- Objective 6: Linking external to internal exposure in order to improve exposure models for risk assessment;
- **Objective 7**: Developing, validating, and applying exposure and effect biomarkers to improve our understanding of the health risks associated with aggregate exposures;
- Objective 8: Identifying chemicals of concern through novel methods for the holistic analysis of HBM samples and improving the use of HBM data in assessing exposure to and the risks of chemical mixtures;
- **Objective 9**: Enhancing our understanding of the causal association between chemical exposure and adverse health outcomes by combining mechanistic studies with existing cohort data;
- Objective 10: Promoting capacity building at national level through training and exchange programmes;
- **Objective 11**: Engaging with stakeholders, including the general public, throughout the programme to ensure the credibility, accountability and legitimacy of activities and results.

# 8. GRIN - GReen INfrastructures for disaster risk reduction protection: evidence, policy instruments and marketability - DG ECHO) - Budget: 681,153 € (PI on Human exposure and Health effects)

The damage and losses caused by natural hazards in Europe over the period 1980-2013 amounted to 480 billion Euros in 2013 prices. More than 80% of the losses, 393 billion Euros, were caused by extreme weather events (i.e., on average 11.6 billion Euros per year). Without concerted action and long-term adaptation planning, future risks are likely to be amplified by ongoing human-induced climate change and socio-economic change. To improve the resilience of society, both structural and non-structural measures and grey and green infrastructure will be needed. In particular, a greater deployment of nature-based solutions such as green infrastructures (GIs) is being increasingly advocated by European institutions NGO's, governments and financing bodies as a part of flexible, effective and efficient, and no-regret measures for disaster risk reduction and adaptation to climate change. Although there is plenty of research indicating the potential benefits of GI, demonstration of its practical value for DRR and role in both adaptation planning and sustainable development is lagging behind compared to other solutions and take up has been slow. This is primarily due to lack of actual applications, experience and coherence in the evidence base showing the direct and indirect benefits of GI solutions. In particular there is a lack of experience and coherence in implementation (including financing) and monitoring of GI solutions, including a lack of tools and methods supporting these processes. GREEN addresses these shortcomings and provides the necessary innovation in methods, tools, and solutions to appropriately promote the role of GI for DRR, climate change adaptation (CCA) and sustainable. In doing so, GREEN responds to the challenge transversally giving a proper value to ecosystem services will drive towards smart, sustainable and inclusive growth.

## ICARUS Integrated Climate forcing and Air pollution Reduction in Urban Systems (HORIZON 2020) - Budget: 6,472,015 € / Coordinator (PI) (2016 – 2019)

The ICARUS main objective is to develop integrated tools and strategies for urban impact assessment in support of air quality and climate change governance in EU Member States leading to the design and implementation of appropriate abatement strategies to improve the air quality and reduce the carbon footprint in European cities. We will develop detailed policies and measures for air pollution and climate control for the short and medium term (until ca. 2030). For the long term perspective (2050 and beyond) we will develop visions of green cities and explore pathways on how to start realizing these visions. The specific project objectives are to:

- quantitatively assess the impact of current and alternative national and local policies on reducing greenhouse gas (GHG) emissions and improving air quality through a full chain approach and evaluate the future public health and well-being impacts of these policies in European cities.
- evaluate (using source apportionment and atmospheric modelling) the current contributions of the different pollution sources linked to urban activities including heat and power use in the urban building stock, urban traffic and transportation needs, energy production, industrial activities including energy production, agriculture and trans-boundary pollution with respect to GHG-emissions, air quality loading, public health and well-being of the population.
- propose measures of technological (i.e. measures that will lead to a reduction of emissions at the source) and non-technological (i.e. measures that induce behavioural changes) nature to reduce both carbon footprint and air quality burden (win-win solutions). Techno-economic analysis of possible scenarios for the introduction of such measures will result in the definition of cost-effective environmental and climate protection and air quality management plans adapted to the specific needs of different EU cities and regions. The effect of these measures will be evaluated jointly taking into account the socioeconomic drivers related to the existing and projected scenarios.
- develop visions of green cities with clean air, close to zero or negative carbon footprint and maximal wellbeing
- develop a pathway for the realization of these visions in the next 50 years and propose first steps down that road in the form of a concrete plan towards achieving these visions in the participating cities.
- raise awareness of the citizens about the impacts on public health and climate change caused by their activities or with changes in their activities.

# 10. BlueHealth - Linking Up Environment, Health and Climate for Inter-sector Health Promotion and Disease Prevention in a Rapidly Changing Environment (HORIZON 2020) - - Budget: 5,998,671 € / (PI) (2016 – 2020)

The BlueHealth Consortium brings together a multi-disciplinary team of experts reaching across all 28 European Union countries and beyond. BlueHealth takes an international, interdisciplinary and multi-sector approach to health promotion and disease prevention by investigating interactions between EU's extensive 'blue infrastructure,' and the health and well-being of its citizens. Blue Infrastructure refers to the network of natural and man-made aquatic environments providing a range of multi-sectoral services (e.g. transportation, fresh water provision). There has been no prior systematic attempt to detail the potential impacts of our blue infrastructure on health promotion and disease (especially prevention relative to 21st Century public health challenges), nor to develop guidelines on how health should be considered when developing blue infrastructure interventions, particularly across sectors. BlueHealth will address this gap.

# 11. PEC - Post-Emergency, multi-hazard health risk assessment in Chemical Disasters (Civil Protection mechanism of the EC - DG ECHO) - Budget: 788,803 € (PI on Human exposure and Health effects)

A consolidated methodology for risk assessment of chemical mixtures and combined natural and technological NaTech hazards is currently not available. In this project an integrated multi-hazard risk assessment toolkit will be developed and the validity of this model will be evaluated on a case study (sample area) by considering the effects on plant structures and infrastructures of hypothetic natural and manmade disasters, such as earthquake, flood or terroristic attack leading to accidental release of large amounts of toxic chemicals into the environment. Immediate and long-term population health impacts of the toxic chemicals absorbed either individually of in combination will be determined and quantified according to (i) characteristics (type and intensity) of the initial disaster, (ii) degree of vulnerability of buildings and infrastructures, (iii) quantity of chemicals stored/handled in the plants, magnitude of their dispersion into the environment and levels of chemical contamination in the disaster area. The key receptors considered in simulations will include employees present in the affected plants during the incident, emergency responders, and the local population. A risk prioritisation matrix based upon damage level attainable in the infrastructures and potential public health risks will be developed to provide strategic risk information for public health planning.

## 12. HEALS - Health and Environment-wide Associations based on Large population Surveys (7th FP - Large scale project)- Budget: 14,866,648 € / Co-Coordinator (PI)

HEALS is the largest multi-center project on the exposome in the world currently. Its overall aim is the refinement of an integrated methodology and the application of the corresponding analytical and computational tools for performing environment-wide association studies (EWAS) in support of Europe-wide environment and health assessments.

HEALS is organized in a series of interlinked streams of activity focusing on the different aspects of individual assessment of exposure to conventional and emerging environmental stressors and on the prediction of the associated health outcomes. These streams bring together state-of-the-art advances in human biomonitoring and systems biology towards the development of an exposure biology paradigm, exposure monitoring technologies and advanced tools for computational analyses of the exposure-to-effect continuum. In fact, HEALS proposes the functional integration of -omics derived data and biochemical biomonitoring (high dimensional biology) to create the internal exposome at the individual level. These data will be exploited using advanced bioinformatics tools for both descriptive and predictive data mining. HEALS will propose a novel bioinformatics strategy focusing on biomarker fusion, and direct coupling of physiology-based biokinetic models to metabolic regulatory networks derived from -omics analyses. In this way, the internal dose of environmental stressors will be coupled to the alterations they bring about to gene expression, protein-protein interactions and metabolic regulation and plausible hypotheses on the respective pathways of toxicity can be established.

The main focus of the project is on susceptibility windows during growth (including pregnancy) and on vulnerable population such as young, elderly, socio-economically disadvantaged, gender and ethnic minorities. The overall approach will be verified and refined in a series of population studies across Europe including twin cohorts. The overall population size involved in these studies is up to ca. 335,000 individuals tackling different levels of environmental exposure, age windows of exposure, and socio-economic and genetic variability. The approach developed will be applied in a pilot environment and health examination

survey of children including singletons and sets of twins with matched singletons covering ten EU Member States (the EXHES Study). The lessons learned will be translated into scientific advice towards the development of protocols and guidelines for the setting up of a European environment and health examination survey.

# 13. ERNCIP – European Reference Network for Critical Infrastructure Protection. Thematic Group "Detection of Indoor Airborne Chemical-Biological Agents" / Joint Research Center – European Commission. Coordinator (PI) (2015-2016)

The overall aim this thematic group is to investigate issues that can be addressed in the EU level regarding Detection, Identification and Monitoring (DIM) of airborne, chemical and biological threats in enclosed spaces. Towards this aim, three main activities have been foreseen during the next 8 months for accomplishing the TG objectives. In order to evaluate the applicability of the current sensor technologies and what has to be done, it is critical to evaluate what are the actual needs that have to be addressed i.e. what do we expect from the sensors against CB threats in enclosed spaces. Thus, a critical starting point of the overall approach will be the definition of relevant scenarios of indoor airborne threats (chemical and biological) in critical infrastructures. The specific needs that have to be addressed will set up the criteria for performing a critical review on the existing sensors available in the EU and used either for chemical or for biological agents. Computational simulations will provide the spatial and temporal gradients contamination within indoor critical infrastructures. Finally, evaluation of capabilities of existing sensors based on the capability to perform early warning, will allow the TG to identify the gaps and to define requirements for next generation detectors in the EU.

## 14. CROME - Cross-Mediterranean Environment and Health Network (*LIFE+ European Commission/DG Environment*) - Budget: 1,760,190 € / Coordinator (PI)

CROME-LIFE aims to demonstrate a technically feasible integrated methodology for interpretation of human biomonitoring data that will allow to quantitatively assess the impact on human health due to acute/chronic exposure to chemicals acting as neurodevelopmental and neurological toxicants and/or human carcinogens such as toxic and organic substances (PCB's and PBDEs, organochlorine and organobromine compounds). The health endpoints investigated are cancer (for organic carcinogens such as PCBs) and neurotoxicity (for metals and organic compounds). The methodology applied will couple environmental monitoring data with human biomonitoring and epidemiological observations through the use of physiologically-based toxicokinetic (PBTK) and toxicodynamic (PBTD) models. These models would allow us to mechanistically associate the observed concentrations of contaminants in environmental media (air, water and soil) with human biomonitoring data already existing within the consortium and collected through targeted field campaigns. Via reverse modelling human exposure to the chemical substances will be reconstructed. These estimates will be used as indices of population exposure and of the environmental health burden due to the anthropogenic pollution in the project demonstration sites. The CROME-LIFE approach will aim at showing the feasibility of environment-wide association studies by interoperably linking environmental, biomonitoring and health status data. Causal associations between the observed health outcomes and the measured/estimated markers of exposure will be derived by means of advanced statistical models and causal diagrams. The CROME-LIFE methodology and tools will be applied in four countries in southern Europe (Greece, Slovenia, Italy and Spain) tackling different levels of environmental exposure, age windows of exposure, and socio-economic and genetic variability.

# 15. CheRRIE - Chemical and Radiological Risk in the Indoor Environment (*European Territorial Cooperation Programme Greece- Bulgaria 2007-2013 INTERREG IV*)- Budget: 1,420,569 € / Scientific Coordinator and PI

CheRRIE aims at addressing the increase in respiratory health problems and allergies as well as lung/thyroid cancer incidence has been observed over the last fifteen years in South-eastern Europe including Central-South Bulgaria and Northern Greece. Much of this increase has been attributed to environmental hazards. The large amount (80%) of time the population spends indoors may have a compounding effect on this problem. This project performs a thorough assessment of the current chemical and radiological risks of building materials and will set up a comprehensive database of building material properties that would affect the respective attributable risk.Quantitative health impact related to the use of building materials will be quantitatively assessed calculating the final radiological and toxic burden of the population from exposure to

ionizing radiation of radionuclides and toxicants in different places both in Greece and Bulgaria. The final results expressed as an annual dose rate (external gamma-radiation, radon, VOCs, formaldehyde and other carcinogens and allergens indoors), illustrating the final whole body burden of the population compared to the international standard of radiological protection (in the case of radiological hazards) and reference doses or their biomonitoring equivalents (in the case of chemical hazards). The system for human exposure to indoor physical and chemical stressors/ health impact assessment and management will be largely based on already existing computational and data reception/management platform (INTERA) developed by EnvE-Lab in the frame of the CEFIC-LRI funded project INTERA.

## 16. Industrially Contaminated Sites and Health Network (ICSHNet) – Budget 1,500,000 € / co-PI (member of the Management Committee)

In Europe, earlier industrialization and poor environmental management practices have left a legacy of thousands of contaminated sites: past and current activities can cause local and diffuse contaminations to such an extent that they might threaten human health and the environment. Moreover, health, environment and social aspects related to contaminated sites are strongly interconnected and local communities are often alarmed.

The aim of this COST action is to establish and consolidate a European Network of experts and institutions involved in environmental health issues in industrially contaminated sites, and develop a common framework for research and response through expert networking, conferences, workshops, training and dissemination activities. The network will:

- · Clarify needs and priorities
- Support collection of relevant information, methods and data
- Promote shared initiatives and develop guidance and resources on risk assessment, management and communication across Europe.

# 17. INTEGRA - Integrated External and Internal Exposure Modelling Platform (*CEFIC-LRI*) - Budget: 300,000 € / Coordinator (PI)

The objective of INTEGRA is to bring together all available information within a coherent methodological framework for assessing the source-to-dose continuum for the entire life cycle of substances covering an extensive chemical space. Hence, the major component of INTEGRA is a unified computational platform that integrates dynamically in time:

- environmental fate through multimedia environmental modelling across different geographical scales
- multi-pathway and multi-route exposure modelling
- internal dose through the use of detailed Physiology based toxicokinetic (PBTK) modelling.

In this way, the platform is able to differentiate between biomonitoring data corresponding to steady exposure patterns as opposed to acute, one-off exposures. The platform is at the moment largely validated using human biomonitoring data from Europe and the USA.

The detailed generic PBTK model incorporates life stage changes and physiological and metabolic efficiency change over an individual's lifetime (from conception till 80 years of age). The model also covers perinatal exposure including exposure routes such as lactation, being practically a mother-fetus interaction model. Assessment of biologically effective dose in the target tissue under realistic exposure scenarios, allows the use of internal dose metrics for risk characterization. In this way high throughput system data such as the ones generated by Tox21 *in vitro* testing can be used (e.g. the use of Biological Pathway Altering Dose (BPAD)), towards the nowadays need of "exposure based risk assessment".

In addition, the combined exposure assessment – internal dosimetry modelling framework allows the use of inverse modeling for exposure reconstruction and HBM data assimilation.

The applicability domain of the platform to a large chemical space is expanded through the use of advanced QSAR models for industrial chemicals.

## 18. URGENCHE - Urban Reduction of GHG Emissions in China and Europe (7th FP - Large scale project) - Budget: 4,652,549 €

The project objective is to develop a modelling platform and a related database for urban impact assessment. The platform will be robust, easily transportable to new cities, and can be used for draft or detailed assessment depending on the availability of data. The topics covered were

- urban energy generation and use, and GHG and other pollution release;
- urban spatial data including the urban spatial plan, building stock, transportation, and population;
- socio-economic, demographic, exposure, health and well-being of the population.

The main practical project objectives for each participating city were to:

- Evaluate the current contributions of the heat and power use in the urban building stock, urban traffic and transportation needs, and the overall spatial plan of the city with respect to GHG-emissions, other environmental stressors, environment quality, public health and well-being of the population.
- Evaluate the future public health and well-being impacts of the local
- implementation of alternative GHG-policies, which would meet the locally applicable national, EU and/or international GHG-reduction targets specifically in each city.
- Based on the above, develop and assess an optimised i.e. maximum net public health and wellbeing benefits - GHG-mitigation policy package for each city.
- Prepare for each participating city a roadmap to this optimised GHG-policy future.

## 19. TAGS - Tiered Aggregate Exposure assessment of Chemical Substances (*CEFIC-LRI*) Budget: 400,000 € / Coordinator (PI)

The objective of the project was the development of a tiered approach to aggregate exposure assessment and the compilation of a computational platform, able to perform quantitative aggregate exposure assessments for environmental and consumer products following a full chain approach (including emission-migration, media concentrations, exposure and internal dosimetry). The use of biomarkers to verify model predictions, to reconstruct population exposure and allocate to apportion exposure to sources (reverse modeling) constituted a part of the tiered approach and the accompanying guidance. The tiered approach guided the user through the preparation of the exposure assessment.

## 20. INTERA - Integrated Exposure for Risk Assessment in Indoor Environments (*CEFIC-LRI*) - Budget: 400,000 € / Coordinator (PI)

The main objective of the project was to define optimal methodologies for predicting indoor exposure to chemical and non-chemical contaminants and their inter-relationships. The work will include the following elements as specified in the call:

- The characterisation and justification of a framework capable of being applied to indoor exposure data/information and covering parameters relevant to their wider interpretation.
- The development/incorporation of appropriate databases of quality assured source data.
- The development/incorporation of suitable models and statistical methodologies for the characterization and treatment of such data.
- The application of suitable models and/or statistical methods that serve to either fill gaps or offer refined exposure assessment where uncertainties are considered unacceptable.
- The ability to display exposure predictions in a number of formats in order that they can be better applied within the context of both research and policy development.

# 21. GENESIS - GENeric European Sustainable Information Space for environment (7th FP - Large scale project) - Budget: € 5 million

GENESIS was an ICT project aiming at the development of a methodology and framework for seamlessly integrating different environment and health information systems across Europe. The role of the JRC-IHCP is to provide analysis of the institutional exploitation of the GENESIS system and advice on the system development including on users requirements.

## 22. HEREPLUS - Health Risk of Environmental Pollution Levels in Urban Systems (7th FP - Concerted action) - Budget: € 2 million (Scientific Coordinator – PI)

HEREPLUS aimed at developing a methodology for assessing the spatial relationship between ambient air pollution and human health at the urban setting in Europe and for evaluating the role that urban green can play in mitigating the adverse health effects of urban air pollution. More specifically, HEREPLUS:

- developed risk maps relating human health with pollutant concentrations (O₃ and PM) by using the ArcGis approach, taking into account existing and validated epidemiological models in some of the major and more exposed European urban areas, namely Rome, Madrid, Athens and Dresden;
- improved the knowledge of the potential role of different urban vegetation in order to mitigate PM and O<sub>3</sub> pollution levels, by providing best practices regarding the choice of no-VOCs emitting species and through the management of large green areas located in different neighboring urban areas;
- delivered guidelines for municipal managers, administrators and national and international Environmental Agencies appointed to establish urban-environmental measures, which combine risk maps, urban vegetation as a sink for ozone and PM, and minimize health costs. These guidelines were formalized in an Operational Manual of best practices, recommendations and designs for municipal laws, used as a base-line for municipal administrations and European policies.
- encouraged coordination among epidemiologists, biostatisticians, environmental scientists, GIS
  specialists, bringing about a further step towards realizing the full potential of GIS technology in
  environmental and health research, and leading to innovative solutions. Moreover, given the different
  institutions involved as partners at a European level (working in the domains of health, environment,
  statistics, physics and climatology), HEREPLUS contributed to the development of a multidisciplinary
  network.
- distributed guidelines and disseminated best practices in Europe through international workshops and a conclusive report.
- supported the implementation of the Global Earth Observation System of Systems (GEOSS) initiative and of the European Environment and Health Action Plan.

## 23. TRANSPHORM - Transport related Air Pollution and Health impacts (7th FP - Large scale project) - Budget: € 8,696,697 million (co-PI on Health)

TRANSPHORM aimed at improving the knowledge of transport related airborne particulate matter (PM) and its impact on human health and to develop and implement assessment tools for scales ranging from city to the whole of Europe. As a major output for users and policy makers, it will develop and implement an integrated methodology to assess the health impacts of particulate matter (PM) resulting from transport related air pollution covering the whole chain from emissions to disease burden. This aim will be achieved through enhanced understanding of sources, improved and new emission factors, increased knowledge of particle characteristics and processes, new targeted air quality and exposure campaigns in collaboration with other projects, new concentration response functions (CRF), improvements in modelling of particulate matter and analysis of mitigation and adaptation strategies for policy response.

## 24. CAIR4HEALTH - Clean Air for health (6th FP - scientific support action) - Budget: € 1 million

The overall aim of CAIR4HEALTH was to strengthen and exploit research results obtained by European and other projects related to air quality and health impact in relation to key European sustainable development action plans and strategies.

In so doing CAIR4HEALTH aided the review and horizon scanning process for key action plans including the Environment and Health Action Plan. It examined examine the current European research base - through the research and policy-related outputs from clusters, networks, projects and expert groups including those represented by CLEAR and AIRNET - and proposed recommendations to address the key needs of these policy initiatives.

# 25. HEIMTSA - Health and Environment Integrated Methodology and Toolbox for Scenario Assessment (6th FP - Integrated project) - Budget: € 5 million

HEIMTSA aimad at supporting the Environment and Health Action Plan (EHAP) by extending health impact assessment (HIA) and cost benefit analysis (CBA) methods and tools so that environment and health impacts of policy scenarios in key sectors can be evaluated reliably at the European level.

- Drawing on past HIA/CBA studies, HEIMTSA uses the full chain (impact pathway) approach:
   Emissions to environmental media ('stressor identification') are derived from sector scenarios in transport, energy, agriculture, industry, households and waste treatment and
- disposal, that are combined and harmonized to result in consistent scenarios for all relevant stressors for the whole of Europe.
- Human exposures (e.g. outdoor and indoor air pollution, water, noise, odour, metals, dioxins) by
  multiple routes are estimated, using new methods (exposure scenarios and probabilistic modelling),
  including consumer exposure to facilitate applications of the full-chain approach.
- Health risk functions are derived, with new methods for: effects of combined exposures; estimating background rates; and mapping health impacts, to aid in communication of results.
- Monetary valuation includes review of methods for valuating children's health, developing values for relevant health endpoints, extending the valuation paradigm to include altruism, and new primary studies of pain and suffering.
- New approaches to estimating and representing uncertainty were developed, and applied integrally throughout.

A decentralised modular system for integrated assessment of environmental health impacts was developed, and the entire HIA and valuation methodology applied to baseline and new policy-relevant scenarios in the key sectors, including some effects of climate change.

Results will be reported and presented in innovative ways including the generation of maps that describe the spatial distribution of health impacts and the presentation of the distribution of impacts on different groups of the population.

## 26. 2-FUN - Full-chain and UNcertainty Approaches for Assessing Health Risks in Future Environmental Scenarios (6th FP - Integrated project) - Budget: € 3 million

2-FUN aimed at developing new methodologies for risk assessment of environmental stressors in the context of assessing future scenarios for the EU-27. The work of the IHCP relates to developing physiology-based pharmacokinetic (PBPK) models for mixtures of environmental chemicals that can be found in different environmental media. The specific models developed so far include the quaternary mixture of VOCs, BTEX (benzene-toluene-ethylbenzene-xylenes), which can be found in the ambient and indoor air, and the mixture of heavy metals and organic pesticides such as arsenic and atrazine, which can be found in drinking water (mainly from surface streams and well water).

# 27. NO MIRACLE - NOvel Methods for Integrated Risk Assessment of CumuLative stressors in Europe (6th FP - Integrated project) - Budget: € 6 million

NoMiracle helped increase knowledge on the transfer of pollutants between different environmental compartments, and on the impact of cumulative stressors, including chemical mixtures. This will facilitate human and ecosystem health monitoring by providing the link with information concerning the condition of air, water, soil and the built environment. By developing and using improved assessment tools and novel models, the project quantified and aimed at reducing uncertainty in current risk assessment and screening methodologies, for example by improving the scientific basis for setting safety factors. The new methods take into account geographical, ecological, social and cultural differences across Europe.

## 28. HENVINET - Health And Environment Network (6th FP - Thematic Network) - Budget: € 2 million

To protect the health of populations and individuals, policies need to integrate environmental and health issues. The aim of HENVINET was to support such informed policy making. HENVINET reviewed, exploited and disseminated knowledge on environmental health issues based on research and practices, for wider use by relevant stakeholders. Further, it led to validation of tools and results with emphasis on the four priority

health diseases of the European Environment and Health Action Plan (EHAP) 2004-2010, and provided structured information overview that was utilised by other actors relevant to Environment and Health Strategy. Building on previous research and policy initiatives such as AirNET, CLEAR, PINCHE, INTARESE and SCALE, HENVINET collected, structured and evaluated material and presented it in a consistent manner, which resulted in transparency and identification of knowledge gaps. HENVINET established an overview of results, activities, projects and tools existing in Europe and promoted stakeholder networking through workshops and annual project meetings. Knowledge, best practices and decision support tools were reviewed to allow wider exploitation by the relevant stakeholders such as policy makers. Recognizing that dissemination of knowledge, best practices and decision support tools is crucial in supporting the implementation of the EHAP, the project defined ways to disseminate information in collaboration with main stakeholders, with emphasis on the needs of users of information, more than of those producing it. To allow for efficient data gathering, information exchanges, and targeted dissemination, the project utilised state-of-the-art Internet solutions and methodologies.

## 29. SMAQ - Satellite-assisted management of air quality (*LIFE-Environment Programme*) - Budget: € 2 million / Coordinator (PI)

SMAQ (satellite-assisted management of air quality) aimed at the development of an integrated system for efficient assessment, monitoring and management of air pollution in the larger area of Western Macedonia in Greece - an area with major lignite-fired power plants. This integrated air quality management system employs state-of-the-art technologies for fusing the necessary environmental and ancillary information to allow for cost-effective air pollution monitoring and assessment. Furthermore, the system will allow the analytical accounting of the main industrial and area emission sources in the area and the creation of a precise and updated emissions inventory. On the basis of the environmental information included in the air pollution management system, alternative emission scenarios corresponding to specific technological options and air quality management policy measures at the local and regional level have been assessed. A comprehensive system of air pollution monitoring combining ground-based measurements from an optimally configured measurement network and air pollution indicators derived from satellite remote sensing will allow the continuous monitoring and assessment of air quality in the area. Finally, a well-designed bio monitoring campaign and epidemiological data relating to effects of airborne pollutants on human health in the area was used to support a comprehensive assessment of the effects of regional air pollution on human health, and, consequently, on the local and regional economy.

## 30. ICAROS - Integrated Computational Assessment of air quality via Remote Observation System - Budget: 850,000 € / Coordinator (PI)

The goal of this research program was the development of an innovative methodology for fusion of different environmental information sources including remote sensing data, ground monitors of air quality, and advanced atmospheric chemistry and transport models in order to reduce the uncertainty of decision making concerning air quality and atmospheric pollution control in cities. The computational tool that was developed in the project was applied for the optimization of ground air quality monitoring networks, as well as for the environment-friendly design and construction of urban and industrial infrastructure. In this way, ICAROS has contributed to the effective comparison of environmental quality and the evaluation of environmental management programs at the EU level.

# 31. ICAROS NET - Integrated Computational Assessment of Air Quality via Remote Observations Network - Budget: € 2 million / Coordinator (PI)

High resolution satellite sensors can capture the optical signal of atmospheric particulate matter through absorption and scattering with a spatial resolution that serves the requirements of urban and regional applications. To date, satellite remote sensing could not offer an integrated assessment of atmospheric pollution loading with a high enough spatial resolution. Thus, the development of an integrated computational platform, based on satellite data for the fusion of data on the state of the environment and the impacts of environmental pressure on human health is the main objective of this project. This platform allows the minimization of uncertainty of decision making regarding the assessment, control and reduction of atmospheric pollution in urban settings, and enhances the robustness of transboundary air pollution assessment. The ICAROS NET system allows the fusion of distinct environmental information classes comprising satellite data, ground air quality monitoring data and results of advanced atmospheric models. A

unique feature of the system is its capacity to distinguish spatially the exposure-response functions of atmospheric pollutants. This is key for the detailed public health risk assessment of fine and ultrafine particles.

- 32. PRQA Regional Plan for Air Quality in Lombardy. 1999 2001 Budget: 90.000€
- 33. **INSPIRE** Integrated Spatial Potential of Renewable Energy in Europe Budget: 850.000 € The INSPIRE project aims to develop the methodology for linking two tools; one for economic analysis (RECAP) and one for resource mapping (GIS-Geographic Information Systems). This will provide, at ETSU, the basis for an integrated approach and methodology for resource assessment across the EU; this will initially be for biomass, but there are plans for the other renewables using other economic modelling tools. RECAP is a versatile computer model of biomass-to-energy systems; in one integrated model, all the costs from biomass production to final energy conversion can be studied. It will be of value to both farmers and potential developers within the renewable energy industry.

## The objectives:

- 1. Develop a tool for biomass-to-energy, which links economic analysis (provided by RECAP) with resource mapping (geographical area). 2. Extend the RECAP model to include environmental costs, thereby enabling a partial life-cycle analysis capability.
- 3. Review the application of the methodology developed to other key renewable energy sources (wind, biowaste and micro-hydro) and pilot a model for one of these (wind).
- 4. Ensure complementarity with other related projects, particularly those sponsored by the JOULE Programme.
  - 34. AMOEBA Atlas of European Biomass to Energy Activities Budget: 500.000 €
  - 35. AD-NET Anaerobic Digestion Network Budget: 400.000 €

AD-Nett regards the development of an efficient information exchange thematic network on anaerobic digestion (AD) of agro-industrial waste and the completion of a comprehensive evaluation of the state-of-the-art in anaerobic digestion in the EU. The JRC is primarily responsible for the assessment of the safety aspects of AD.

36. **Flash Pyrcon** – A Novel Approach for the Integration of Biomass Pyrolytic Oils into Existing Markets of Liquid Fuels/Chemicals Budget: 800.000 €

The objective of FLASHPYRCON is to evaluate the penetrability of bio-oils derived via flash pyrolysis into existing and future markets of oils and high-added value chemicals. The JRC performεδ a system analysis of the technical and economic performance and of the environmental burdel of the technology.

- 37. BIOSTIR Coupling Fast Pyrolysis of Biomass with Stirling engine for CHP Budget: 300.000 €
- 38. COMPLEXCITY Urban dynamics modelling Budget: 125.000 €
- 39. ADAGE Decision Aid for Environmental Management
- 40. **SIMAGE** Integrated System for Environmental Monitoring and Emergency Management. Budget: 12.000.000 €
- 41. **CRYOPLANE** Systems Study of Hydrogen Fuelled Aircraft. Budget: 4.500.000 € Civil aviation has enjoyed fast growth for a long time; some 4% to 5% traffic increase per annum has been predicted for the nextfew decades. As 2/3 of aircraft produced will serve additional traffic and only 1/3 will replace old aircraft, manufacturers (bothof airframes and engines) have a very strong interest in such continuing growth. However, technology improvements are not sufficient to balance traffic growth: fuel consumption and hence CO2 emissions increase by some 2% per annum, in contradiction to the accepted requirements of protecting the atmosphere (Kyoto Protocol). Liquid Hydrogen is the only known fuel suitable for aircraft to be produced from renewable energy and offering extremely low emissions (zero CO2, CO, SO2, UHC, soot; very low NOx). Use of Liquid Hydrogen can eliminate the dependency of aviation upon dwindling crude oil resources. It can eliminate, or at least reduce dramatically, the contribution of aviation to the anthropogenic greenhouse effect. Use of Liquid Hydrogen hence could allow long-term growth of aviation without penalizing the environment. Using hydrogen as an aviation fuel offers obvious advantages but also poses great technical challenges. For reasons of system weight and volume, hydrogen must be stored by aircraft in its liquid state at −253°C (20°K). Even so, fuel volume is 4 times greater than for kerosene, leading to changes of aircraft configuration. Thirty-five partners from Austria,

Belgium, France, Germany, Greece, Italy, Netherlands, Norway, Spain, Sweden and Great Britain, representing Industry, Research Establishments and Universities, had come together for a comprehensive "System Analysis" of Liquid Hydrogen Fuelled Aircraft (dubbed "CRYOPLANE"). The 2-year project was supported by the European Commission within the 5th Framework Program. The "System Analysis" cover ed all aspects relevant for assessing the technical feasibility, safety, environmental compatibility and economic viability of using Liquid Hydrogen as an aviation fuel. The project helped to lay the foundation for a consistent European long term strategy for the transition to the new fuel in aviation.

- 42. ARIS Arctic Regional Intelligence System Budget: 140.000 €
- 43. Safety and Environmental Aspects of Fusion Energy Critical assessment of the review of the possible methods for decomissioning and disposing of offshore oil and gas installations for DG Environment

#### ANNEX 2: ORGANIZATION OF INTERNATIONAL CONFERENCES / WORKSHOPS

October 4-6, 2017, Rome, Italy: 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean region – with focus on Environmental and health inequity; science in the service of society Organizer and Chair of the symposium, President of MESAEP.

February 6-10, 2017, Thessaloniki, Greece: Third Plenary Conference COST Action IS1408 on Industrially Contaminated Sites and Health Network (ICSHNet) (6-7 February) and First International Training School on Environmental health in industrially contaminated sites for the COST Action IS1408 on Industrially Contaminated Sites and Health Network (ICSHNet) (7-10 February).

October 12, 2016 Annual International Society of Exposure Science Meeting, held in Utrecht, The Netherlands, on October 9-13, 2016. Workshop on "The exposome: a transdisciplinary paradigm for improved environment and health associations".

October 9, 2016 Annual International Society of Exposure Science Meeting, held in Utrecht, The Netherlands, on October 9-13, 2016. Workshop on "INTEGRA".

September 26-30, 2015, Crete, Greece: 18th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean region - Sustainable Resource Use and Impact on Health and Well-being. Organizer and Chair of the symposium, President of MESAEP.

October 12-16, 2014, Cincinnati, USA: 24th Annual Meeting of International Society of Exposure science, Symposium on Integrated modelling approach to predict internal exposure to chemicals. Organizer and Chair of the symposium.

August 24-28, 2014, Seattle, USA: 26th Annual Conference of International Society of Environmental Epidemiology, Symposium on International Collaboration on the Exposome. Organizer and Chair of the symposium.

September 28-October 1, 2013, Istanbul, Turkey: 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region. Member of the Organising Committee – General Secretary of MESAEP.

September 24-28, 2011, Ioannina, Greece: 16th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region. Member of the Organising Committee – General Secretary of MESAEP.

June 7 2010, Windsor, UK: International Experts meeting for Assessment of cumulative exposure to chemical compounds. In collaboration to European Chemical Council and US Environmental Protection Agency. Organizer and Chair of the meeting.

October 7-11 2009, Bari, Italy: 15th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region: Environmental Threats in the Mediterranean Region – Problems and Solutions. Member of the Organising Committee – General Secretary of MESAEP.

January 30-31 2009, Ispra Italy: International Workshop on the application of advanced techniques for health risk analysis associated to exposure to chemical mixtures. In collaboration to European Chemical Council. Organizer and Chair of the meeting.

October 10-14, 2007, Seville, Spain: 14th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region: Environment and Health. Member of the Organising Committee – General Secretary of MESAEP.

October 8-12, 2005, Thessaloniki, Greece: 13th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region. Member of the Organising Committee.

June, 12-15 2005, Poros, Greece: 1st International Workshop on Modifiers of Chemical Toxicity: Implications for Human Health Risk Assessment. Chair of the Organising Committee.

October 4-8 2003, Antalya, Turkey: 12th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region: appropriate solutions for environmental problems in emerging economies. Member of the Conference Scientific Committee.

September 21-24, 2003 Stresa, Italy: International Conference of the International Society for Exposure Analysis. Organizer of the workshop for Risk assessment and management from exposure to toxic substances in the built environment.

June 26-27, 2003 Budapest, Hungary: International Workshop on information fusion for environmental management: the user perspective. Co-organizer with the Hungarian Science Academy and the Hungarian ministry of research. Chair of the Scientific Committee and of the overall workshop.

October 6-10, 2001, Limassol, Cyprus: Environmental Pollution and its impact on life in the Mediterranean region. (MESAEP and SECOTOX joint conference). Member of the Scientific Committee and Chair of the main session for environmental policy and management.

October 2-5, 2001, Rome, Italy: 3rd International Conference on environmental indices and indicators: systems analysis approach. Co-organiser with the Italian Environmental Protection Agency and the Centre for International Environmental Cooperation of the Russian Academy of Sciences. Member of the Scientific Committee.

September 9-10, 2001, Brussels, Belgium: Rapporteur in the session on environmental risks management, in the frame of the Workshop on informatics and communication services for the citizen, organized by the European Commission Directorate General of Information Society.

September 25-26, 2000, Lesvos, Greece: International Workshop on Environmental information fusion for air quality management. Co-organizer with the University of the Aegean and the National Observatory of Athens. Chair of the Scientific Committee and of the overall workshop.

April, 1997, Alexandroupoli, Greece: Chair of the session on Safety, on the International Conference for Safety and environmental protection petrol-ducts and terminal stations, organized by the European Commission Directorate Generale of Energy and transportation (focusing on Bourgas – Alexandroupoli duct).

#### **ANNEX 3: PUBLICATIONS LIST**

### **Articles in International Peer-reviewed Journals**

- Barouki, R., Audouze, K., Becker, C., Blaha, L., Coumoul, X., Karakitsios, S., Klanova, J., Miller, G. W., Price, E. J., Sarigiannis, D., 2021. The Exposome and Toxicology: A Win–Win Collaboration. Toxicological Sciences, https://doi.org/10.1093/toxsci/kfab149.
- 2. Novak, R., Petridis, I., Kocman, D., Robinson, J. A., Kanduč, T., Chapizanis, D., Karakitsios, S., Flückiger, B., Vienneau, D., Mikeš, O., Degrendele, C., Sáňka, O., García Dos Santos-Alves, S., Maggos, T., Pardali, D., Stamatelopoulou, A., Saraga, D., Persico, M. G., Visave, J., Gotti, A., Sarigiannis, D., 2021. Harmonization and Visualization of Data from a Transnational Multi-Sensor Personal Exposure Campaign. International Journal of Environmental Research and Public Health. 18, 11614.
- 3. Robinson, J. A., Novak, R., Kanduč, T., Maggos, T., Pardali, D., Stamatelopoulou, A., Saraga, D., Vienneau, D., Flückiger, B., Mikeš, O., Degrendele, C., Sáňka, O., García Dos Santos, S., Visave, J., Gotti, A., Persico, M. G., Chapizanis, D., Petridis, I., Karakitsios, S., Sarigiannis, D. A., Kocman, D., 2021. User-Centred Design of a Final Results Report for Participants in Multi-Sensor Personal Air Pollution Exposure Monitoring Campaigns. International Journal of Environmental Research and Public Health. 18. 12544.
- 4. Kouroutzi, M., Stratidakis, A., Kermenidou, M., Karakitsios, S., Sarigiannis, D., 2021. Application of TiO2 Nanoparticles in Clay Roofing Tiles as a Photocatalytic Active Material. Materials Proceedings. 5, 90.
- 5. Mueller, W., Wilkinson, P., Milner, J., Vardoulakis, S., Steinle, S., Pärkkä, J., Parmes, E., Cluitmans, L., Kuijpers, E., Pronk, A., Sarigiannis, D., Karakitsios, S., Chapizanis, D., Maggos, T., Stamatelopoulou, A., Loh, M., 2021. Neighbourhood and path-based greenspace in three European countries: associations with objective physical activity. BMC Public Health. 21, 282.
- 6. Saraga, D., Maggos, T., Degrendele, C., Klánová, J., Horvat, M., Kocman, D., Kanduč, T., Garcia, S., Peteira, R. F., Gómez, P. M., Manousakas, M., Bairachtari, K., Eleftheriadis, K., Kermenidou, M., Karakitsios, S., Gotti, A., Sarigiannis, D. Multi-city comparative PM2.5 source apportionment for fifteen sites in Europe: The ICARUS project. Science of The Total Environment (2021) 751:141855.

- 7. Kermenidou, M., Balcells, L., Martinez-Boubeta, C., Chatziavramidis, A., Konstantinidis, I., Samaras, T., Sarigiannis, D., Simeonidis, K. Magnetic nanoparticles: an indicator of health risks related to anthropogenic airborne particulate matter. Environmental Pollution (2021) (in press).
- 8. Papaioannou, N., Distel, E., Oliveira, E., Gabriel, C., Frydas I., Anesti, O., Attignon, E., Aggerbeck, M., Horvat, M., Barouki, R., Sarigiannis, D., Karakitsios, S. Multi-omics analysis reveals that co-exposure to phthalates and metals disturbs urea cycle and choline metabolism. Environmental Research (2021) 192, 110041.
- 9. Barouki, R., Kogevinas, M., Audouze, K., Belesova, K., Bergman, A., Birnbaum, L., Boekhold, S., Denys, S., Desseille, C., Drakvik, E., Frumkin, H., Garric, J., Destoumieux-Garzon, D., Haines, A., Huss, A., Jensen, G., Karakitsios, S., Klanova, J., Koskela, I. M., Laden, F., Marano, F., Franziska Matthies-Wiesler, E., Morris, G., Nowacki, J., Paloniemi, R., Pearce, N., Peters, A., Rekola, A., Sarigiannis, D., Šebková, K., Slama, R., Staatsen, B., Tonne, C., Vermeulen, R., Vineis, P. The COVID-19 pandemic and global environmental change: Emerging research needs. Environ Int (2020) 146, 106272.
- 10. Novak, R., Kocman, D., Robinson, J.A., Kanduč, T., Sarigiannis, D., Džeroski, S., Horvat, M. Low-cost environmental and motion sensor data for complex activity recognition: proof of concept. Engineering Proceedings (2020) 2,54; doi:10.3390/ecsa-7-08194.
- Skalny, A.V., Rios Rossi Lima, T., Ke, T., Zhou, Z-C., Bornhorst, J., Alekseenko, S.I., Aaseth, J., Anesti, O., Sarigiannis, D.A., Tsatsakis, A., Aschner, M., Tinkov, A.A. Toxic metal exposure as a possible risk factor for COVID-19 and other respiratory infectious diseases, Food and Chemical Toxicology (2020), 146, 111809.
- 12. Trivizakis, E., Tsiknakis, N., Vassalou, E.E., Papadakis, G.Z., Spandidos, D.A., Sarigiannis, D., Tsatsakis, A., Papanikolaou, N., Karantanas, A.H., Marias, K. Advancing Covid-19 differentiation with a robust preprocessing and integration of multi-institutional open-repository computer tomography dataset for deep learning analysis. Experimental and Therapeutic Medicine (2020), <a href="https://doi.org/10.3892/etm.2020.9210">https://doi.org/10.3892/etm.2020.9210</a>.
- 13. Sarigiannis, D., Papaioannou, N., Handakas, E., Anesti, O., Polanska, K., Hanke, W., Salifoglou, A, Gabriel, C., Karakitsios, S. Neurodevelopmental exposome: the effect of in utero co-exposure to heavy metals and phthalates on child neurodevelopment. Environmental Research (2020), *in press*.
- 14. Kermenidou, M., Karakitsios, S., Sarigiannis, D. Sources of oxidative stress induced by ambient air PMx. Environmental Research (2020), *in press*.
- 15. Sarigiannis, D., Chapizanis, D., Petridis, I., Kougioumtzoglou, A., Kermenidou, M., Sarigiannis, G., Gotti, A., Karakitsios, S. Refining PM exposure using low-cost portable sensor data and human respiratory tract deposition modelling. Journal of Exposure Science and Environmental Epidemiology (2020), *in press*.
- 16. Anesti O., Papaioannou N., Gabrie C., Dzhedzheia V., Petridis I., Dickinson M., Horvat M., Snoj Tratnik J., Tsatsakis A., Karakitsios S., Sarigiannis A. An exposome connectivity paradigm for the mechanistic assessment of the effects of prenatal and early life exposure to metals on neurodevelopment. Frontiers in Public Health (2020), *in press*.
- 17. Chapizanis, D., Karakitsios, S., Gotti, A., Sarigiannis, D. Assessing personal exposure using Agent Based Modelling informed by sensors technology. Environmental Research (2021) 192, 110141. https://doi.org/10.1016/j.envres.2020.110141.
- Audouze, K., Sarigiannis, D., Alonso-Magdalena, P., Brochot, C., Casas, M., Vrijheid, M., Babin, P. J., Karakitsios, S., Coumoul, X., Barouki, R. Integrative Strategy of Testing Systems for Identification of Endocrine Disruptors Inducing Metabolic Disorders—An Introduction to the OBERON Project. International Journal of Molecular Sciences (2020) 21, 2988.
- 19. Sarigiannis, D., Handakas, E.J., Karakitsios, S, Gotti, A. Life cycle assessment of municipal waste management options. Environmental Research (2020), https://doi.org/10.1016/j.envres.2020.110141.
- 20. Papadaki, K., Karakitsios, S., Sarigiannis, D. Modeling of the total elimination half life for environmental chemicals. Environmental Research (2020), *in press*.
- 21. Chaika, V., Pikula, K., Vshivkova, T., Zakharenko, A., Reva, G., Drozdov, K., Vardavas, A. I., Stivaktakis, P. D., Nikolouzakis, T. K., Stratidakis, A. K., Kokkinakis, M. N., Kalogeraki, A., Burykina, T., Sarigiannis, D. A., Kholodov, A., Golokhvast, K. The toxic influence and biodegradation of carbon nanofibers in

- freshwater invertebrates of the families Gammaridae, Ephemerellidae, and Chironomidae. Toxicology Reports (2020) 7, 947-954.
- 22. Saraga, D., Maggos, T., Degrendele, C., Klánová, J., Horvat, M., Kocman, D., Kanduč, T., Garcia, S., Peteira, R. F., Gómez, P. M., Manousakas, M., Bairachtari, K., Eleftheriadis, K., Kermenidou, M., Karakitsios, S., Gotti, A., Sarigiannis, D. Multi-city comparative PM2.5 source apportionment for fifteen sites in Europe: The ICARUS project. Science of The Total Environment (2020) 141855.
- 23. Karakitsios, S., Busker, R., Tjärnhage, T., Armand, P., Dybwad, M., Nielsen, M.F., Burman, J., Burke, J., Brinek, J., Bartzis, J., Maggos, T., Theocharidou, M., Gattinesi, P., Giannopoulos, G., Sarigiannis, D. Challenges on detection, identification and monitoring of indoor airborne chemical-biological agents. Safety Science (2020) 129, doi.org/10.1016/j.ssci.2020.104789
- 24. Goumenou, M., Sarigiannis, D., Tsatsakis, A., Anesti, O., Docea, A.O., Petrakis, D., Tsoukalas, D., Kostoff, R., Rakitskii, V., Spandidos, D.A., Aschner, M., Calina, D. Covid-19 in Northern Italy: An integrative overview of factors possibly influencing the sharp increase of the outbreak (Review). Molecular Medicine Reports (2020) 22 (1):20-32.
- 25. Sarigiannis, D.A., Karakitsios, S.P., Handakas, E., Gotti, A. Development of a generic lifelong physiologically based biokinetic model for exposome studies. Environmental Research (2020) 185, doi.org/10.1016/j.envres.2020.109307
- 26. Izquierdo, R., García Dos Santos, S., Borge, R., Paz, D.D.L., Sarigiannis, D., Gotti, A., Boldo, E. Health impact assessment by the implementation of Madrid City air-quality plan in 2020. Environmental Research (2020) 183, doi.org/10.1016/j.envres.2019.109021
- 27. Novak, R., Kocman, D., Robinson, J.A., Kanduč, T., Sarigiannis, D., Horvat, M. Comparing airborne particulate matter intake dose assessment models using low-cost portable sensor data. Sensors (2020) 20 (5), doi.org/10.3390/s20051406
- 28. Kholodov, A., Zakharenko, A., Drozd, V., Chernyshev, V., Kirichenko, K., Seryodkin, I., Karabtsov, A., Olesik, S., Khvost, E., Vakhnyuk, I., Chaika, V., Stratidakis, A., Vinceti, M., Sarigiannis, D., Hayes, A.W., Tsatsakis, A., Golokhvast, K. Identification of cement in atmospheric particulate matter using the hybrid method of laser diffraction analysis and Raman spectroscopy. Heliyon (2020) 6 (2), doi.org/10.1016/j.heliyon.2020.e03299
- 29. Pourchet, M., Debrauwer, L., Klanova, J., Price, E.J., Covaci, A., Caballero-Casero, N., Oberacher, H., Lamoree, M., Damont, A., Fenaille, F., Vlaanderen, J., Meijer, J., Krauss, M., Sarigiannis, D., Barouki, R., Le Bizec, B., Antignac, J.-P. Suspect and non-targeted screening of chemicals of emerging concern for human biomonitoring, environmental health studies and support to risk assessment: from promises to challenges and harmonization issues. Environment International (2020) (in print).
- 30. Sillé, F.C.M., Karakitsios, S., Kleensang, A., Koehler, K., Maertens, A., Miller, G.W., Prasse, C., Quiros-Alcala, L., Ramachandran, G., Rappaport, S.M., Rule, A.M., Sarigiannis, D., Smirnova, L., Hartung, T. The exposome a new approach for risk assessment. ALTEX Alternatives to animal experimentation (2020) 37(1), 003-023.
- 31. Hernández, A.F., Docea, A.O., Goumenou, M., Sarigiannis, D., Aschner, M., Tsatsakis, A. Application of novel technologies and mechanistic data for risk assessment under the real-life simulation (RLRS) approach. Food and Chemical Toxicology (2020) 137:111123. doi: 10.1016/j.fct.2020.111123.
- 32. Bravo, N., Grimalt, J., Mazej, D., Snoj Tratnik, J., Sarigiannis, D.A., Horvat, M. Mother/child organophospate and pyrethroid distributions. Environment International (2020) 134, 105264. doi: 10.1016/j.envint.2019.105264.
- 33. Mueller, W., Steinle, S., Pärkkä, J., Parmes, E., Liedes, H., Kuijpers, E., Pronk, A., Sarigiannis, D., Karakitsios, S., Chapizanis, D., Maggos, T., Stamatelopoulou, A., Wilkinson, P., Milner, J., Vardoulakis, S., Loh, M. Urban greenspace and the indoor environment: Pathways to health via indoor particulate matter, noise, and road noise annoyance. Environmental Research (2020), 180:158850
- 34. Tsatsakis, A.M., Katsikantami, I., Kalantzi, O.-I., Sevim, C., Tsarouhas, H., Sarigiannis, D., Tzatzarakis, M.N., Rizos, A.K. Phthalates: exposure and health effects. Encyclopedia of Environmental Health (2<sup>nd</sup> edition) (2019), 163-173.
- 35. Ribeiro, C., Mendes, V., Peleteiro, B., Delgado, I., Araujo, J., Aggerbeck, M., Annesi-Maesano, I., Sarigiannis, D., Ramos, E. Association between the exposure to phthalates and adiposity: a meta-analysis in children and adults. Environmental research (2019) 179, 108744.

- 36. Li, N., Friedrich, R., Maesano, C.N., Medda, E., Brescianini, S., Stazi, M.A., Sabel, C.E., Sarigiannis, D., Annesi-Maesano, I. Lifelong exposure to multiple stressors through different environmental pathways for European populations. Environmental Research (2019) 179A, 108744.
- 37. Hernandez, A., Buha, A., Constantin, C., Wallace D.R., Sarigiannis, D., Neagu, M., Antonijevic, B., Hayes, A.W., Wilks, M.F., Tsatsakis, A. Critical assessment and integration of separate lines of evidence for risk assessment of chemical mixtures. Archives of Toxicology (2019) (accepted)
- 38. Zarkadas, I., Pilidis, G., Kaldis, F., Stamou, I., Sarigiannis, D. Biomethane potential determinants of anaerobic digestion substrates. Bioresource Technology (2019) (accepted).
- 39. Li, N., Maesano, C.N., Friedrich, R., Medda, E., Brandstetter, S., Kabesch, M., Apfelbacher, C., Melter, M., Seelbach-Göbel, B., Annesi-Maesano, I., Sarigiannis, D. and the KUNO-kids study group. A model for estimating the lifelong exposure to PM2.5 and NO2 and the application to population studies. Environmental Research (2019) doi.org/10.1016/j.envres.2019.108629.
- 40. Margina, D., Nitulescu, G.M., Ungurianu, A., Mesnage, R., Goumenou, M., Sarigiannis, D.A., Aschner, M., Spandidos, D.A., Renieri, E.A., Hernandez Jerez, A., Tsatsakis, A. Evaluating the effects of chemical mixtures with endocrine disrupting activity in the context of real-life risk simulation (RLRS): an integrative approach (Review). World Academy of Sciences Journal (2019) doi.org/10.3892/wasj.2019.17.
- 41. Leblanc, A.F., Attignon, E.A., Distel, E., Karakitsios, S.P., Sarigiannis, D.A., Bortoli, S., Barouki, R., Coumoul, X., Aggerbeck, M., Blanc, E.B. A dual mixture of persistent organic pollutants modifies carbohydrate metabolism in the human hepatic cell line HepaRG. Environmental Research (2019). doi.org/10.1016/j.envres.2019.108628.
- 42. Taghizadeh, S.F., Goumenou, M., Rezaee, R., Alegakis, T., Kokaraki, V., Anesti, O., Sarigiannis, D.A., Tsatsakis, A., Karimi, G. Cumulative risk assessment of pesticide residues in different Iranian pistachio cultivars: applying the source specific HQs and adversity specific HIA approaches in Real Life Risk Simulations (RLRS). Toxicology Letters (2019) 313: 91-100.
- 43. Rezaee, R., Sheidary, A., Jangjoo, S., Ekhtiary, S., Bagheri, S., Dadres, M., Docea, A.O., Tsarouhas, K., Sarigiannis, D.A., Karakitsios, S., Tsatsakis, A., Kovatsi, L., Hashemzaei, M. Cardioprotective effects of hesperidin in carbon monoxide-poisoned rats. Drug and Chemical Toxicology (2019), Taylor & Francis, doi.org/10.1080/01480545.2019.1650753.
- 44. Sarigiannis, D.A., Karakitsios, S., Dominguez-Romero, E., Papadaki, K., Brochot, C., Kumar, V., Schumacher, M., Sy, M., Mielke, H., Greiner, M., Mengelers, M., Scheringer, M. Physiology-based toxicokinetic modeling in the frame of the European Human Biomonitoring Initiative. Environmental Research (2019), 172, 216-230, Academic Press.
- 45. Sarigiannis, D.A. Environmental and health inequalities. Fresenius Environmental Bulletin (2019), 28(2), 516-517.
- 46. Onida, M., Faravelli, M., Gotti, A., Sarigiannis, D. Communicating multi-hazard health risk through a web-GIS platform: a case-study. Fresenius Environmental Bulletin (2019), 762.
- 47. Sarigiannis, D.A., Kaldis, F., Zachariou, S., Lioti, M., Zarkadas, I.S. Anaerobic digestion of olive mill wastewater: focusing on the effect of nitrogen source. CLEAN Soil, Air, Waste (2019), 47(3), 1800300, Wiley.
- 48. Sarigiannis D.A., Karakitsios S. Advancing chemical risk assessment through human physiology-based biochemical process modeling. Fluids (2019) 4(1), 4; doi:10.3390/fluids4010004.
- 49. Sarigiannis D.A., Snoj Tratnik J., Mazej D., Kosjek T., Heath E., Horvat M., Anesti O., Karakitsios S.P. Risk characterization of bisphenol-A in the Slovenian population starting from human biomonitoring data. Environmental Research (2019) 170: 293-300.
- 50. Chernyshev V.V., Zakharenko A.M., Ugay S.M., Hien T.T., Hai L.H., Olesik S.M., Kholodov A.S., Zubko E., Kokkinakis M., Burykina T.I., Stratidakis A.K., Mezhuev Ya. O., Sarigiannis D.A., Tsatsakis A.M., Golokhvast K.S. Morphological and chemical composition of particulate matter in buses exhaust. Toxicology Reports (2019) https://doi.org/10.1016/j.toxrep.2018.12.002.
- 51. Pikula, K.S., Zkakharenko, A.M., Chaika, V.V., Stratidakis, A.K., Waissi, G., Sarigiannis, D.A., Hayes, A.W., Coleman, M.D., Tsatsakis, A.M., Golokhvast, S. Toxicity bioassay of waste cooking-oil based biodiesel on marine microalgae. Toxicology Reports (2019) 6: 111-117.

- 52. Tratnik, JS, Kosjek, T, Heath, E, Mazej, D, Ćehić, S, Karakitsios, SP, Sarigiannis, DA, Horvat, M. Urinary bisphenol A in children, mothers and fathers from Slovenia: Overall results and determinants of exposure. Environmental research (2019) 168: 32-40.
- 53. Katsikantami, I, Colosio, C, Alegakis, A, Tzatzarakis, MN, Vakonaki, E, Rizos, AK, Sarigiannis, DA, Tsatsakis, AM. Estimation of daily intake and risk assessment of organophosphorus pesticides based on biomonitoring data—The internal exposure approach. Food and Chemical Toxicology (2019) 123: 57-71.
- 54. Buekers, J, David, M, Koppen, G, Bessems, J, Scheringer, M, Lebret, E, Sarigiannis, D, Kolossa M, Gehring, M, Berglund, M, Schoeters, G, Trier, X. Development of Policy Relevant Human Biomonitoring Indicators for Chemical Exposure in the European Population. International journal of environmental research and public health (2018) 15(10): 2085-3003.
- 55. Limban, C, Nuţă, DC, Chiriţă, C, Negreş, S, Arsene, AL, Goumenou, M, Karakitsios, SP, Tsatsakis, AM, Sarigiannis, DA. The use of structural alerts to avoid the toxicity of pharmaceuticals. Toxicology Reports (2018) 5:943-953.
- 56. Sarigiannis, DA, Karakitsios, SP. Addressing complexity of health impact assessment in industrially contaminated sites via the exposome paradigm. Epidemiologia e prevenzione (2018) 42(5-6S1): 37-48.
- 57. Hoek, G, Ranzi, A, Alimehmeti, I, Ardeleanu, ER, Arrebola, JP, Ávila, P, Candeias, C, Colles, A, Crişan, GC, Dack, S, Demeter, Z, Fazzo, L, Fierens, T, Flückiger, B, Gaengler, S, Hänninen, O, Harzia, H, Hough, R, Iantovics, BL, Kalantzi, OI, Karakitsios, SP, Makris, KC, Martin-Olmedo, P, Nechita, E, Nicoli, T, Orru, H, Pasetto, R, Pérez-Carrascosa, FM, Pestana, D, Rocha, F, Sarigiannis, DA, Teixeira, JP, Tsadilas, C, Tasic, V, Vaccari, L, Iavarone, I. A review of exposure assessment methods for epidemiological studies of health effects related to industrially contaminated sites. Epidemiologia e prevenzione (2018) 42(5-6S1): 21-36.
- 58. Stamatelopoulou A, Chapizanis D, Karakitsios S, Kontoroupis P, Asimakopoulos DN, Maggos T, Sarigiannis D. Assessing and Enhancing the Utility of Low-Cost Activity and Location Sensors for Exposure Studies. Environmental Monitoring and Assessment (2018), 190:155.
- 59. Steckling N, Gotti A, Bose-O'Reilly S, Chapizanis D, Costopoulou D, De Vocht F, Garí M, Grimalt J, Heath E, Hiscock R, Jagodic M, Karakitsios SP, Kedikoglou K, Kosjek T, Leondiadis L, Maggos T, Mazej D, Polańska K, Povey A, Rovira J, Schoierer J, Schuhmacher M, Špirić Z, Stajnko A, Stierum R, Tratnik JS, Vassiliadou I, Annesi-Maesano I, Horvat M, Sarigiannis DA. Biomarkers of exposure in environment-wide association studies Opportunities to decode the exposome using human biomonitoring data. Environmental Research (2018) 164:597-624.
- 60. Papadaki, K., Karakitsios, S., Sarigiannis, D.A. Modeling of adipose/blood partition coefficient for environmental chemicals. Food and Chemical Toxicology (2017) 110:274-285.
- 61. Pino, A., Chiarotti, F., Calamandrei, G., Gotti, A., Karakitsios, S., Handakas, E., Bocca, B., Sarigiannis, D., Alimonti, A. Human biomonitoring data analysis for metals in an Italian adolescents cohort: an exposome approach. Environmental Research 158 (2017) 159:344-354.
- 62. Sarigiannis, D. Assessing the impact of hazardous waste on children's health: the exposome paradigm. Environmental Research 158 (2017): 531-541.
- 63. Sarigiannis, D.A., Handakas, E.J., Kermenidou, M., Zarkadas, I., Gotti, A., Charisiadis, P., Makris, K., Manousakas, M., Eleftheriadis, K., Karakitsios, S.P. Monitoring of air pollution levels related to Charilaos Trikoupis bridge. Science of the Total Environment (2017) 609:1451-1463.
- 64. Loh, M., Sarigiannis, D., Gotti, A., Karakitsios, S., Pronk, A., Kuijpers, E., Annessi-Maesano, I., Baiz, N., Madureira J, Oliveira Fernandes, E., Jerrett, M., Cherrie, J. A Sensor-based Approach to Characterise the External Exposome. International Journal of Environmental Research and Public Health (2017) 14, 434; doi:10.3390/ijerph14040434.
- 65. Grellier, J., White, M.P., Albin, M., Bell, S., Elliott, L.R., Gascon, M., Gualdi, S., Mancini, L., Nieuwenhuijsen, M.J., Sarigiannis, D.A., van den Bosch, M., Wolf, T., Wuijts, S., Fleming, L.E. BlueHealth: a study programme protocol for mapping and quantifying the potential benefits to public health and well-being from Europe's blue spaces. British Medical Journal Open 2017;7:e016188. doi:10.1136/bmjopen-2017-016188
- 66. Sarigiannis, D, Papadaki, K., Kontoroupis, P, Karakitsios, S. Development of QSARs for parameterizing Physiology Based ToxicoKinetic models. Food and Chemical Toxicology (2017), 106:114-124

- 67. Ganzleben, K., Klanova, J., Schoeters, G.R., Antignac, J.P., Sepai, O., Barouki, R., Tolonen, H., Castano, A., Sarigiannis, D., Fiddicke, U., Lebret, E., Olea, N. Human biomonitoring as a tool to support chemicals regulation in the European Union. International Journal of Hygiene and Environmental Health (2017) http://dx.doi.org/10.1016/j.ijheh.2017.01.007
- 68. Priftis A, Papikinos K, Koukoulanaki M, Kerasioti E, Stagos D, Konstantinopoulos K, Spandidos DA, Kermenidou M, Karakitsios S, Sarigiannis D, Tsatsakis AM, Kouretas D. Development of an assay to assess genotoxicity by particulate matter extract. Molecular Medicine Reports 2017; 15: 1738-1746.
- 69. Manrai, A.K., Cui, Y., Bushel, P., Hall, M., Karakitsios, S., Mattingly, C.J., Ritchie, M., Schmitt, C., Sarigiannis, D.A., Thomas, D., Wishart, D., Balshaw, D.M., Patel, C.J. Informatics and data analytics to support exposome-based discovery for public health, Annual Review of Public Health (2017) 38:279-294.
- 70. Handakas, E., Sarigiannis, D., Manariotis, I., Yannopoulos, P., Zarkadas, I. Decision support tool for urban solid waste management. Fresenius Environmental Bulletin (2017) 26(1):405-412.
- 71. Sarigiannis, D., Kyriakou, S., Kermenidou, M., Karakitsios, S. The reactive oxidative potential from biomass emitted particulate matter (PM10, PM2.5 & PM1) and its impact on human health. Fresenius Environmental Bulletin (2017) 26(1): 188-195.
- 72. Sarigiannis, D., Nikolaki, S., Zikopoulos, D., Kermenidou, M. Determination of 19 PAHs in air samples using gas chromatography-mass spectrometry. Fresenius Environmental Bulletin (2017) 26(1): 338-343.
- 73. Handakas, E., Chapizanis, D., Sarigiannis, D., Karakitsios, S. Study of in-vehicle particulate matter exposure in Thessaloniki, Greece. Fresenius Environmental Bulletin (2017) 26(1): 327-331.
- 74. Zarkadas, I., Georgopoulos, N., Kaldis, F., Pilidis, G., Sarigiannis, D. Assessing the Biomethane potential of three pickling and canning semi-solid wastes under thermophilic conditions. Fresenius Environmental Bulletin (2017) 26(1): 392-398.
- 75. Sarigiannis, D.A., Kontoroupis, P., Nikolaki, S., Gotti, A., Chapizanis, D., Karakitsios, S. Benefits on public health from transport-related greenhouse gas mitigation policies in Southeastern European cities. Science of the Total Environment (2017) 579: 1427-1438.
- 76. Sarigiannis, D.A., Karakitsios, S., Handakas, E., Simou, K., Solomou, E., Gotti, A. Integrated exposure and risk characterization of bisphenol-A in Europe, Food and Chemical Toxicology (2016) 98 134-147.
- 77. Sarigiannis, D., Papadaki, K., Karakitsios, S. Development and evaluation of QSAR models for use in toxicokinetic modelling of "data poor" industrial chemicals. Toxicology Letters (2016) 258, S296.
- 78. Sarigiannis, D., Karakitsios, S., Handakas, E., Gotti, A. Exposome analysis of polyaromatic hydrocarbons. Toxicology Letters (2016) 258, S57.
- 79. Sarigiannis, D., Karakitsios, S., Tsatsakis, A., Golokhvast, K., Engin, B. High dimension biological analysis of carbon nanotube toxicity. Toxicology Letters (2016) 258, S269.
- 80. Tobollik, M., Keuken, M., Sabel, C., Cowie, H., Tuomisto, J., Sarigiannis, D., Kuenzli, N., Perez, L., Mudu, P. Health impact assessment of transport policies in Rotterdam: Decrease of total traffic and increase of electric car use. Environmental Research (2016) 146, 350-358.
- 81. Zarkadas, I., Dontis, G., Pilidis, G., Sarigiannis, D.A. Exploring the potential of fur farming wastes and byproducts as substrates to anaerobic digestion process (2016) Renewable Energy 96, 1063-1070.
- 82. Sarigiannis, D.A. and Salifoglou, A. Research directives toward deciphering adverse outcome pathways induced by environmental metallotoxins (2016) Current Opinion in Chemical Engineering 13, 161-169.
- 83. Vitkina, T., Yankova, V. Kuznetsov, V.L., Krasnikov, D.V., Nazarenko, A.V., Chaika, V.V., Smagin, V.V. Tsatsakis, A., Engin, A.B., Karakitsios, S., Sarigiannis, D.A., Golokhvast, K. The impact of multi-walled carbon nanotubes with different amount of metallic impurities on immunometabolic parameters in healthy volunteers. Food and Chemical Toxicology (2016) 87:138-147.
- 84. Sabel, C.E., Hiscock, R., Asikainen, A., Bi, J., Delpledge, M., van den Elshout, S., Friedrich, R., Huang, G., Hurley, F., Jantunen, M., Karakitsios, S.P., Keuken, M., Kingham, S., Kontoroupis, P., Kuenzli, N., Liu, M., Martuzzi, M., Morton, K., Mudu, P., Nittynen, M., Perez, L., Sarigiannis, D., Stahl-Timmins, W., Tobolik, M., Tuomisto, J., Wilers, S. Public health impacts of city policies to reduce climate change: findings from the URGENCHE EU-China project. Environmental Health (2016) 15(1), 5.

- 85. Baïz, N., Karakitsios, S., Stierum, R., Sarigiannis, D., Annesi-Maesano, I. A Literature Review to Define Critical Life Events: Implications for Time-Dependent Biological Sample Collection to determine the Exposome in Childhood. Int. J. Environ. Res. Public Health (2016), 12, 1-x manuscripts; doi:10.3390/ijerph120x0000x
- 86. Sarigiannis, D.A., Kermenidou, M., Nikolaki, S., Zikopoulos, D., Karakitsios, S.P. Mortality and morbidity attributed to aerosol and gaseous emissions from biomass use for space heating, Aerosol and Air Quality Research (2015) 15: 2496–2507.
- 87. Sarigiannis, D., 2015. Unravelling the Exposome through integrated exposure biology. Toxicology Letters. 238. S229-S230.
- 88. Sarigiannis, D. Exposome science for public health protection and innovation (2015). Toxicology Letters. 238, S12-S13.
- 89. Tsakiris, I., Tzatzarakis, M., Alegakis, A., Mitlianga, P., Vakonaki, E., Tsatsakis, I., Dumanov, J., Sarigiannis, D., Tsatsakis, A. Monitoring of Ochratoxin A residues in Greek bottled wine. Toxicology Letters (2015) 238, S82-S83.
- 90. Sarigiannis, D., Karakitsios, S., Gotti, A., Handakas, E., Papadaki, K. INTEGRA: Advancing risk assessment using internal dosimetry metrics. Toxicology Letters (2015) 238, S110-S111.
- 91. Sarigiannis, D., Papadaki, K., Kontoroupis, P., Karakitsios, S. Advanced QSAR models for use in toxicokinetic modelling. Toxicology Letters (2015) 238, S166-S167.
- 92. Alegakis, A., Androutsopoulos, V., Karakitsios, S., Sarigiannis, D. Modelling risk for chemical mixtures. Toxicology Letters (2015) 238, S19.
- 93. Perez, L., Trüeb, S., Cowie, H., Keuken, M.P., Mudu, P., Ragettli, MS., Sarigiannis, D.A., Tobollik, M., Tuomisto, J., Vienneau, D., Sabel, C., Künzli, N. Transport-related measures to mitigate climate change in Basel, Switzerland: a health-effectiveness comparison study, Environment International (2015) 85:111-119.
- 94. Golokhvast, K.S., Chernyshev, V.V., Chaika, V.V., Ugay, S.M., Zelinskaya, E.V., Tsatsakis, A.M., Karakitsios, S.P., Sarigiannis, D.A. Size-segregated emissions and metal content of particles emitted by vehicles with low and high mileage: implications to population exposure, Environmental Research (2015) 142: 479-485.
- 95. Sarigiannis, D.A., Karakitsios, S.P., Kermenidou, M. Health impact and monetary cost of exposure to particulate matter emitted from biomass burning in large cities, Science of the Total Environment (2015) 524-525: 319-330.
- 96. Braubach, M., Tobollik, M., Mudu, P., Hiscock, R., Chapizanis, D., Sarigiannis, D., Keuken, M., Perez, L., Martuzzi, M. Development of a methodology to assess the impacts of urban transport interventions and related noise on wellbeing. Int. J. Environ. Res. Public Health (2015) 12: 5792-5814.
- 97. Sarigiannis, D.A., Karakitsios, S.P., Zikopoulos, D., Nikolaki, S., Kermenidou, M. Lung cancer risk from PAHs emitted from biomass combustion. Environmental Research (2015) 137: 147-156.
- 98. Andra S.S., Charisiadis P., Karakitsios S.P., Sarigiannis D.A., Makris C. Passive exposures of children to volatile trihalomethanes during domestic cleaning activities of their parents. Environmental Research (2015) 136: 187-195.
- 99. Sarigiannis DA, Karakitsios SP, Kermenidou M, Nikolaki S, Zikopoulos D, Semelidis S, Papagiannakis A, Tzimou R. Total exposure to airborne particulate matter in cities: the effect of biomass combustion. Science of The Total Environment (2014) 493(0): 795-805.
- 100. Sarigiannis D.A., Gotti, A. New methods for personal monitoring of air pollution through the use of passive sensors during childhood. Pneumologia Pediatrica (2014) 54: 37-43
- 101. Karakitsios S., Asikainen A., Garden C., Semple S., De Brouwere K., Galea K.S., Sánchez-Jiménez A., Gotti A., Jantunen M., Sarigiannis D. Integrated exposure for risk assessment in indoor environments based on a review of concentration data on airborne chemical pollutants in domestic environments in Europe. Indoor and Built Environment (2014), doi:10.1177/1420326X14534865.
- 102. Sarigiannis D.A., Kontoroupis P., Solomou E.S., Nikolaki S., Karabelas A.J. Inventory of pesticide emissions into the air in Europe. *Atmospheric Environment* (2013) 75: 6-14.

- 103. Karakitsios S.P., Sarigiannis D.A., Gotti A., Kassomenos P.A., Pilidis G.A. A methodological frame for assessing benzene induced leukemia risk mitigation due to policy measures. *Science of the Total Environment* (2013) 443: 549-58.
- 104. Theofanidis S.A., Papagiannakis A., Semelidis S., Sarigiannis D.A. Integrated recycling of municipal solid waste in thessaloniki. *Fresenius Environmental Bulletin* (2012) 21: 3337-3344.
- 105. Sarigiannis D.A., Karakitsios S.P., Antonakopoulou M.P., Gotti A. Exposure analysis of accidental release of mercury from compact fluorescent lamps (CFLs). *Science of the Total Environment* (2012) 435–436: 306-15.
- 106. Sarigiannis D.A., Hansen U. Considering the cumulative risk of mixtures of chemicals A challenge for policy makers. *Environmental Health* (2012) 11: (Suppl 1) S18.
- 107. Sarigiannis D.A., Karakitsios, S.P., Gotti, A. Exposure and risk characterization in European indoor environments related to benzene and formaldehyde. *Fresenius Environmental Bulletin* (2012) *21*: 3160-7.
- 108. Sarigiannis D., Samaras Z., Vouitsis I., Karakitsios S., Kalaitzis V. Mechanistic Exposure Assessment of Ultrafine PM. *Epidemiology* (2012) 23(5S): 313.
- 109. Sarigiannis D., Karakitsios S., Gotti A. Tags: A Computational Tool Towards Tiered Aggregate Exposure Assessment. *Epidemiology* (2012) 23(5S): 136.
- 110. Sarigiannis D., Gotti A., Karakitsios S., Kontoroupis P., Nikolaki S. Intera Platform: A Tool for Mechanistic Risk Assessment of Indoor Air Pollutants. *Epidemiology* (2012) 23(5S): 234.
- 111. Handakas E.J., Sarigiannis D.A. Solid waste management: A systems approach. *Fresenius Environmental Bulletin* (2012) 21: 3330-6.
- 112. Zscheppang A., Manes F., La Torre G., Boccia A., Trueman S., Sarigiannis D., Pavlos K., Artinano B.A., Perrino C., Patier R.a.F.n. Methodology for measuring environmental health within Europe. Health Risk from Environmental Pollution Levels in Urban Systems (HEREPLUS). *Italian Journal of Public Health* (2012) 5(4).
- 113. Schaefer K., Emeis S., Schrader S., Török S., Alföldy B., Osan J., Pitz M., Münkel C., Cyrys J., Peters A., Sarigiannis D., Suppan P. A measurement based analysis of the spatial distribution, temporal variation and chemical composition of particulate matter in Munich and Augsburg. *Meteorologische Zeitschrift* (2011) 20: 47-57.
- 114. Sarigiannis D.A., Karakitsios S.P., Gotti A., Liakos I.L., Katsoyiannis A. Exposure to major volatile organic compounds and carbonyls in European indoor environments and associated health risk. *Environment International* (2011) 37: 743-65.
- 115. Sarigiannis D., Karakitsios S. Perinatal Exposure to Bisphenol A: The Route of Administration Makes the Dose. *Epidemiology* (2011) 22: S172.
- 116. Sarigiannis D., Gotti A., Manes F., Incerti G., Salvatori E., Kalabokas P. On the Use of Satellite Data to Estimate Spatially Referenced Health Risk of Air Pollution. *Epidemiology* (2011) 22: S139.
- 117. Sarigiannis D., Gotti A., Karakitsios S. A Computational Framework for Aggregate and Cumulative Exposure Assessment. *Epidemiology* (2011) 22: S96-S7.
- 118. Sarigiannis D., Gotti A., Kalabokas P., Manes F., Incerti G., Salvatori E., La Torre G. On the Use of Satellite Data for Spatial Health Risk Assessment of Urban Air Pollutants. *Epidemiology* (2011) 22: S140-S1.
- 119. Kassomenos, P., Petrakis, M., Sarigiannis, D., Gotti, A., Karakitsios, S., Identifying the contribution of physical and chemical stressors to the daily hospital admission rate implementing an artificial neural network model, *Air Quality, Atmosphere and Health*, Elsevier (2011) 4: 263-272.
- 120. Hänninen, O., Vardoulakis, S., Sarigiannis, D.A., Incecik, S., Sokhi, R.S. Focus on exposure to air pollution and related health impacts, *Air Quality, Atmosphere and Health*, Elsevier (2011) 4:159-160.
- 121. Pistocchi, A., Sarigiannis, D.A., Vizcaino, P. Spatially explicit multimedia fate models for pollutants in Europe: state of the art and perspectives, *Science of the Total Environment* (2010) 408(18): 3817-3830.
- 122. Coccini, T, Roda, E., Sarigiannis, D.A., Mustarelli, P., Quartarone, E., Profumo, A., Manzo, L. Effects of water-soluble functionalized multi-walled carbon nanotubes examined by different cytotoxicity methods in human astrocyte D384 and lung A549 cells, *Toxicology*, Elsevier (2010) 269(1): 41-53.

- 123. Coccini, T., Roda, E., Sarigiannis, D.A., Mustarelli, P., Profumo, A., Manzo, L. The degree of functionalization affects in vitro cytotoxicity of multi-walled carbon nanotubes (CNTs), *Toxicology Letters* (2009) 189 (S1): S183-S184.
- 124. Sarigiannis, D., Karakitsios, S., Gotti, A. Mechanistic full chain approach for ETS carcinogenicity impact assessment in the EU, *Epidemiology* (2009) 20(6): S88.
- 125. Karakitsios, S.P., Kassomenos, P.A., Sarigiannis, D.A., Pilidis, G.A. Exposure modeling of benzene exploiting passive-active sampling data, *Environmental Modeling and Assessment* (2009) doi: 10.1007/s10666-009-9206-6
- 126. Sarigiannis, D., Gotti, A., Cimino Reale, G. and Marafante, E. Reflections on new directions for risk assessment of environmental chemical mixtures, *Int. J. Risk Assessment and Management,* (2009) 13(3/4): 216–241.
- 127. Sarigiannis, D. Toxicogenomics and biology-based modeling framework for health risk assessment, *Human & Experimental Toxicology* (2009) 28: 139-141.
- 128. Vardoulakis, S., Hanninen, O., Sarigiannis, D.A. Exposure to air pollution and effects on human health, *WHO Newsletter*, 43: 12-16 (2009)
- 129. Karabelas, A.J., Plakas, K.V., Solomou, E.S., Drossou, V., Sarigiannis, D.A. Impact of European legislation on marketed pesticides a view from the standpoint of health impact assessment studies, *Environment International* (2009) 35(7): 1096-1107
- 130. Sarigiannis, D.A., Gotti, A. Dynamic risk assessment of pollution disasters, *Fresenius Environmental Bulletin* 18 (6): 928-934 (2009)
- 131. Kotzias, D., Geiss. O., Tirendi, S., Barrero-Moreno, J., Reina, V., Gotti, A., Cimino-Reale, G., Casati, B., Marafante, E., Sarigiannis, D. Exposure to multiple air contaminants in public buildings, schools and kindergartens the European indoor air monitoring and exposure assessment (AIRMEX) study, Fresenius Environmental Bulletin 18 (5A): 670-681 (2009).
- 132. Sarigiannis, D.A., Karakitsios, S.P., Gotti, A., Papaloukas, C.L., Kassomenos, P.A., Pilidis, G.A. Bayesian Algorithm Implementation in a Real Time Exposure Assessment Model on Benzene with Calculation of Associated Cancer Risks, *Sensors* (2009), 9(2): 731-755
- 133. Sarigiannis, D., Cimino Reale, G., Marafante, E., Collotta, A. Gene expression-based biomarkers of air pollution mixtures. *Epidemiology* 19(6) Suppl.:S355 (2008).
- 134. Sarigiannis, D; Liakos, I; Katsogiannis, A; Gotti, A; Barrero-Moreno, J; Kotzias, D. Exposure characterization and health risk of volatile organic chemicals in the indoor air in Europe. *Epidemiology* 19(6) Suppl.:S355-356 (2008).
- 135. Karakitsios, S., Sarigiannis, D., Gotti, A., Kassomenos, P., Pilidis, G. An integrated exposure and risk model for benzene in the ambient air. *Epidemiology* 19(6) Suppl.:S356 (2008).
- 136. Zscheppang, A., Manes, F., La Torre, G., Boccia, A., Trueman, S., Sarigiannis, D., Pavlos, K., Artíñano, B., Perrino, C., Patier, R.F., Rigby, M., Jankovic, S., Kirch, W. Methodology for measuring environmental health within Europe. Health Risk from Environmental Pollution Levels in Urban Systems (HEREPLUS). *Italian Journal of Public Health* 5(4): 284-287 (2008).
- 137. Solomou, E., Sarigiannis, D., Karabelas, A., Mousiou, V., Tsikardani, L., Amanatidou, E. Estimation of emissions and local emission factors in the region of Western Macedonia, Greece. *Fresenius Environmental Bulletin* 17 (10B): 1725-1735 (2008)
- 138. Sarigiannis, D.A., Gotti, A. Biology-based dose-response models for health risk assessment of chemical mixtures. *Fresenius Environmental Bulletin* 17 (9B): 1439-1451 (2008)
- 139. Cimino Reale, G., Collotta, A., Sarigiannis, D., Marafante, E. Toxicogenomic study of indoor and outdoor air chemical mixtures. *Fresenius Environmental Bulletin* 17 (9B): 1485-1491 (2008)
- 140. Sarigiannis, D.A., Saisana, M. Multi-objective optimization of air quality monitoring. *Environmental Monitoring and Assessment* 136 (1-3), (2008) pp. 87-99
- 141. Sarigiannis, D.A., Gotti, A. Reducing Uncertainty in Estimating Complex Exposure for Integrated Health Risk Assessment. *Epidemiology* 17(6) Suppl:S153 (2006).

- 142. Sarigiannis, D.A., Gotti, A., Soulakellis, N. Information Fusion for Computational Assessment of Air Quality and Health Effects. *Epidemiology* 17(6) Suppl.:S112 (2006).
- 143. Sarigiannis, D.A., N.A. Soulakellis, N.I. Sifakis, Information fusion for computational assessment of air quality and health effects, *Photogrammetric Eng & Remote Sensing* Vol. 70, No. 2, February 2004, pp. 235–245 (2004).
- 144. Soulakellis, N.A., Sifakis, N.I., Tombrou, M., Sarigiannis, D., Schäfer, K. Estimation and mapping of aerosol optical thickness over the city of Brescia Italy using diachronic and multiangle SPOT 1, SPOT 2 and SPOT 4 imagery. *Geocarto International* 19 (4), (2004) pp. 57-66
- 145. Dandou, A., E. Bosioli, M. Tombrou, N. Sifakis, D. Paronis, N. Soulakellis, D. Sarigiannis. The importance of mixing height in characterising pollution levels from aerosol optical thickness derived by satellite, *Water, Air and Soil Pollution: Focus* Vol. 2(5): 17-28 (2002)
- 146. Sarigiannis, D., N. Soulakellis, K. Schäfer, M. Tombrou, N. Sifakis, D. Assimakopoulos, M. Lointier, E. Bossioli, A. Dantou, M. Saisana, ICAROS: An integrated computational environment for the assimilation of environmental data and models for urban and regional air quality, *Water, Air and Soil Pollution: Focus* Vol. 2(5): 641-654 (2002)
- 147. Schäfer, K., Fömmel, G., Hoffmann, H., Briz, S., Junkermann, W., Emeis, S., Jahn, C., Leipold, S., Sedlmaier, A., Soulakellis, N., Sifakis, N., Sarigiannis, D.: Three-Dimensional Ground-Based Measurements of Urban Air Quality to Evaluate Satellite Derived Interpretations for Urban Air Pollution, *Water, Air and Soil Pollution: Focus* 2(5): 91-102 (2002)
- 148. Sarigiannis, D.A., G. Triacchini, Meso-scale life cycle impact assessment of novel technology policies: the case of renewable energy, *Journal of Hazardous Materials*, Elsevier, Vol.78 (1-3): 145 171 (2000).
- 149. Andritsos, F., D.A. Sarigiannis, L. Daverio, Envelope analysis of post-accidental thermal transients for ITER, *Fusion Technology*, Vol.2: 1787-1790 (1997).
- 150. Sarigiannis, D.A., Computer-aided design for environment in the process industries, *Computers and Chemical Engineering*, Vol.20:972, pp.1407-1412 (1996).
- 151. Sarigiannis, D.A., On order reduction in hydrogen isotope distillation models, *Fusion Engineering and Design*, 28 (1995), 406-412.
- 152. Ho, S.K., C. Annese, T.K. Fowler, E. Greenspan, J.P. Holdren, M.D. Lowenthal and D.A. Sarigiannis, Integrated fusion environmental and safety studies, *J. of Fusion Energy* (1993), 12, N.1-2:163-169.
- 153. Sarigiannis, D.A., T.K. Fowler, S.K. Ho, J.P. Holdren, Tritium process modelling: a systems approach, *Fusion Technology* (1993), 1211-1215, North-Holland.

## Monographs - Books - Book chapters

- 1. Sarigiannis, D.A., Hartung, T., Karakitsios, S. The exposome—a new paradigm for non-animal toxicology and integrated risk assessment. Chapter in: Toxicological Risk Assessment and Multi-System Health Impacts from Exposure. Academic Press (2021).
- 2. Sarigiannis, D.A. Computational toxicology. Chapter in: Toxicology in modern world. NEON publications (2020).
- 3. Sarigiannis, D.A. The exposome paradigm in environmental health. Chapter in: Environmental exposures and human health challenges. Paradopoulou, P., Marouli, C., Misseyanni, A. (eds.), IGI Global (2019).
- 4. Sarigiannis, D.A., Gotti, A., Karakitsios, S.P. The waste-energy-health nexus: the social (in)justice dimension. Chapter in: Environmental exposures and human health challenges. Paradopoulou, P., Marouli, C., Misseyanni, A. (eds.), IGI Global (2019).
- 5. Sarigiannis, D.A. The exposome: a new tool for improved health risk assessment. Chapter in: Management of emerging public health issues and risks. Roig, B., Weiss, K., Thireau, V. (eds)., Academic Press (2019).
- 6. Sarigiannis, D.A., Gotti, A., Karakitsios, S.P. Indoor air and public health. Chapter in: Management of emerging public health issues and risks. Roig, B., Weiss, K., Thireau, V. (eds)., Academic Press (2019).

- 7. Sarigiannis D.A. Transcriptomics within the exposome paradigm. Chapter in: Unraveling the exposome. S. Dagnino and A. Macherone (eds.), Springer (2019).
- 8. Sarigiannis D.A. The HEALS project. Chapter in: Unraveling the exposome. S. Dagnino and A. Macherone (eds.), Springer (2019).
- 9. Sarigiannis D.A., S. Karakitsios, E. Handakas, K. Papadaki, D. Chapizanis, A. Gotti. Informatics and data analytics to support exposome-based discovery Part 1: Assessment of external and internal exposure. Chapter in: Applying Big Data Analytics in Bioinformatics and Medicine. P. Papadopoulou and D. Lytras (eds.), IGI Global (2018).
- 10. Sarigiannis D.A., A. Gotti, E. Handakas, S. Karakitsios. Informatics and data analytics to support exposome-based discovery Part 2: Computational exposure biology. Chapter in: Applying Big Data Analytics in Bioinformatics and Medicine. P. Papadopoulou and D. Lytras (eds.), IGI Global (2018).
- 11. Sarigiannis D.A. and Karakitsios S.P. Complex exposure modeling. Chapter in: Mixtures toxicology and risk assessment. J.E. Simmons and C. Rider (eds.), Springer (2018).
- 12. Sarigiannis D. Indoor air. Chapter in: Environmental Indicators, R.H. Armon and O. Hanninen (eds.), Springer Science+Business Media, Dordrecht, Germany, 1060 pages (2015).
- 13. Sarigiannis D.A. Combined or multiple exposure to health stressors in indoor built environments. An evidence-based review prepared for the WHO training workshop "Multiple environmental exposures and risks" 16-18 October 2013, WHO Regional Office for Europe, Copenhagen, Denmark (2013).
- 14. Karakitsios SP, Sarigiannis DA, Gotti A. Benzene and its Derivatives: New Uses and Impacts on Environment and Human Health. Chapter: "Refining exposure and health risk assessment of benzene", pp. 245-295. NOVA Publishers, ISBN: 978-1-62100-026-6, (2012)
- 15. Vliamos, S.J., Sarigiannis, D.A. Entrepreneurship, local development and the green region. Chapter in: The Handbook of entrepreneurship and sustainable development, P. Kyro (ed.) (2011).
- 16. Sarigiannis, D.A. Climate change and agriculture: the impact on public health. Chapter in: Where does agriculture go, I. Efthymiopoulos, M. Modinos (eds.) (2010) DIPE Ellinika Grammata, Athens, Greece (in Greek).
- 17. Sarigiannis, D.A. Pollution and health. Chapter in The Eco-nomy of Water, I. Efthymiopoulos, M. Modinos (eds.), (2009) ΔΙΠΕ Ellinika Grammata, Athens, Greece (in Greek).
- Sarigiannis, D.A. Marine pollution and health. Chapter in The Marine Environment, I. Efthymiopoulos, M. Modinos (eds.), (2008) ΔΙΠΕ Ellinika Grammata, Athens, Greece (in Greek).
- Sarigiannis, D.A., Efthymiopoulos, I. Chaos, entropy and organisation. Chapter in From Prometheus to Negawatts, I. Efthymiopoulos, M. Modinos (eds.), (2006) ΔΙΠΕ – Ellinika Grammata, Athens, Greece (in Greek).
- 20. Sarigiannis, D.A. From carbon to hydrogen. Chapter in From Prometheus to Negawatts, I. Efthymiopoulos, M. Modinos (eds.), (2006) ΔΙΠΕ Ellinika Grammata, Athens, Greece (in Greek).
- 21. D.A. Sarigiannis, On the incorporation of environmental and safety concerns in the computer-aided synthesis of novel process systems, chapter in Environmental Informatics---Methodology and Applications of Environmental Information Processing, N. Avouris, B. Page (eds.), Euro-courses series, European Commission (1995), Kluwer Academic Publ.
- 22. D.A. Sarigiannis, F. Andritsos, The Reaction between Beryllium and Steam on the PFCs Coating of ITER: Safety Implications, Fusion Technology and Safety, Technical Note I.95.36 (1995) JRC, Commission of the European Communities.
- 23. F. Andritsos, D.A. Sarigiannis, Short Term Transient of the Reaction between Beryllium and Steam on the PFCs Coating of ITER, Fusion Technology and Safety, Technical Note I.94.172 (1994) JRC, Commission of the European Communities.
- 24. D.A. Sarigiannis, F. Andritsos, The Reaction between Beryllium and Steam on the PFCs Coating of ITER, Fusion Technology and Safety, Technical Note I.94.104 (1994) JRC, Commission of the European Communities.

- 25. H.S. Cho, B. Heerema, J. Latkowski, M. Lowenthal, D. Sarigiannis, E. Lopez, J. Fitzpatrick, R. Gatto, K. D'Ambrosio, J. Gudmundsson, E. Morse, EDMAK: Educational Design Tokamak, (1992), UC-BFE-31, Berkeley Fusion Engineering, University of California, Berkeley.
- 26. D.A. Sarigiannis, Tritium Systems, chapter in Code Development for the Incorporation of Safety and Environmental Aspects of Fusion Energy, S.K. Ho, T.K. Fowler, J.P. Holdren (eds.) (1991), UC-BFE-027, Berkeley Fusion Engineering, University of California, Berkeley.

## Articles in peer-reviewed International Conference Proceedings

- K. Tsioka, N. Papaioannou, E. Handakas, C. Gabriel, S. Karakitsios, O. Anesti, D.A. Sarigiannis. Exposomics – based association of environmental exposures and neurodevelopmental disorders. 2017 68th Congress of the Hellenic Society of Biochemistry and Molecular Biology, Athens, Greece, 10-12/11/2017.
- 2. D. Sarigiannis, S. Zachariou, M. Lioti, F. Kaldis, I. Zarkadas. Valorisation of the three phase olive mill wastewater with the addition of high protein co substrates. 2017 AIChE Annual Meeting, Minneapolis (MN), USA, 29/10-3/11/2017.
- 3. D. Sarigiannis, S. Karakitsios, M. Kermenidou. Oxidative stress induced by ambient air PMx: Which are the Main Sources? 2017 AIChE Annual Meeting, Minneapolis (MN), USA, 29/10-3/11/2017.
- 4. D.A. Sarigiannis, E. Handakas, A. Gotti, S. Karakitsios. Exposure reconstruction of multiple chemicals from human biomonitoring data using Markov chain and differential evolution Monte Carlo. 2017 AIChE Annual Meeting, Minneapolis (MN), USA, 29/10-3/11/2017.
- 5. Dimosthenis A. Sarigiannis. Molecular initiating events linked to carbon nanotube functionalization for medical applications. 2017 AIChE Annual Meeting, Minneapolis (MN), USA, 29/10-3/11/2017.
- 6. D.A. Sarigiannis, K. Polanska, W. Hanke, A. Salifoglou, A. Gabriel, N. Papaioannou, E. Handakas, S. Karakitsios. Pathway analysis of combined in utero exposure to heavy metals and phthalates and its association with child psychomotor development. 2017 AIChE Annual Meeting, Minneapolis (MN), USA, 29/10-3/11/2017.
- 7. K. Papadaki, S. Karakitsios, D.A. Sarigiannis. QSARs for predicting adipose: blood partitioning of industrial chemicals. 2017 AIChE Annual Meeting, Minneapolis (MN), USA, 29/10-3/11/2017.
- 8. Dimosthenis A. Sarigiannis, Graziella Cimino Reale, Angelo Collotta, Elisa Roda, Paolo Mustarelli, Teresa Coccini, Luigi Manzo. Toxicogenomics effects of water soluble carbon nanotubes. 2017 AlChE Annual Meeting, Minneapolis (MN), USA, 29/10-3/11/2017.
- A. Arampatzis, C. Giannitsis, E. Ballhysa, T. Nikolopoulos, E. Sandaltzopoulou, K. Akritidis, N. Papaioannou, K. Samaras Tsakiris, A. Theocharis, A Papadimitriou, D. Sarigiannis, G. Koliakos. A Toolbox of Genetically Engineered E. coli for Precise Targeting and Programmable Elimination of Cancer Cells According to Their miRNA Profile. 2017 2nd Bioengineering & Translational Medicine Conference, Minneapolis (MN), USA, 28-29/10/2017.
- D. Sarigiannis. Exposome Based Risk Assessment of Carbon Nanotube Functionalisation. 2017 2nd Bioengineering & Translational Medicine Conference, Minneapolis (MN), USA, 28-29/10/2017.
- D. Chapizanis, S. Karakitsios, D.A. Sarigiannis. Integrated use of Agent Based Modelling with sensor webs for personal exposure assessment. 2017 27th Annual Meeting of Exposure Science (ISES), North Carolina, USA, 15-19/10/2017.
- 12. N. Barouki, E. Handakas, S. Karakitsios, D. Sarigiannis. A web based platform for air pollution data analysis and exposure assessment. 2017 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESAEP), Rome, Italy, 4-6/10/2017.
- 13. D.A. Sarigiannis, K. Tsioka, N. Papaioannou, E. Handakas, C. Gabriel, S. Karakitsios. Exposomics analysis linking environmental exposures to neurodevelopmental disorders: A combination of metabolomics and bioinformatics analysis. 2017 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESAEP), Rome, Italy, 4-6/10/2017.
- 14. D. Sarigiannis, A. Gotti, E. Matiaki. An integrated approach to combat atmospheric pollution in smart cities through policy interventions and behavioural change The ICARUS paradigm. 2017 19th

- International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESAEP), Rome, Italy, 4-6/10/2017.
- 15. D. Sarigiannis, K. Zarifidis, I. Zarkadas. Anaerobic digestion of cellulose rich agro residues of rice and wheat farming: Focussing on the effects of biological and mechanical pretreatments. 2017 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESAEP), Rome, Italy, 4-6/10/2017.
- 16. D.A. Sarigiannis. Assessing the impact of hazardous waste on children's health: the Exposome paradigm. 2017 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESAEP), Rome, Italy, 4-6/10/2017.
- 17. I. Furxhi, D. Sarigiannis, S. Karakitsios. Assessment of public health risk from arsenic using biomarkers and biokinetics modeling. 2017 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESAEP), Rome, Italy, 4-6/10/2017.
- 18. D. Chapizanis, S. Karakitsios, D. Sarigiannis. Emerging methodologies for personal exposure assessment: coupling portable sensors data and agent based modelling (ABM). 2017 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESAEP), Rome, Italy, 4-6/10/2017.
- D.A. Sarigiannis, Handakas, A. Gotti, S. Karakitsios. Human exposure assessment to multiple chemicals using biomarkers. 2017 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESAEP), Rome, Italy, 4-6/10/2017.
- 20. D. Sarigiannis, M. Vassou, I. Zarkadas. Growth of microalgae chlorella vulgaris on biogas and anaerobic digestion of the recovered microalgal biomass for biofuels production: Toward a zero carbon society. 2017 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESAEP), Rome, Italy, 4-6/10/2017.
- 21. K. Papadaki, S. Karakitsios, D. Sarigiannis. Modeling of elimination half life for environmental chemicals. 2017 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESAEP), Rome, Italy, 4-6/10/2017.
- 22. D.A. Sarigiannis, K. Polanska, W. Hanke, A. Salifoglou, A. Gabriel, N. Papaioannou, E. Handakas, S. Karakitsios. Pathway analysis of prenatal combined exposure to heavy metals and phthalates related child motor development. 2017 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESAEP), Rome, Italy, 4-6/10/2017.
- 23. D. Sarigiannis, S. Karakitsios, M. Kermenidou. Generation of oxygen species is linked to ambient air PMx sources. 2017 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESAEP), Rome, Italy, 4-6/10/2017.
- 24. D.A. Sarigiannis, K. Polanska, W. Hanke, A. Salifoglou, A. Gabriel, N. Papaioannou, E. Handakas, S. Karakitsios. Pathway analysis of neurodevelopment toxicity due to prenatal combined exposure to heavy metals and phthalates. 2017 53rd Congress of the European Societies of Toxicology, Bratislava, Slovakia, 10-13/09/2017.
- 25. D.A Sarigiannis, A. Gotti, S. Karakitsios, E. Matiaki. A holistic approach in support of air quality for future green and resilient cities. 2017 6th International Conference on Environmental Management, Engineering, Planning & Economics (CEMEPE) and SECOTOX, Thessaloniki, Greece, 25-30/06/2017.
- 26. D. Sarigiannis, K. Papadaki, S. Karakitsios. Advanced modeling of adipose: blood partition coefficient for environmental chemicals. 2017 6th International Conference on Environmental Management, Engineering, Planning & Economics (CEMEPE) and SECOTOX, Thessaloniki, Greece, 25-30/06/2017.
- 27. D. Sarigiannis. Assessing the impact of hazardous waste on children's health: the exposome paradigm. 2017 6th International Conference on Environmental Management, Engineering, Planning & Economics (CEMEPE) and SECOTOX, Thessaloniki, Greece, 25-30/06/2017.
- 28. D. Sarigiannis, S. Karakitsios, I. Furxhi. Assessment of public health risk from arsenic using biomarkers and biokinetic modelling. 2017 6th International Conference on Environmental Management, Engineering, Planning & Economics (CEMEPE) and SECOTOX, Thessaloniki, Greece, 25-30/06/2017.
- 29. D. Chapizanis, S. Karakitsios, D. Sarigiannis. Can Agent Based Modelling, coupled with sensors data, be used for personal exposure assessment? 2017 6th International Conference on Environmental

- Management, Engineering, Planning & Economics (CEMEPE) and SECOTOX, Thessaloniki, Greece, 25-30/06/2017.
- 30. D. Sarigiannis, S. Karakitsios. Cancer risk associated to combined chemical and radiological indoor exposure in Greece and Bulgaria. 2017 6th International Conference on Environmental Management, Engineering, Planning & Economics (CEMEPE) and SECOTOX, Thessaloniki, Greece, 25-30/06/2017.
- 31. D. Sarigiannis, F. Kaldis, P. Katapodis, M. Lioti, R. Fried, I. Zarkadas. Effect of lipolytic enzymatic pretreatment in the anaerobic digestion of fat, oil and grease (FOG). 2017 6th International Conference on Environmental Management, Engineering, Planning & Economics (CEMEPE) and SECOTOX, Thessaloniki, Greece, 25-30/06/2017.
- 32. D.A. Sarigiannis, Handakas, A. Gotti, S. Karakitsios. Exposure assessment of multiple chemicals starting from biomonitoring data. 2017 6th International Conference on Environmental Management, Engineering, Planning & Economics (CEMEPE) and SECOTOX, Thessaloniki, Greece, 25-30/06/2017.
- 33. D. Sarigiannis, A. Gotti, Handakas, S. Karakitsios. Life cycle based health risk assessment of plastic waste. 2017 6th International Conference on Environmental Management, Engineering, Planning & Economics (CEMEPE) and SECOTOX, Thessaloniki, Greece, 25-30/06/2017.
- 34. D.A. Sarigiannis, K. Polanska, W. Hanke, A. Salifoglou, A. Gabriel, N. Papaioannou, E. Handakas, S. Karakitsios. Pathway analysis of prenatal combined exposure to heavy metals and phthalates related child motor development. 2017 6th International Conference on Environmental Management, Engineering, Planning & Economics (CEMEPE) and SECOTOX, Thessaloniki, Greece, 25-30/06/2017.
- 35. D. Sarigiannis, S. Karakitsios, M. Kermenidou. Sources of oxidative induced by ambient air PMx. 2017 6th International Conference on Environmental Management, Engineering, Planning & Economics (CEMEPE) and SECOTOX, Thessaloniki, Greece, 25-30/06/2017.
- 36. D.A. Sarigiannis, S.P. Karakitsios, E. Handakas, A. Gotti. Life cycle based health risk assessment of plastic waste. 2017 5th International Conference on Sustainable Solid Waste Management, Athens, Greece, 21-24/06/2017.
- 37. D.A. Sarigiannis, S.P. Karakitsios, A. Gotti. Health Risk From Accidental Fire In A Plastics Recycling Facility. 2017 5th International Conference on Sustainable Solid Waste Management, Athens, Greece, 21-24/06/2017.
- 38. D.A. Sarigiannis, E. Handakas, I. Zarkadas. Food Waste Biomethanation In Farm Scale Systems. 2017 5th International Conference on Sustainable Solid Waste Management, Athens, Greece, 21-24/06/2017.
- 39. D.A. Sarigiannis. Assessing the impact of hazardous waste on children's health: the Exposome paradigm. 2017 11th Panhellenic Research Congress of Chemical Engineering, Thessaloniki, Greece, 25-27/05/2017.
- 40. D.A. Sarigiannis, S. Karakitsios. Cancer risk associated to combined chemical and radiological indoor exposure in Greece and Bulgaria. 2017 11th Panhellenic Research Congress of Chemical Engineering, Thessaloniki, Greece, 25-27/05/2017.
- 41. D. Sarigiannis, F. Kaldis, P. Katapodis, M. Lioti, R. Fried, I. Zarkadas. Effect of lipolytic enzymatic pretreatment in the anaerobic digestion of fat, oil and grease (fog). 2017 11th Panhellenic Research Congress of Chemical Engineering, Thessaloniki, Greece, 25-27/05/2017.
- 42. D. Sarigiannis, D. Chapizanis, S. Karakitsios. Emerging methodologies for personal exposure assessment: coupling portable sensors data and agent based modelling (ABM). 2017 11th Panhellenic Research Congress of Chemical Engineering, Thessaloniki, Greece, 25-27/05/2017.
- 43. D.A. Sarigiannis, Handakas, A. Gotti, S. Karakitsios. Exposure assessment of multiple chemicals starting from biomonitoring data. 2017 11th Panhellenic Research Congress of Chemical Engineering, Thessaloniki, Greece, 25-27/05/2017.
- 44. D.A. Sarigiannis, S. Karakitsios, A. Tsatsakis, K.S. Golokhvast, A.B. Engin. High dimension biological analysis of carbon nanotube toxicity. 2017 11th Panhellenic Research Congress of Chemical Engineering, Thessaloniki, Greece, 25-27/05/2017.
- 45. D.A. Sarigiannis, A. Gotti, Handakas, S. Karakitsios. Life cycle based health risk assessment of plastic waste. 2017 11th Panhellenic Research Congress of Chemical Engineering, Thessaloniki, Greece, 25-27/05/2017.

- 46. D. Sarigiannis, K. Papadaki, S. Karakitsios. Modelling the adipose: blood partition coefficient for environmental chemicals. 2017 11th Panhellenic Research Congress of Chemical Engineering, Thessaloniki, Greece, 25-27/05/2017.
- 47. D.A. Sarigiannis, K. Polanska, W. Hanke, A. Salifoglou, A. Gabriel, N. Papaioannou, E. Handakas, S. Karakitsios. Pathway analysis of prenatal combined exposure to heavy metals and phthalates related child motor development. 2017 11th Panhellenic Research Congress of Chemical Engineering, Thessaloniki. Greece, 25-27/05/2017.
- 48. D. Sarigiannis, S. Karakitsios, M. Kermenidou. Sources of oxidative induced by ambient air PMx. 2017 11th Panhellenic Research Congress of Chemical Engineering, Thessaloniki, Greece, 25-27/05/2017.
- 49. D. Sarigiannis, A. Gotti, E. Matiaki. An integrated approach to combat atmospheric pollution in smart cities through policy interventions and behavioural change. 2017 6th Environmental Conference of Macedonia, Thessaloniki, Greece, 5-7/05/2017.
- 50. D. Sarigiannis, A. Tsoha, M. Kermenidou. In vitro genotoxicity and cytotoxicity of urban particulate matter: association with chemical composition. 2017 6th Environmental Conference of Macedonia, Thessaloniki, Greece, 5-7/05/2017.
- 51. I. Furxhi, D. Sarigiannis, S. Karakitsios. Assessment of risk from arsenic exposure in Serres. 2017 6th Environmental Conference of Macedonia, Thessaloniki, Greece, 5-7/05/2017.
- 52. D. Sarigiannis, G. Dontis, I. Zarkadas. Biomethanation and valorization of mink droppings and byproducts. 2017 6th Environmental Conference of Macedonia, Thessaloniki, Greece, 5-7/05/2017.
- 53. D. Sarigiannis, S. Karakitsios. Cancer risk associated to combined chemical and radiological indoor exposure in the Greece Bulgaria cross boundary region. 2017 6th Environmental Conference of Macedonia, Thessaloniki, Greece, 5-7/05/2017.
- 54. D. Sarigiannis, D. Chapizanis, S. Karakitsios. Emerging methodologies for environmental exposure assessment at a personal level. 2017 6th Environmental Conference of Macedonia, Thessaloniki, Greece. 5-7/05/2017.
- 55. D. Sarigiannis, E. Handakas, D. Chapizanis, S. Karakitsios. Exposure to PM in various micro environments. 2017 6th Environmental Conference of Macedonia, Thessaloniki, Greece, 5-7/05/2017.
- 56. D. Sarigiannis, S. Karakitsios, M. Kermenidou. Impact of maritime transport on the local air quality of Thessaloniki. 2017 6th Environmental Conference of Macedonia, Thessaloniki, Greece, 5-7/05/2017.
- 57. D. Sarigiannis, E. Handakas, S. Karakitsios, A. Gotti. Life cycle assessment of municipal waste management in Thessaloniki. 2017 6th Environmental Conference of Macedonia, Thessaloniki, Greece, 5-7/05/2017.
- 58. D. Sarigiannis, S. Karakitsios, M. Kermenidou. Reactive oxygen species generation associated with sources of atmospheric particulate matter in ambient air of Thessaloniki. 2017 6th Environmental Conference of Macedonia, Thessaloniki, Greece, 5-7/05/2017.
- D. Sarigiannis, S. Zachariou, M. Lioti, I. Zarkadas. Valorisation of the three phase olive mill wastewater with the addition of high protein co – substrates. 2017 6th Environmental Conference of Macedonia, Thessaloniki, Greece, 5-7/05/2017.
- 60. D.A. Sarigiannis, K. Polanska, W. Hanke, A. Salifoglou, A. Gabriel, N. Papaioannou, E. Handakas, S. Karakitsios. Combined exposure to EDCs resulting in neurodevelopmental disorders. 2017 SETAC, 27th Annual Meeting, Brussels, Belgium, 7-11/05/2017.
- 61. D.A. Sarigiannis, E. Matiaki, A. Gotti. Conceptualizing stakeholder engagement in the realm of tackling air pollution and nurturing environment-conscious citizens, in the context of sustainable, urban resilient cities. 2017 SETAC, 27th Annual Meeting, Brussels, Belgium, 7-11/05/2017.
- 62. D.A. Sarigiannis, A. Gotti, V. Handakas, S. Karakitsios. Exposure to heavy metals, contaminated soil, diet and children neurodevelopment. 2017 SETAC, 27th Annual Meeting, Brussels, Belgium, 7-11/05/2017.
- 63. D.A. Sarigiannis, I. Furxhi, S. Karakitsios, A. Tsatsakis, K.S. Golokhvast. High dimension biological analysis of carbon nanotube toxicity. 2017 SETAC, 27th Annual Meeting, Brussels, Belgium, 7-11/05/2017.

- 64. D.A. Sarigiannis, S.P. Karakitsios, K. Papadaki, E. Handakas, A. Gotti. Integrated external and internal exposure to chemicals: the INTEGRA computational platform. 2017 SETAC, 27th Annual Meeting, Brussels, Belgium, 7-11/05/2017.
- 65. D.A. Sarigiannis, S.P. Karakitsios, E. Handakas, A. Gotti. Internal dosimetry metrics for risk assessment of endocrine disruptors the case of bisphenol A. 2017 SETAC, 27th Annual Meeting, Brussels, Belgium, 7-11/05/2017.
- 66. D.A. Sarigiannis. Multiscale connectivity a high dimension biology approach to unravel the exposome. 2017 SETAC, 27th Annual Meeting, Brussels, Belgium, 7-11/05/2017.
- 67. D.A. Sarigiannis, A. Gotti, V. Handakas, S. Karakitsios. The HERACLES Waste study: unraveling the associations between exposure to metals through diet and children cognitive functions. 2017 SETAC, 27th Annual Meeting, Brussels, Belgium, 7-11/05/2017.
- 68. D. Sarigiannis, K. Polanska, W. Hanke, A. Salifoglou, A. Gabriel, N. Papaioannou, E. Handakas, S. Karakitsios. Pathway analysis of prenatal combined exposure to heavy metals and phthalates related child motor development. SOT's 56<sup>th</sup> Annual Meeting, Baltimore, USA, 12-16/3/2017.
- 69. D. Sarigiannis, S. Karakitsios, A. Tsatsakis, K. Golokhvast, A.B. Engin. High dimension biological analysis of carbon nanotube toxicity. SOT's 56<sup>th</sup> Annual Meeting, Baltimore, USA, 12-16/3/2017.
- 70. D. Sarigiannis, E. Handakas, A. Gotti, K. Papadaki, S. Karakitsios. Exposure assessment of multiple chemicals starting from biomonitoring data. SOT's 56<sup>th</sup> Annual Meeting, Baltimore, USA, 12-16/3/2017.
- 71. D. Sarigiannis, D. Chapizanis, S. Karakitsios. Emerging Methodologies for Environmental Exposure Assessment: Coupling Personal Sensor Data and Agent Based Modelling (ABM). 2016 AIChE Annual Meeting, San Francisco (CA), USA, 13-18/11/2016.
- 72. D. Sarigiannis, S. Karakitsios, A. Tsatsakis, K. Golokhvast. Real Life PM Emissions from Traffic and Human Exposure Implications. 2016 AIChE Annual Meeting, San Francisco (CA), USA, 13-18/11/2016.
- 73. K. Papadaki, S. Karakitsios, D. Sarigiannis. Advanced Modeling of Tissue:Blood Partition Coefficients for Industrial Chemicals. 2016 AIChE Annual Meeting, San Francisco (CA), USA, 13-18/11/2016.
- 74. D. Sarigiannis, S. Karakitsios, E. Handakas, A. Gotti. Exposome Analysis of Polyaromatic Hydrocarbons. 2016 AIChE Annual Meeting, San Francisco (CA), USA, 13-18/11/2016.
- 75. D. Sarigiannis, S. Karakitsios, A. Tsatsakis, K. Golokhvast. High Dimension Biological Analysis of Carbon Nanotube Toxicity. 2016 AIChE Annual Meeting, San Francisco (CA), USA, 13-18/11/2016.
- 76. D. Sarigiannis, F. Kaldis, I. Zarkadas. Biomethane Potential Determinants of Different Agro Industrial Substrates. 2016 AIChE Annual Meeting, San Francisco (CA), USA, 13-18/11/2016.
- 77. D. Sarigiannis. Assessing health impacts of hazardous waste: the exposome paradigm. 9th European Public Health Conference, Vienna, Austria, 9-12/11/2016.
- 78. D. Sarigiannis. The exposome and Health Impact Assessment. 9th European Public Health Conference, Vienna, Austria, 9-12/11/2016.
- 79. D. Sarigiannis, S. Karakitsios, M. Kermenidou. Health impact assessment of urban ultrafine and nano particles. International Conference on Health & Safety issues related to Nanomaterials Nanosafe 2016, Grenoble, France, 7-10/11/2016.
- 80. D. Sarigiannis, S. Karakitsios, A. Tsatsakis, K. Golokhvast, A. Engin. High dimension biological analysis of carbon nanotube toxicity. International Conference on Health & Safety issues related to Nanomaterials Nanosafe 2016, Grenoble, France, 7-10/11/2016.
- 81. D. Sarigiannis, S. Karakitsios, M. Kermenidou. The reactive oxidative potential of pm associated with sources and its impact on human health. International Conference on Health & Safety issues related to Nanomaterials Nanosafe 2016, Grenoble, France, 7-10/11/2016.
- 82. D. Sarigiannis. Multiscale connectivity in HEALS a high dimension biology approach to unravel the exposome. 2016 Annual International Society of Exposure Science Meeting, Utrecht, The Netherlands, 9-13/10/2016.
- 83. D. Chapizanis, D.A Sarigiannis, S. Karakitsios, A. Gotti. Personal exposure assessment fusing multisensor data and Agent Based Modelling (ABM). 2016 Annual International Society of Exposure Science Meeting, Utrecht, The Netherlands, 9-13/10/2016.

- 84. S. Karakitsios, D. Sarigiannis, A. Gotti, E. Handakas. The importance of internal dosimetry in unravelling the exposome. 2016 Annual International Society of Exposure Science Meeting, Utrecht, The Netherlands, 9-13/10/2016.
- 85. D. Sarigiannis. Early observations from HEALS. 2016 Annual International Society of Exposure Science Meeting, Utrecht, The Netherlands, 9-13/10/2016.
- 86. D. Sarigiannis, D. Chapizanis, S. Karakitsios, A. Gotti. Using agent-based modelling for interpreting the individual exposome. 2016 Annual International Society of Exposure Science Meeting, Utrecht, The Netherlands, 9-13/10/2016.
- 87. E. Handakas, A. Gotti, S. Karakitsios, D. Sarigiannis. Exposure assessment of multiple chemicals starting from biomonitoring data. 2016 Annual International Society of Exposure Science Meeting, Utrecht, The Netherlands, 9-13/10/2016.
- 88. D. Sarigiannis, S. Karakitsios, A. Gypalis, E. Handakas, A. Gotti. INTEGRA LCA: An innovative tool for health risk assessment of plastic waste. 5th International Conference on Industrial and Hazardous Waste Management, Chania, Greece, 27-30/9/2016.
- 89. D. Sarigiannis, S. Karakitsios, A. Gotti. Assessing health impacts of hazardous waste: the exposome paradigm. 5th International Conference on Industrial and Hazardous Waste Management, Chania, Greece, 27-30/9/2016.
- 90. D. Sarigiannis, S. Karakitsios, E. Handakas, A. Gotti. Cancer risk from exposure to dioxins and furans after accidental fire in an urban waste recycling facility. 5th International Conference on Industrial and Hazardous Waste Management, Chania, Greece, 27-30/9/2016.
- 91. D. Sarigiannis, G. Dontis, I. Zarkadas. Biomethanation and valorisa-tion of mink droppings and byproducts. 5th International Conference on Industrial and Hazardous Waste Management, Chania, Greece, 27-30/9/2016.
- 92. D. Sarigiannis, A. Gotti, S. Karakitsios, A. Pino, G. Calamandrei, L. Chiarotti, A. Alimonti. Human Biomonitoring Data Analysis for metals in an Italian Adolescents Cohort: an Exposome Approach. 8th International Conference On Children's Health and the Environment, Barcelona, Spain, 14-16/9/2016.
- 93. D. Sarigiannis, S. Karakitsios, E. Handakas, A. Gotti Internal dosimetry metrics for risk assessment of endocrine disruptors the case of bisphenol A. 8th International Conference On Children's Health and the Environment, Barcelona, Spain, 14-16/9/2016.
- 94. D. Sarigiannis, S. Nikolaki, M. Kermenidou, D. Zikopoulos, S. Karakitsios. Children exposure to PAH and potential carcinogenic risk assessment from biomass burning incorporating internal dosimetry metrics. 8th International Conference On Children's Health and the Environment, Barcelona, Spain, 14-16/9/2016.
- 95. D. Sarigiannis. Assessing the impact of hazardous waste on children's health: the exposome paradigm. 8th International Conference On Children's Health and the Environment, Barcelona, Spain, 14-16/9/2016.
- 96. D. Sarigiannis, K. Polanska, G. Theodoridis, C. Xatziioannou, W. Hanke. Pathway analysis of prenatal exposure to phthalates and child motor development. EUROTOX 2016 Seville, Spain 4-7/9/2016.
- 97. D. Sarigiannis, S. Karakitsios, A. Tsatsakis, K. Golokhvast, A. Engin. High dimension biological analysis of carbon nanotube toxicity. EUROTOX 2016 Seville, Spain 4-7/9/2016.
- 98. D. Sarigiannis, S. Karakitsios, E. Handakas, A. Gotti. Exposome analysis of polyaromatic hydrocarbons. EUROTOX 2016 Seville, Spain 4-7/9/2016.
- 99. D. Sarigiannis, K. Papadaki, S. Karakitsios. Development and evaluation of QSAR models for use in toxicokinetic modelling of "data poor" industrial chemicals. EUROTOX 2016 Seville, Spain 4-7/9/2016.
- 100. D. Sarigiannis, P. Kontoroupis, E. Solomou, S. Nikolaki, A. Karabelas. Cancer risk attributable to inhalation of plant protection products in the EU. EUROTOX 2016 Seville, Spain 4-7/9/2016.
- 101. D. Sarigiannis. Industrially contaminated sites in Greece: use of biomarkers and the exposome paradigm. 28th Annual Conference International Society for Environmental Epidemiology, Rome, Italy, 31/8-4/9/2016.
- 102. D. Sarigiannis. Assessing health impacts of hazardous waste: the exposome paradigm. 28th Annual Conference International Society for Environmental Epidemiology, Rome, Italy, 31/8-4/9/2016.

- D. Sarigiannis, S. Nikolaki, M. Kermenidou, D. Zikopoulos, S. Karakitsios. Cancer risk of PAHs in particles emitted from biomass combustion. 28th Annual Conference International Society for Environmental Epidemiology, Rome, Italy, 31/8-4/9/2016.
- 104. D. Sarigiannis, I. Zarkadas. High dimension biological processes for the valorization of agro-industrial waste towards a circular bioeconomy. Circular Economy and Sustainable Use of REnewable REsources in the context of Climate Change and Social Upheavals, Nisyros, Greece, 20-22/7/2016.
- D. Sarigiannis, S. Karakitsios, A. Gotti. Combined exposure to indoor air pollutants in Europe. SIDISA 2016 - X International Symposium on Sanitary and Environmental Engineering, Rome, Italy, 20-22/6/2016.
- 106. D. Sarigiannis, S. Karakitsios, D. Chapizanis, E. Handakas, A. Gotti. The ICARUS paradigm for air pollution exposure management in cities. SIDISA 2016 X International Symposium on Sanitary and Environmental Engineering, Rome, Italy, 20-22/6/2016.
- D. Sarigiannis, S. Karakitsios. Health and monetary impact of biomass burning for space heating.
   SIDISA 2016 X International Symposium on Sanitary and Environmental Engineering, Rome, Italy, 20-22/6/2016.
- 108. D. Sarigiannis, S. Karakitsios, A. Gotti. Cancer risk from exposure to dioxins and furans after accidental fire in an urban waste recycling facility. SIDISA 2016 X International Symposium on Sanitary and Environmental Engineering, Rome, Italy, 20-22/6/2016.
- 109. D. Sarigiannis, M. Antonakopoulou, E. Handakas, A. Gotti, S. Karakitsios. Life cycle assessment of municipal waste management options as strategic tool for decision making. SIDISA 2016 - X International Symposium on Sanitary and Environmental Engineering, Rome, Italy, 20-22/6/2016.
- I. Zarkadas, E. Handakas, D. Sarigiannis. The benefits of food waste biomethanation in farm-scale systems. SIDISA 2016 - X International Symposium on Sanitary and Environmental Engineering, Rome, Italy, 20-22/6/2016.
- 111. D. Sarigiannis. Multi-omics for exposome analysis. 4th Workshop on Holistic Analytical Methods for Systems Biology Studies, Thessaloniki, Greece, 17-19/4/2016.
- 112. D. Sarigiannis, S. Karakitsios. Cosmic ray exposome. ENMF 2016 "Exploring Novel Medical Frontiers", Thessaloniki, Greece, 9-10/4/2016.
- 113. D. Sarigiannis, P. Kontoroupis, C. Schieberle, B. Miller, V. Singh, R. Sokhi. Integrated uncertainty evaluation in air pollution health impact assessment. 10th International Conference on Air Quality Science and Application, Milan, Italy, 14-18/3/2016.
- 114. D. Sarigiannis, M. Kermenidou, D. Zikopoulos, S. Nikolaki, S. Karakitsios. Health and monetary cost attributed to aerosol and gaseous emissions from biomass use for space heating. 10th International Conference on Air Quality – Science and Application, Milan, Italy, 14-18/3/2016.
- 115. D. Sarigiannis, S. Nikolaki, M. Kermenidou, D. Zikopoulos. Determination of 19 PAHs in air samples using gas chromatography mass spectrometry. 10th International Conference on Air Quality Science and Application, Milan, Italy, 14-18/3/2016.
- D. Sarigiannis, D. Chapizanis, P. Kontoroupis, S. Karakitsios. Personal exposure assessment to air pollutants using portable sensors and agent based modelling. 10th International Conference on Air Quality – Science and Application, Milan, Italy, 14-18/3/2016.
- 117. D. Sarigiannis, M. Kermenidou, S. Kyriakou, Roxani Tzimou Tsitouridou, S. Karakitsios. Reactive oxygen species found in urban PM2.5 and PM10: chemical analysis and source apportionment. 10th International Conference on Air Quality Science and Application, Milan, Italy, 14-18/3/2016.
- D. Sarigiannis, E. Handakas, M. Kermenidou, P. Charisiadis, K. Makris, A. Gotti, S. Karakitsios. Air pollution at the Charilaos Trikoupis bridge (Greece). 10th International Conference on Air Quality – Science and Application, Milan, Italy, 14-18/3/2016.
- 119. K. Golokhvast, V. Chernyshev, V. Chaika, S. Ugay, E. Zelinskaya, A. Tsatsakis, S. Karakitsios, D. Sarigiannis. Size-segregated emissions and metal content of particles emitted by vehicles with low and high mileage: implications to population exposure. 10th International Conference on Air Quality Science and Application, Milan, Italy, 14-18/3/2016.

- 120. D. Sarigiannis, K. Polanska, G. Theodoridis, C. Xatziioannou, W. Hanke. Pathway analysis of prenatal exposure to phthalates and child motor development. The Society of Toxicology 55th Annual Meeting and ToxExpo, New Orleans (Louisiana), USA, 13–17/3/2016.
- 121. D. Sarigiannis. Mixtures Assessment: the exposome paradigm. EEA workshop on activities on mixtures under the EHBMI, Copenhagen, Denmark, 11/2/2016.
- 122. D.A. Sarigiannis, K. Papadaki, P. Kontoroupis, S. Karakitsios. QSARs for predicting physicochemical and biochemical properties of industrial chemicals. 2015 AIChE Annual Meeting, Salt Lake City, UT, 8-13/11/2015.
- D. Sarigiannis, D. Zikopoulos, S. Nikolaki, M. Kermenidou, S. Karakitsios. PAH Exposure and LUNG Cancer Risk Assessment By Internal Dosimetry Metrics. 2015 AIChE Annual Meeting, Salt Lake City, UT, 8-13/11/2015.
- 124. D. Sarigiannis, E. Handakas, A. Gotti, S. Karakitsios. An Exposure Reconstruction MODEL for Environmental and Consumer Product Chemicals: Application on Bisphenol A. 2015 AIChE Annual Meeting, Salt Lake City, UT, 8-13/11/2015.
- 125. D. Sarigiannis, D. Chapizanis, E. Handakas, P. Kontoroupis, S. Karakitsios. Sensor Data Analysis for Environmental Exposure Assessment. 2015 AIChE Annual Meeting, Salt Lake City, UT, 8-13/11/2015.
- 126. D. Sarigiannis, A. Gotti, S. Karakitsios. Benzomics: A High Dimensional Biology Perspective to Benzene Health Risk. 2015 AIChE Annual Meeting, Salt Lake City, UT, 8-13/11/2015.
- I. Zarkadas, F. Kaldis, P. Katapodis, G. Pilidis, D. Sarigiannis. Thermophilic Anaerobic Digestion of Mixed Substrates: The Effect of Commercial Enzymes Addition in the Efficiency of the Process. 2015 AIChE Annual Meeting, Salt Lake City, UT, 8-13/11/2015.
- 128. I. Zarkadas, G. Dontis, G. Pilidis, D. Sarigiannis. Bio-Methanation of Fur Farming Wastes Under Mesophilic Conditions: Focusing on Methane Potential and Volatile Solids Reduction. 2015 AIChE Annual Meeting, Salt Lake City, UT, 8-13/11/2015.
- 129. E. Kuijpers, A. Pronk, R. Franken, M. Voogt, D. Sarigiannis, D. Chapizanis, S. Karakitsios, Z. Spiric, T. Maggos, M. Stametelopoulou, J. Bartzis, C. Schieberle, S. Steinle, M. Loh, J. Cherrie. The potential use of a particulate matter sensor for "Exposome" research. ISEE Europe Young 2015 2nd Early Career Researchers Conference on Environmental Epidemiology. Utrecht, Netherlands, 2-3/11/2015.
- R. Boessen, A. Pronk, E. Kuijpers, D. Sarigiannis, D. Chapizanis, F. Pierik, S. Karakitsios, T. Maggos, M. Stametelopoulou, J. Bartzis, Z. Spiric, C. Schieberle, S. Steinle, M. Loh, J. W. Cherrie. Prediction of Location in Indoor/Outdoor Micro-Environments Using Smart Consumer Products. ISEE Europe Young 2015 - 2nd Early Career Researchers Conference on Environmental Epidemiology. Utrecht, Netherlands, 2-3/11/2015.
- 131. D. Sarigiannis, D. Chapizanis, P. Kontoroupis, S. Karakitsios. Sensor Data Analysis for Environmental Exposure Assessment. ISEE Europe Young 2015 2nd Early Career Researchers Conference on Environmental Epidemiology. Utrecht, Netherlands, 2-3/11/2015.
- 132. D. Sarigiannis, D. Chapizanis, S. Karakitsios, A. Pronk, E. Kuijpers, R. Boessen, T. Maggos, M. Stametelopoulou, J. Bartzis, Z. Spiric, C. Schieberle, M. Loh, J. Cherrie. Predicting location using ANN, based on sensors data. ISEE Europe Young 2015 2nd Early Career Researchers Conference on Environmental Epidemiology. Utrecht, Netherlands, 2-3/11/2015.
- D. Sarigiannis, D. Zikopoulos, S. Nikolaki, M. Kermenidou, S. Karakitsios. Cancer Risk of Pahs in Particles Emitted from Biomass Combustion. ISES 25th Annual Meeting, Henderson, Nevada, 18-22/10/2015.
- 134. M. Loh, N. Li, C. Schieberle, A. Pronk, E. Kuijpers, D. Sarigiannis, D. Chapizanis, S. Karakitsios, T. Maggos, M. Stametelopoulou, Z. Spiric, J. Bartzis, J. W. Cherrie. A Pilot Study to Collect Time-Location-Activity Data Using a Mass Market Smartphone App and Fitness Tracking Device. ISES 25th Annual Meeting, Henderson, Nevada, 18-22/10/2015.
- 135. A. Pronk, D. Sarigiannis, D. Chapizanis, S. Karakitsios, E. Kuijpers, R. Boessen, F. Pierik, T. Maggos, M. Stametelopoulou, J. Bartzis, Z. Spiric, C. Schieberle, M. Loh, J. W. Cherrie. Prediction of Location in Indoor/Outdoor Micro-Environments Using Smart Consumer Products. ISES 25th Annual Meeting, Henderson, Nevada, 18-22/10/2015.

- 136. D. Sarigiannis, D. Hapizanis, E. Handakas, M. Kermenidou, S. Karakitsios, A. Gotti. Refining Exposure to PM Based on Human Respiratory Tract Deposition and Agent Based Modelling. ISES 25th Annual Meeting, Henderson, Nevada, 18-22/10/2015.
- 137. D. Sarigiannis. Multiscale connectivity a high dimension biology approach to unravel the exposome. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 138. M. Loh, A. Pronk, E. Kuijpers, C. Schieberle, D. Chapizanis, A. Stamatelopoulou, J. Bartzis, Z. Spiric, D. Sarigiannis, J. Cherrie. Using a physical activity monitor and smartphone app to determine time-use and location information for exposure studies. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 139. D. Sarigiannis, S. Karakitsios, E. Handakas, A. Gotti. Internal dosimetry metrics for risk assessment of endocrine disruptors The case of bisphenol A. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 140. D. Sarigiannis, S. Karakitsios, D. Zikopoulos, S. Nikolaki, M. Kermenidou. Cancer risk of PAHs in biomass emitted particulates. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 141. E. Kuijpers, A. Pronk, R. Franken, M. Voogt, D. Sarigiannis, D. Chapizanis, S. Karakitsios, Z. Spiric, T. Maggos, M. Stametelopoulou, J. Bartzis, C. Schieberle, S. Steinle, M. Loh, J. Cherrie. The potential use of a particulate matter sensor for "Exposome" research. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 142. D.A. Sarigiannis, K. Papadaki, P. Kontoroupis, S. Karakitsios. QSARs for predicting physicochemical and metabolic properties of environmental chemicals. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 143. D. Sarigiannis, D. Chapizanis, P. Kontoroupis, S. Karakitsios. Sensor Data Analysis for Environmental Exposure Assessment. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 144. D. Sarigiannis, S. Kyriakou, M. Kermenidou, S. Karakitsios. The reactive oxidative potential from biomass emitted particulate matter (PM10, PM2.5 & PM1) and its impact on human health. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete. Greece. 26-30/9/2015.
- 145. E. I. Tolis, N. I. Pitaraki, I. A. Sakellaris, M. A. Siarga, A. Pronk, M. Loh, J. Cherrie, J. G. Bartzis, D. A. Sarigiannis. Estimating individual exposure by human monitoring. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 146. M. Schuhmacher, I. Annesi Maesano, J. Cherrie, J. Bartzis, D. Sarigiannis. The HEALS approach to health and environment wide associations. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 147. D. Sarigiannis, E. Handakas, A. Gotti, S. Karakitsios. A reverse dosimetry model for environmental and consumer products chemicals: The case of Bisphenol A. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 148. L. Stefanopoulos, E. Handakas, D. Sarigiannis, N. Maglaver. WEHEAL: A personalized health smartphone application against environmental stressors and pollutants. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 149. P. Kontoroupis, D. Sarigiannis, A.J. Karabelas. A stochastic approach to spatially disaggregate pesticide usage data for health impact assessment studies. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 150. D. Sarigiannis, S. Karakitsios, P. Kontoroupis, I. Zarkadas, S. Nikolaki, M. Kermenidou, E. Handakas, K. Papadaki, D. Chapizanis. Cancer risk associated to combined exposure to indoor BTEX and carbonyls emitted from building materials. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.

- 151. D. Sarigiannis, E. Handakas, M. Kermenidou, S. Karakitsios, P. Charisiadis, K. Makris. Monitoring of air pollution levels related to Charilaos Trikoupis Bridge. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 152. D. Sarigiannis, M. Kermenidou, R. Tzimou-Tsitouridou, S. Nikolaki, S. Karakitsios. Reactive oxygen species associated with PM2.5 and PM10 in the Metropolitan area of Thessaloniki: chemical analysis and source apportionment. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 153. D. Sarigiannis, S. Karakitsios, P. Kontoroupis, I. Zarkadas, S. Nikolaki, M. Kermenidou, E. Handakas, K. Papadaki, D. Chapizanis. Indoor BTEX and carbonyls levels in Thessaloniki, Greece, emitted from building materials. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- D. Sarigiannis, S. Nikolaki, D. Zikopoulos, M. Kermenidou. Determination of 19 PAHs in air samples using gas chromatography mass spectrometry. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- K. Simou, D. Sarigiannis, E. Handakas, S. Karakitsios. Monitoring of PM2.5 and PM10 levels in indoor places. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 156. E. Handakas, D. Chapizanis, D. Sarigiannis, S. Karakitsios. Study of in-vehicle particulate matter exposure. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 157. I. Zarkadas, G. Dontis, G. Pilidis, D. Sarigiannis. Exploring the biomethanation of mink farming generated wastes in Greece. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 158. I. Zarkadas, N. Georgopoulos, F. Kaldis, D. Sarigiannis, G. Pilidis. Assessing the Biomethane potential of three pickling and canning semi-solid wastes under thermophilic conditions. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 159. D. Sarigiannis, P. Kontoroupis, S. Nikolaki, A. Gotti, Dimitris Chapizanis. Public health co-benefits from traffic related greenhouse gas emission policies to the city of Thessaloniki. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 160. D. Sarigiannis, P. Kontoroupis. Noise pollution in the city of Thessaloniki: the effect of climate change policies. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 161. D. Sarigiannis, P. Kontoroupis, C. Schieberle, B. G. Miller, V. P. Sing. A methodological approach in quantifying uncertainties of air quality health impact assessment. 18th International Symposium on Environmental Pollution and its Impact on Life in Mediterranean Region, Crete, Greece, 26-30/9/2015.
- 162. D. Sarigiannis. Exposome science for public health protection and innovation. EUROTOX 2015, 51st Congress of the European Societies of Toxicology, Porto, Portugal, 13-16/9/2015.
- 163. A. Alegakis, V. Androutsopoulos, S. Karakitsios, D. Sarigiannis. Modelling risk for chemical mixtures. EUROTOX 2015, 51st Congress of the European Societies of Toxicology, Porto, Portugal, 13-16/9/2015.
- I. Tsakiris, M. Tzatzarakis, A. Alegakis, P. Mitlianga, E. Vakonaki, I. Tsatsakis, J. Dumanov, D. Sarigiannis, A. Tsatsakis. Monitoring of Ochratoxin A residues in Greek bottled wine. EUROTOX 2015, 51st Congress of the European Societies of Toxicology, Porto, Portugal, 13-16/9/2015.
- 165. D. Sarigiannis, S. Karakitsios, A. Gotti, E. Handakas, K. Papadaki. INTEGRA: Advancing risk assessment using internal dosimetry metrics. EUROTOX 2015, 51st Congress of the European Societies of Toxicology, Porto, Portugal, 13-16/9/2015.
- 166. D. Sarigiannis, K. Golokhvast, V. Chernyshev, V. Chaika, S. Ugay, E. Zelinskaya, A. Tsatsakis, S. Karakitsios. Size-segregated emissions and metal content of particles emitted by vehicles with low and high mileage: implications to population exposure. EUROTOX 2015, 51st Congress of the European Societies of Toxicology, Porto, Portugal, 13-16/9/2015.

- D. Sarigiannis, K. Papadaki, P. Kontoroupis, S. Karakitsios. Advanced QSAR models for use in toxicokinetic modelling. EUROTOX 2015, 51st Congress of the European Societies of Toxicology, Porto, Portugal, 13-16/9/2015.
- 168. D. Sarigiannis. Unravelling the Exposome through integrated exposure biology. EUROTOX 2015, 51st Congress of the European Societies of Toxicology, Porto, Portugal, 13-16/9/2015.
- 169. I. Zarkadas, D. Sarigiannis, G. Pilidis. The low intensity Biorefinery concept. 10th National Symposium of Chemical Engineering, Patra, Greece, 4-6/6/2015.
- 170. I. Zarkadas, F. Kaldis, P. Katapodis, D. Sarigiannis, G. Pilidis. Utilization of enzymatic pretreatment for improving efficiency in bio-methanation of mixed substrates. 10th National Symposium of Chemical Engineering, Patra, Greece, 4-6/6/2015.
- 171. D. Sarigiannis, S. Karakitsios, E. Handakas, A. Gotti. An integrated tool for risk assessment for industrial chemicals the case of bisphenol A. 10th National Symposium of Chemical Engineering, Patra, Greece, 4-6/6/2015.
- 172. D. Sarigiannis, K. Papadaki, S. Karakitsios. QSARs for predicting physicochemical and biochemical properties of industrial chemicals. 10th National Symposium of Chemical Engineering, Patra, Greece, 4-6/6/2015.
- 173. D. Sarigiannis, M. Kermenidou, S. Kyriakou, S. Karakitsios. The reactive oxidative potential from biomass emitted particulate matter (PM10, PM2.5 & PM1) and its impact on human health. 10th National Symposium of Chemical Engineering, Patra, Greece, 4-6/6/2015.
- 174. D. Sarigiannis, D. Zikopoulos, S. Nikolaki, M. Kermenidou, S. Karakitsios. PAH exposure and lung cancer risk assessment by internal dosimetry metrics: The case of biomass use for residential heating. 10th National Symposium of Chemical Engineering, Patra, Greece, 4-6/6/2015.
- 175. D. Sarigiannis, S. Nikolaki, D. Zikopoulos, M. Kermenidou. Determination of 19 PAHs in air samples using gas chromatography mass spectrometry. 10th National Symposium of Chemical Engineering, Patra, Greece, 4-6/6/2015.
- 176. D. Sarigiannis, P. Kontoroupis, S. Nikolaki, A. Gotti, D. Chapizanis. Public health co-benefits from traffic related greenhouse gas emission policies. 10th National Symposium of Chemical Engineering, Patra, Greece, 4-6/6/2015.
- 177. D. Sarigiannis, E. Handakas, M. Kermenidou, P. Charisiadis, K. Makris, S. Karakitsios. Monitoring of air pollution levels related to Charilaos Trikoupis bridge. 10th National Symposium of Chemical Engineering, Patra, Greece, 4-6/6/2015.
- 178. D. Sarigiannis, D. Chapizanis, S. Karakitsios, P. Kontoroupis. Sensor data analysis for environmental exposure assessment. 10th National Symposium of Chemical Engineering, Patra, Greece, 4-6/6/2015.
- 179. D. Sarigiannis, E. Handakas, S. Karakitsios. An exposure reconstruction model for environmental and consumer product chemicals: Application on Bisphenol A. 10th National Symposium of Chemical Engineering, Patra, Greece, 4-6/6/2015.
- 180. D. Sarigiannis. High dimension exposome biology: A paradigm change in chemical risk assessment in the making. TurkHelTox Toxicology Congress, Cesme, Izmir, Turkey, 21-25/10/2015.
- 181. D. Sarigiannis, M. Kermenidou, S. Kyriakou, S. Karakitsios. The reactive oxidative potential of particulate matter and its impact on human health. TurkHelTox Toxicology Congress, Cesme, Izmir, Turkey, 21-25/10/2015.
- 182. D. Sarigiannis, E. Handakas, D. Chapizanis, S. Karakitsios. Development of a personal exposure model based on Agent Based Modelling. SETAC Europe 25th Annual Meeting, Barcelona, Spain, 3-7/5/2015.
- 183. D.A. Sarigiannis, K. Papadaki, S. Karakitsios. Advanced QSAR models for use in toxicokinetic modeling. SETAC Europe 25th Annual Meeting, Barcelona, Spain, 3-7/5/2015.
- 184. D. Sarigiannis, S. Karakitsios, E. Handakas, A. Gotti. Internal dosimetry metrics for risk assessment of endocrine disruptors - the case of bisphenol A. SETAC Europe 25th Annual Meeting, Barcelona, Spain, 3-7/5/2015.
- 185. V. Kumr, Marti Nadal, J. Domingo, S. Karakitsios, A. Gotti, D. Sarigiannis, V. Karri, M. Schuhmacher. Tissue dosimetry modeling of chemical mixtures containing metals: a case study of Cd, Hg and Pb in humans. SETAC Europe 25th Annual Meeting, Barcelona, Spain, 3-7/5/2015.

- 186. D. Sarigiannis, S. Karakitsios. Multiscale connectivity a high dimension biology approach to unravel the exposome. SETAC Europe 25th Annual Meeting, Barcelona, Spain, 3-7/5/2015.
- 187. V. Kumar, M. Nadal, J. Domingo, S. Karakitsios, A. Gotti, D. Sarigiannis, V. Karri, M. Schuhmacher. Tissue dosimetry modeling of chemical mixtures containing Metals: a case study of Cd, Hg and Pb in humans. SETAC Europe 25th Annual Meeting, Barcelona, Spain, 3-7/5/2015.
- 188. D.A. Sarigiannis, Multiscale connectivity for chemical mixture toxicity assessment, 2014 AIChE Annual Meeting, Atlanta, USA, 16-21/11/2014.
- 189. D.A. Sarigiannis, A. Gotti, S. Karakitsios, Biology based dose response (BBDR) of chemical mixtures using exposomics, 2014 AIChE Annual Meeting, Atlanta, USA, 16-21/11/2014.
- 190. D.A. Sarigiannis, E. Handakas, S.P. Karakitsios, M.P. Antonakopoulou, A. Gotti, Life cycle analysis for urban waste treatment optimization, 2014 AIChE Annual Meeting, Atlanta, USA, 16-21/11/2014.
- 191. D.A. Sarigiannis, S. Karakitsios, A. Gotti, E. Handakas, K. Papadaki, Development of a generic physiology based biokinetic model for predicting internal dose and assimilation of biomonitoring data for industrial chemicals, 2014 AIChE Annual Meeting, Atlanta, USA, 16-21/11/2014.
- 192. D.A. Sarigiannis, S. Karakitsios, Artificial Neural Networks for environmental and biochemical modelling, 2014 AIChE Annual Meeting, Atlanta, USA, 16-21/11/2014.
- 193. D.A. Sarigiannis, P. Kontoroupis, S. Karakitsios, A. Gotti, S. Nikolaki, D. Chapizanis, Health co-benefits of traffic related GreenHouse Gas (GHG) mitigation policies in cities, 24th ISES Annual Meeting, Cincinnati (Ohio), USA, 12-16/10/2014.
- 194. D.A. Sarigiannis, S. Karakitsios, A. Gotti, G. Loizou, J. Cherrie, R. Smolders, Katleen De Brouwere, K. Galea, K. Jones, E. Handakas, K. Papadaki, A. Sleeuwenhoek, INTEGRA: Advancing exposure continuum from global scale contamination to tissue dose, 24th ISES Annual Meeting, Cincinnati (Ohio), USA, 12-16/10/2014.
- 195. D.A. Sarigiannis, D. Zikopoulos, M. Kermenidou, S. Nikolaki, S.P. Karakitsios, Refining assessment of PAH exposure and potential carcinogenic risk assessment from biomass burning incorporating internal dosimetry metrics, 24th ISES Annual Meeting, Cincinnati (Ohio), USA, 12-16/10/2014.
- 196. D.A. Sarigiannis, S. Karakitsios, M. Kermenidou, A new metric of fine and ultrafine PM exposure: the region-specific oxidative stress index (SOS), 24th ISES Annual Meeting, Cincinnati (Ohio), USA, 12-16/10/2014.
- 197. D.A. Sarigiannis, E.J. Handakas, S.P. Karakitsios, A Detailed Multi-compartmental Skin Penetration Model Coupled to a Physiologically Based Pharmacokinetic Model for Assessing Exposure to Chemical Compounds: the Case of Bisphenol A, 24th ISES Annual Meeting, Cincinnati (Ohio), USA, 12-16/10/2014.
- 198. D.A. Sarigiannis, S.P. Karakitsios, A. Gotti, M. Braubach, Combined exposure to harmful indoor air pollutants in Europe, 24th ISES Annual Meeting, Cincinnati (Ohio), USA, 12-16/10/2014.
- 199. D.A. Sarigiannis, S.P. Karakitsios, A. Gotti, M. Braubach, Combined Exposure to Health Stressors in Indoor Built Environments in Europe, 24th ISES Annual Meeting, Cincinnati (Ohio), USA, 12-16/10/2014.
- 200. D.A. Sarigiannis, Unravelling the Exposome through Health and Environment-wide Associations based on Large population Surveys, 24th ISES Annual Meeting, Cincinnati (Ohio), USA, 12-16/10/2014.
- 201. M. Loh, J. Cherrie, A. Pronk, E. Kuijpers, C. Schieberle; A. Stamatelopoulou, D. Chapizanis, J. Bartzis, Z. Spiric, D. Sarigiannis, A Comparison Study of Location and Activity Monitoring For Exposure Studies, 24th ISES Annual Meeting, Cincinnati (Ohio), USA, 12-16/10/2014.
- 202. H. Price, K. Douglas, R. Sokhi, M. Keuken, M. Kermenidou, D.A. Sarigiannis, Source apportionment of PM2.5 and PM10: within-city and between-city variation in Europe. 2014 International Aerosol Conference, Busan, Korea, 28/8-2/9/2014.
- 203. D.A. Sarigiannis, D. Zikopoulos, M. Kermenidou, S. Nikolaki, S.P. Karakitsios, Refining assessment of PAH exposure and potential carcinogenic risk assessment from biomass burning incorporating internal dosimetry metrics, 26th Annual ISEE Conference, Seattle (Washington), USA, 24-28/8/2014.
- 204. D.A. Sarigiannis, S. Karakitsios, A. Gotti, G. Loizou, J. Cherrie, R. Smolders, Katleen De Brouwere, K. Galea, K. Jones, E. Handakas, K. Papadaki, A. Sleeuwenhoek, Integrated external and internal

- exposure to chemicals: the INTEGRA computational platform, 26th Annual ISEE Conference, Seattle (Washington), USA, 24-28/8/2014.
- 205. D.A. Sarigiannis, Modeling from external exposure dose down to internal doses bridging the gap, 2014 ICCA-LRI & JRC Workshop, Lugano, Switzerland, 17-18/6/2014.
- 206. D.A. Sarigiannis, S. Karakitsios, A. Gotti, G. Loizou, J. Cherrie, R. Smolders, Katleen De Brouwere, K. Galea, K. Jones, E. Handakas, K. Papadaki, A. Sleeuwenhoek, INTEGRA: From global scale contamination to tissue dose, 7th International Congress on Environmental Modelling and Software (iEMSs), San Diego (California), USA, 15-19/6/2014.
- 207. D.A. Sarigiannis, Integrated external and internal exposure to chemicals: the INTEGRA computational platform, SETAC Europe 24th Annual Meeting, Basel, Switzerland, 11-15/5/2014.
- 208. D.A. Sarigiannis, E. Handakas, A. Gotti, S. Karakitsios, Risk and life cycle impact assessment of municipal waste management, SETAC Europe 24th Annual Meeting, Basel, Switzerland, 11-15/5/2014.
- 209. D.A. Sarigiannis, I. Annesi-Maesano, J. Cherrie, J. Bartzis, M. Schumacher, The HEALS approach to health and environment-wide associations, SETAC Europe 24th Annual Meeting, Basel, Switzerland, 11-15/5/2014.
- 210. D.A. Sarigiannis, Computational toxicology, 7<sup>th</sup> conference of Forensic Medicine & Toxicology, Larisa, Greece, 26-27/4/2014.
- 211. D.A. Sarigiannis, S.P. Karakitsios, A. Gotti, M. Braubach, Combined exposure to harmful indoor air pollutants in Europe, Air Quality 2014, Garmisch-Partenkirchen, Germany, 24-28/3/2014.
- 212. D.A. Sarigiannis, S. Karakitsios, M. Kermenidou, Enhancing PM epidemiological concentration-response functions by incorporating lung deposition and oxidative stress, Air Quality 2014, Garmisch-Partenkirchen, Germany, 24-28/3/2014.
- 213. D.A. Sarigiannis, S. Karakitsios, M. Kermenidou, PM attributed mortality and morbidity due to biomass use in Thessaloniki estimation of socioeconomic cost, Air Quality 2014, Garmisch-Partenkirchen, Germany, 24-28/3/2014.
- 214. D.A. Sarigiannis, P. Kontoroupis, D. Chapizanis, S. Karakitsios, Public health co benefits from traffic related greenhouse gas emission policies, Air Quality 2014, Garmisch-Partenkirchen, Germany, 24-28/3/2014.
- 215. D.A. Sarigiannis, D. Zikopoulos, M. Kermenidou, S. Nikolaki, S. Karakitsios, Carcinogenic risk of PAHs in particulate matter from biomass combustion, Air Quality 2014, Garmisch-Partenkirchen, Germany, 24-28/3/2014.
- 216. D.A. Sarigiannis, S.P. Karakitsios, A. Gotti, INTEGRA: advancing exposure and risk characterization, Phoenix, Arizona, USA SOT's 53rd Annual Meeting, 24–27/3/2014.
- 217. D.A. Sarigiannis, D. Zikopoulos, M. Kermenidou, S. Nikolaki, S. Karakitsios, Carcinogenic risk of PAHs in particulate matter from biomass combustion, USA SOT's 53rd Annual Meeting, 24–27/3/2014.
- 218. D.A. Sarigiannis, S. Karakitsios, M. Kermenidou, S. Nikolaki, The effect of urban biomass combustion for space heating on PM exposure, 2013 AIChE Annual Meeting, San Francisco, USA, 3-8/11/2013.
- 219. D.A. Sarigiannis, S.P. Karakitsios, A. Gotti, Integrated external and internal exposure to chemicals: the INTEGRA computational platform, 2013 AIChE Annual Meeting, San Francisco, USA, 3-8/11/2013.
- 220. D.A. Sarigiannis, E.J. Handakas, S.P. Karakitsios, A multi-compartment skin penetration model coupled to a physiology-based biokinetic model for chemical exposure assessment, 2013 AIChE Annual Meeting, San Francisco, USA, 3-8/11/2013.
- 221. D.A. Sarigiannis, P. Kontoroupis, E. Solomou, S. Nikolaki, A.J.Karabelas, Probabilistic assessment of pesticide exposure via inhalation in Greece, 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey, 28/9-1/10/2013.
- 222. D.A. Sarigiannis, S. Theofanidis, Anaerobic digestion of organic municipal solid waste: a valid waste management option, 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey, 28/9-1/10/2013.
- 223. D.A. Sarigiannis, V. Handakas, A. Gotti, S. Karakitsios, Life cycle analysis of municipal waste management: industrial symbiosis options for reduced ecological footprint, 17th International

- Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey, 28/9-1/10/2013.
- 224. D.A. Sarigiannis, V. Handakas, S. Karakitsios, A detailed multicompartmental skin penetration model coupled to a physiologically based pharmacokinetic model for assessing exposure to endocrine disrupting chemicals, 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey, 28/9-1/10/2013.
- 225. D.A. Sarigiannis, S. Karakitsios, M. Kermenidou, A.F. Mika Gavriilidou, SOS lung region specific oxidative stress: a novel exposure metric for airborne PM, 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey, 28/9-1/10/2013.
- 226. D.A. Sarigiannis, Z. Samaras, E. Vouitsis, S. Karakitsios, Mechanistic exposure assessment of ultrafine PM, 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey, 28/9-1/10/2013.
- 227. D.A. Sarigiannis, P. Kontoroupis, D. Chapizanis, S. Karakitsios, Health impact assessment of the traffic related Greenhouse Gases (GHG) emission policies the case study of Thessaloniki, Greece, 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey, 28/9-1/10/2013.
- 228. D.A. Sarigiannis, S. Karakitsios, A. Gotti, A tiered approach for aggregate exposure assessment: the case of Bisphenol A, 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey, 28/9-1/10/2013.
- 229. D.A. Sarigiannis, S. Karakitsios, M. Kermenidou, R. Tzimou-Tsitouridou, PM attributed mortality and morbidity due to biomass use in Thessaloniki estimation of socioeconomic cost, 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey, 28/9-1/10/2013.
- 230. D.A. Sarigiannis, S. Nikolaki, M. Kermenidou, D. Zikopoulos, K. Plakas, S. Karakitsios, A.J. Karabelas, Carcinogenicity risk of PAHs in Particulate Matter, 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey, 28/9-1/10/2013.
- 231. D.A. Sarigiannis, A. Gotti, S. Karakitsios, INTERA platform: a tool for mechanistic risk assessment of indoor air pollutants, 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey, 28/9-1/10/2013.
- 232. D.A. Sarigiannis, S. Karakitsios, M. Kermenidou, S. Nikolaki, D. Zikopoulos, K. Plakas, S. Semelidis, A. Papagiannakis, R. Tzimou-Tsitouridou, The impact of biomass burning during wintertime in the large Metropolitan area of Thessaloniki in Greece, IMA 2013-Instrumental Methods of Analysis-Modern Trends and Applications, Thessaloniki, Greece, 15-19/9/2013.
- 233. D.A. Sarigiannis, S. Karakitsios, M. Kermenidou, The effect of biomass burning on PM exposure during wintertime, 2013 European Aerosol Conference (EAC 2013), Prague, Czech Republic, 1-6/9/ 2013.
- 234. D.A. Sarigiannis, Z. Samaras, E. Vouitsis, S. Karakitsios, V. Kalaitzis, Mechanistic exposure assessment of ultrafine PM, 2013 European Aerosol Conference (EAC 2013), Prague, Czech Republic, 1-6/9/2013.
- 235. S. Pateraki, T. Maggos, D.A. Sarigiannis, M. Kermenidou, S. Karakitsios, V.D. Assimakopoulos, A. Zagkosµ D.N. Asimakopoulos. Chemical profile of wood burning PM2.5 and PM1 in the two largest cities of Greece, Athens and Thessaloniki, 2013 European Aerosol Conference (EAC 2013), Prague, Czech Republic, 1-6/9/ 2013.
- 236. D.A. Sarigiannis, S. Karakitsios, A. Gotti, Is indoor exposure to DEHP a health risk? Conference of ISEE, ISES and ISIAQ, Basel, Switzerland, 19–23/8/2013.
- 237. D.A. Sarigiannis, S. Karakitsios, M. Kermenidou, Enhancing PM epidemiological concentration-response functions by incorporating lung deposition and oxidative potential, Conference of ISEE, ISES and ISIAQ, Basel, Switzerland, 19–23/8/2013.
- 238. D. Sarigiannis, P. Kontoroupis, N. Spyridoula, E. Solomou, M. Kermenidou, Spyros Karakitsios, The impact of urban climate change policies on health under financial crisis conditions the city of Thessaloniki, Conference of ISEE, ISES and ISIAQ, Basel, Switzerland, 19–23/8/2013.

- 239. D.A. Sarigiannis, S. Karakitsios, M. Kermenidou, PM attributed mortality and morbidity due to biomass use in Thessaloniki estimation of socioeconomic cost, 4th International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE) and SECOTOX Conference, Mykonos, Greece, 24-28/6/2013.
- 240. D.A. Sarigiannis, S. Karakitsios, A. Gotti, A tiered approach for aggregate exposure assessment the case of bisphenol-A, 4<sup>th</sup> International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE) and SECOTOX Conference, Mykonos, Greece, 24-28/6/2013.
- 241. D.A. Sarigiannis, V. Handakas, S. Karakitsios, A detailed multi-compartmental skin penetration model coupled to a physiologically based pharmacokinetic model for assessing exposure to chemical compounds: the case of BISPHENOL-A, 9<sup>th</sup> Greek Conference of Chemical Engineering, Athens, Greece, 23-25/5/2013.
- 242. D.A. Sarigiannis, S. Karakitsios, A. Gotti, A tiered approach for aggregate exposure assessment: the case of Bisphenol A, 9<sup>th</sup> Greek Conference of Chemical Engineering, Athens, Greece, 23-25/5/2013.
- 243. D.A. Sarigiannis, S.A. Theofanidis, Anaerobic digestion of organic municipal solid waste: a valid waste management option, 9<sup>th</sup> Greek Conference of Chemical Engineering, Athens, Greece, 23-25/5/2013.
- 244. D.A. Sarigiannis, P. Kontoroupis, D. Chapizanis, S. Karakitsios, Health impact assessment of the traffic related greenhouse gases (GHG) emission policies- the case study of Thessaloniki, Greece, 9<sup>th</sup> Greek Conference of Chemical Engineering, Athens, Greece, 23-25/5/2013.
- 245. D.A. Sarigiannis, P. Kontoroupis, E. Solomou, S. Nikolaki, A.J.Karabelas, Probabilistic assessment of pesticide exposure via inhalation, 9<sup>th</sup> Greek Conference of Chemical Engineering, Athens, Greece, 23-25/5/2013.
- 246. D. Sarigiannis, S. Karakitsios, Alberto Gotti, Enhancing biological equivalents by biologically effective dose using a generic PBPK model the case of BPA and DEHP, SOT's 52nd Annual Meeting, San Antonio 10-14/3/2013, USA.
- 247. D. Sarigiannis, S. Karakitsios, Alberto Gotti, Enhancing PM epidemiological concentration-response functions by incorporating lung deposition and oxidative potential, SOT's 52nd Annual Meeting, San Antonio 10-14/3/2013, USA.
- 248. D. Sarigiannis, S. Karakitsios, Alberto Gotti, Is indoor exposure to DEHP a health risk? SOT's 52nd Annual Meeting, San Antonio 10-14/3/2013, USA.
- 249. D. Sarigiannis, S. Karakitsios, Alberto Gotti, Graziella Cimino-Reale, The connectivity paradigm to cumulative risk assessment, Environmental Health 2013 Science and Policy to Protect Future Generations, Boston 3-6/3/2013, USA.
- 250. D. Sarigiannis, S. Karakitsios, A. Gotti, A dynamic physiology based pharmacokinetic model for assessing lifelong in-ternal dose, 2012 AIChE Annual Meeting. Pittsburgh, 28/10-2/11/ 2012, USA.
- 251. D. Sarigiannis, G. Reale, A. Collotta, E. Roda, P. Mustarelli, T. Coccini, L. Manzo. Toxicogenomics effects of water-soluble carbon nanotubes, 2012 AIChE Annual Meeting. Pittsburgh, 28/10-2/11/2012, USA.
- 252. D. Sarigiannis, S. Karakitsios, A. Gotti, Biological Equivalent-based risk assessment the case of BPA and HCHO. SOT's 51st Annual Meeting, San Francisco 11-15/3/2012, USA.
- 253. D. Sarigiannis, S. Karakitsios, A. Gotti, DEHP exposure assessment, SOT's 51st Annual Meeting, San Francisco 11-15/3/2012, USA.
- 254. D. Sarigiannis, S. Karakitsios, Alberto Gotti, The exposome approach for assessing the risks imposed by selected volatile contaminants of environmental tobacco smoke (ETS), SOT's 51st Annual Meeting, San Francisco 11-15/3/2012, USA.
- 255. D. Sarigiannis, S. Karakitsios, A. Gotti, A dynamic physiology based pharmacokinetic model for assessing lifelong internal dose, 2012 AIChE Annual Meeting, Pittsburgh, 28/10-2/11/2012, USA.
- 256. D. Sarigiannis, G. Reale, A. Collotta, E. Roda, P. Mustarelli, T. Coccini, L. Manzo, Toxicogenomics effects of water-soluble carbon nanotubes, 2012 AIChE Annual Meeting, Pittsburgh, 28/10-2/11/2012, USA.

- 257. D. Sarigiannis, S. Karakitsios, A. Gotti, Indoor air concentrations of PM2.5 and PM10 in European micro-environments and associated health risks, Air Quality 2012 Conference, Athens, 19-23/3/2012, Greece.
- 258. D. Sarigiannis, S. Karakitsios, A. Gotti, INTERA platform for mechanistic risk assessment of indoor air pollutants VOCs Europe-wide assessment, Air Quality 2012 Conference, Athens, 19-23/3/2012, Greece.
- 259. D. Sarigiannis, S. Karakitsios, A. Gotti, P. Kassomenos, G. Pilidis, Urban VOC abatement policy health impact assessment, Air Quality 2012 Conference, Athens, 19-23/3/2012, Greece.
- 260. D. Sarigiannis, M. Antonakopoulou, E. Handakas, A. Gotti, S. Karakitsios, Life cycle assessment of municipal waste management options, 4th HSWMA International Conference, Athens, 19-23/3/2012, Greece.
- 261. D. Sarigiannis, A. Gotti, S. Karakitsios, INTERA platform: a tool for mechanistic risk assessment of indoor air pollutants, 24th ISEE Annual Conference, Columbia (South Carolina), 26-30/8/2012, USA.
- 262. D. Sarigiannis, Z. Samaras, E. Vouitsis, S. Karakitsios, V. Kalaitzis, Mechanistic Exposure Assessment of Ultrafine PM, 24th ISEE Annual Conference, Columbia (South Carolina), 26-30/8/2012, USA.
- 263. D. Sarigiannis, S. Karakitsios, A. Gotti, TAGS: A Computational Tool Towards Tiered Aggregate Exposure Assessment 24th ISEE Annual Conference, Columbia (South Carolina), 26-30/8/2012, USA.
- 264. D. Sarigiannis, S. Karakitsios, A. Gotti, A tiered approach for aggregate exposure assessment, 22th ISES Annual Conference, Seattle, 28/10-1/11/2012, USA.
- 265. D. Sarigiannis, Z. Samaras, E. Vouitsis, S. Karakitsios, V. Kalaitzis, Mechanistic Exposure Assessment of Ultrafine PM, 22th ISES Annual Conference, Seattle, 28/10-1/11/2012, USA.
- 266. D. Sarigiannis, S. Karakitsios, A. Gotti, Enhancing biological equivalents by biologically effective dose using a generic PBPK model the case of BPA and DEHP, 22th ISES Annual Conference, Seattle, 28/10-1/11/2012, USA.
- 267. D. Sarigiannis, A. Gotti, S. Karakitsios, INTERA platform: a tool for mechanistic risk assessment of indoor air pollutants, 22th ISES Annual Conference, Seattle, 28/10-1/11/2012, USA.
- 268. D. Sarigiannis, S. Karakitsios, A. Gotti, Assessing benzene induced leukemia risk mitigation due to policy measures, 11th PRE International Conference, Thessaloniki, 3-6/7/2012, Greece.
- 269. D. Sarigiannis, S. Karakitsios, A. Gotti, A mechanistic model for assessing environmental and internal exposure to DEHP, 11th PRE International Conference, Thessaloniki, 3-6/7/2012, Greece.
- 270. D. Sarigiannis, S. Karakitsios, Assessing the risks imposed by selected volatile contaminants of environmental tobacco smoke (ETS), 11th PRE International Conference, Thessaloniki, 3-6/7/2012, Greece.
- 271. D. Sarigiannis, E. Solomou, P. Kontoroupis, S. Nikolaki, A.J. Karabelas, Environmental health impact assessment for plant protection products in the European Union, 11th PRE International Conference, Thessaloniki, 3-6/7/2012, Greece.
- 272. D. Sarigiannis, Satellite-assisted air-quality assessment: an integrated computational tool for air quality, 11th PRE International Conference, Thessaloniki, 3-6/7/2012, Greece.
- 273. D. Sarigiannis, A. Gotti, S. Karakitsios, INTERA platform: a tool for mechanistic risk assessment of indoor air pollutants, 11th PRE International Conference, Thessaloniki, 3-6/7/2012, Greece.
- 274. D. Sarigiannis, S.A. Theofanidis, A. Papagiannakis, S. Semelidis, Integrated municipal solid waste management: The case of Thessaloniki, 11th PRE International Conference, Thessaloniki, 3-6/7/2012, Greece
- 275. D. Sarigiannis, E. Handakas, Integrated municipal solid waste management: A systems approach, 11th PRE International Conference, Thessaloniki, 3-6/7/2012, Greece.
- 276. D. Sarigiannis, Z. Samaras, E. Vouitsis, S. Karakitsios, V. Kalaitzis, Mechanistic exposure assessment of traffic-originated ultrafine PM, 19th TAP Conference, Thessaloniki, 26-27/11/2012, Greece.
- 277. D. Sarigiannis, S. Karakitsios, A. Gotti, The Tiered Aggregate Exposure, Assessment (TAGS) platform: the case of population exposure to BPA, 7th International Conference on Science of Exposure Assessment, Edinburg, 2-4/7/2012, UK.

- 278. K. De Brouwere, D. Sarigiannis, A. Gotti, S. Karakitsios, Mechanistic risk assessment of indoor pollutants: exposure to phthalates, 7th International Conference on Science of Exposure Assessment, Edinburg, 2-4/7/2012, UK.
- 279. D. Sarigiannis, A. Gotti, S. Karakitsios, P. Kontoroupis, S. Nikolaki, Mechanistic risk assessment of indoor air pollutants BTEX Europe-wide assessment, 7th International Conference on Science of Exposure Assessment, Edinburg, 2-4/7/2012, UK.
- 280. D. Sarigiannis, S. Karakitsios, M Antonakopoulou, A. Gotti, Exposure analysis of accidental release of, mercury from compact fluorescent lamps (CFLs), 7th International Conference on Science of Exposure Assessment, Edinburg, 2-4/7/2012, UK.
- 281. D. Sarigiannis, Addressing the exposome by an integrative approach, 7th International Conference on Science of Exposure Assessment, Edinburg, 2-4/7/2012, UK.
- 282. D. Sarigiannis, The contribution of the exposome concept to evidence on exposure body burden, Biomarkers Research Symposium, Newcastle, 8-9/5/2012, UK.
- 283. M. Jantunen, D. Sarigiannis, A. Gotti, S. Karakitsios, Integrated Exposure for Risk Assessment in Indoor Environments INTERA, 10th Healthy Buildings International Conference, Brisbane, 8-12/7/2012, Australia.
- 284. D. Sarigiannis, S. Karakitsios, Alberto Gotti, A full chain mechanistic approach for exposure assessment from multiple sources in indoor environments, 2011 ISEE Conference, Baltimore 23-27/10/2011, USA.
- 285. D. Sarigiannis, S. Karakitsios, Alberto Gotti, A tiered approach for aggregate exposure assessment, 2011 ISEE Conference, Baltimore 23-27/10/2011, USA.
- 286. D. Sarigiannis, S. Karakitsios, Alberto Gotti, A bottom-up approach for assessing exposure to Environmental Tobacco Smoke (ETS), 2011 ISEE Conference, Baltimore 23-27/10/2011, USA.
- 287. D. Sarigiannis, S. Karakitsios, Alberto Gotti, Assessment of BPA exposure during pregnancy and multiple exposure routes, 2010 Joint Conference of International Society of Exposure Science & International Society for Environmental Epidemiology (ISEE-ISES), Seoul, 28/8-1/9/2010, Korea.
- 288. D. Sarigiannis, S. Karakitsios, Alberto Gotti, A mechanistic approach for assessing Bisphenol A internal doses for infants implementing a breast feeding PBTK model, 2009 ISES Annual Conference, Minneapolis 1-5/11/2009, USA.
- 289. S. Karakitsios, D. Sarigiannis, A. Gotti, P. Kassomenos, G. Pilidis, An integrated exposure model for benzene. Application in a medium sized Southeastern European city, 2008 Joint ISEE-ISEA Conference, Pasadena (California), 12-16/10/2008, USA.
- 290. D. Sarigiannis, N. Sifakis, N. Soulakellis, K. Schäfer, M. Tombrou, A new approach to environmental data fusion for integrated assessment of particulate matter loading and its effect on health in the urban environment, Proc. International Geoscience and Remote Sensing Symposium 2003, VII:4579-4581, IEEE (2003).
- 291. Retalis, N. Sifakis, N. Grosso, D. Paronis, D. Sarigiannis, Aerosol optical thickness retrieval from AVHRR images over the Athens urban area, Proc. International Geoscience and Remote Sensing Symposium 2003, IV:2182-2184, IEEE (2003).
- 292. D. Sarigiannis, N. Soulakellis, N.I. Sifakis, M. Tombrou, K. Schäfer, Multidisciplinary data and model fusion: a key to integrated air quality assessment, Remote Sensing of Clouds and the Atmosphere VII, Klaus Schäfer, Olga Lado-Bordowsky, Adolfo Comerón, Richard H. Picard (Eds.), Proceedings of SPIE Vol. 4882: 520-531 (2003).
- 293. N.Sifakis, N.Soulakellis, D.Sarigiannis, M.Tombrou, K.Schäfer, High spatial resolution satellites as complement to atmospheric modeling and to ground measurements for air-quality monitoring, Remote Sensing of Clouds and the Atmosphere VII, Klaus Schäfer, Olga Lado-Bordowsky, Adolfo Comerón, Richard H. Picard (Eds.), Proceedings of SPIE Vol. 4882: 532-539 (2003).
- 294. D.A. Sarigiannis D.A. Alternative vehicle technologies, Proc. Alternative Mobility Conference, Athens, November 29-30, 2002.
- 295. M. Saisana, D. Sarigiannis, D, A. Chaloulakou, N. Spyrellis, Air quality monitoring design: optimisation of PM2.5 networks using satellite observations, Proc. 7th Conference on Environmental Science and Technology, Syros, Greece, 3-6 September 2001.

- 296. D.A. Sarigiannis, Data fusion and inference systems for environmental decision support, Proc. 11th AAAI Conference (American Assoc. of Artificial Intelligence), Orlando, Florida, 18-24 July 1999.
- 297. N.I. Sifakis, D.A. Sarigiannis, D. Asimakopoulos, A. Bonetti, E. Nicologianni, M. Lointier, K. Schäfer, N. Soulakellis, M. Tomprou. I.C.A.R.O.S. integrated computational systems for air quality monitoring exploiting satellite observations, Proc. of the HELECO'99 Environmental Technology for the 21st Century, Thessaloniki, 3-6 June 1999, pp. 486-495.
- 298. D.A. Sarigiannis, Integrated systems for urban air pollution assessment, Proc. Int. Soc. Ecotoxicology Conf., Antalya, Turkey, 5-9 October 1998.
- 299. D.A. Sarigiannis, D. Assimakopoulos, A. Bonetti, F. Huynh, M. Lointier, K. Schäfer, N.I. Sifakis, N. Soulakelis, M. Tombrou, ICAROS Integrated computational assessment via remote observation system, Proc. Annual Conf. of UK Remote Sensing Society, Chatham Maritime, Kent, UK, 9-11 September 1998.
- 300. D.A. Sarigiannis, Decision analysis on industrial design for environment, Proc. Intern. Conf. On Protection and Restoration of the Environment IV, Halkidiki, Greece, 1-4 July 1998.
- 301. S. Dagnall, B. Hillring, D. Sarigiannis, Integrated Spatial Potential Initiative for Renewable Energy in Europe, Proc. 9th EC Conf. On Biomass for Energy, Environment, Agriculture and Industry, Würzburg, Germany, 8-12 June, 1998.
- 302. J. Gretz, D.A. Sarigiannis, State of the art of alternative fuels: hydrogen and biofuels, Proc. Conf. On Energy Technologies and Strategies of Research and Development for the Year 2000, Pisa, Italy, 6-7 March, 1998.
- 303. D.A. Sarigiannis, Systems models for urban and regional development under extreme conditions, Proc. 1st European Cold Conference, Kiruna, Sweden,11-16 January 1998.
- 304. D.A. Sarigiannis, Industrial ecology approaches for environmental protection, Proc. Intern. Conf. On Interactions between Industry and Society in the Cities, Thessaloniki, Greece, 20-23 October 1997.
- 305. D.A. Sarigiannis, G. Volta, Multi-criteria analysis for integrated technology assessment, Proc. ESReDA Intern. Seminar on Decision Analysis and its Application in Safety and Reliability, Espoo, Finland, 15-16 May, 1997.
- 306. D.A. Sarigiannis, G. Volta, Industrial design for environment, Proc. ESReDA Intern. Seminar on Decision Analysis and its Application in Safety and Reliability, Espoo, Finland, 15-16 May, 1997.
- 307. D.A. Sarigiannis, Developments in environment regulations and monitoring for oil pipelines networks, Proc. THERMIE Seminar on Environment Protection from Oil Pipelines and Sea Fed Terminals, EC, DG XVII, Alexandroupolis, Greece, 7-8 April 1997.
- 308. D.A. Sarigiannis, Object-oriented database technology for renewable energy information processing, Proc. Intern. Workshop on Renewable Energy Databases, DG XVII, Oxford, 4-5 November 1996.
- 309. D.A. Sarigiannis, G. Volta, Ecological vulnerability analysis: towards a new paradigm for industrial development, Proc. 3rd Intern. Conf. on Probabilistic Safety Analysis and Management, Crete, Greece, Springer Verlag (1996).
- 310. D.A. Sarigiannis, F. Andritsos, Energy conservation and economic development: new synergisms in the private sector, Proc. 2nd International Conf. on Environmental Technology for the Mediterranean HELECO'95 (1995), Athens, Greece.
- 311. D.A. Sarigiannis, G. Volta, A new concept for risk-based technology development and regulation: areas of its applicability, Proc.1995 ASME/JSME Pressure Vessels and Piping Conference (1995) Hawaii, USA.
- 312. G. Volta, D.A. Sarigiannis, Evaluation of the risk from fusion energy: a systems perspective, Proc. 80th Nat. Conf. Italian Phys. Soc. (1994), Lecce, Italy.
- 313. D.A. Sarigiannis, Social aspects of biomass use for development at the local level in the Mediterranean, Proc. 6th European Conference on Biomass for Energy, Industry and the Environment (1991) EC, Greece.
- 314. C. Hadjiyannakis, D.A. Sarigiannis, E. Billa, C. Tsilifonis, T.D. Tsoutsos, E.G. Koukios, Integrated large-scale biomass utilization: a systems approach, Proc. 6th European Conference on Biomass for Energy, Industry and the Environment (1991) EC, Greece.

- 315. D.A. Sarigiannis, Dynamic simulation of tritium processing systems in magnetic fusion reactors, Computer-Oriented Process Engineering, Process Technology Proc. 10 (1991), Elsevier Publ.
- 316. D.A. Sarigiannis, Nuclear fusion and fission as CO2 abatement strategies: economic -- safety -- environmental considerations, International Conference on Innovation, Industrial Progress and Environment (1991), France.
- 317. D. Sarigiannis, Assessment of environmental impacts of energy options: methodological problems, Proc. Int. Seminar on Environmental Engineering and Economics, (1991) Technical Chamber of Greece, Athens, Greece.
- 318. D.A. Sarigiannis, E. Billa, C. Hadjiyannakis, E.G. Koukios, The concept of bio-community--Part II: the role of non-linearities in regional bio-resources exploitation, Proc. 3rd European Symposium on Soft Energy Action at the Local Level (1991), Greece.
- 319. D.A. Sarigiannis, C. Hadjiyannakis, E. Billa, E.G. Koukios, Simulation models of biological pollutants flow: principles constraints applications, Proc. National Conference of Environmental Science and Technology (1989) Greece.
- 320. D.A. Sarigiannis, C. Hadjiyannakis, E. Billa, T.D. Tsoutsos, E.G. Koukios, The concept of biocommunity: a simulation tool for integrated regional planning, Proc. 1st European Symposium on Soft Energy Sources at the Local Level (1988), Greece.

<sup>&</sup>lt;sup>1</sup> https://IPCheM.jrc.ec.europ.eu/RDSIdiscovery/IPCheM/index.html