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Centre for Interdisciplinary Research and Innovation of the Aristotle University of Thessaloniki, in the Research Group Health and Exposome Research: Assessing Contributors to Lifetime Exposure and State of health (HERACLES) (since 2015)

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EXECUTIVE SUMMARY

My research and scientific activity since receiving my degree until today focuses on the study of the interaction of environmental factors (with emphasis on chemicals) with human health. This has been based on data analysis to understand the biochemical processes that relate and regulate the interaction of environmental and nutritional factors with genetic factors, contributing to precision prevention. My research also addresses the human health risk assessment of chemicals and pharmaceuticals, with the aim of their safe and sustainable design, contributing significantly to the realisation of the new European Strategy for Chemicals that Promote Sustainability. My research activity over the last 13 years has been developed at the Centre for Interdisciplinary Research and Innovation of the Aristotle University of Thessaloniki, in the Health and Exposome Research: Assessing Contributors to Lifetime Exposure and State of health (HERACLES) research group (since 2015) and at the Environmental Engineering Laboratory of the Department of Chemical Engineering of the Aristotle University of Thessaloniki, where I am the Executive Manager under the direction of Prof. D. Sarigiannis, and as of April 2024, I am an ELE A' at the National Research Foundation (Office of the President / Institute of Chemical Biology).

SUMMARY OF THE RESEARCH PROJECT

SCHOLARSHIPS - DISTINCTIONS

- STATE SCHOLARSHIP FOUNDATION (2001-2002) / Scholarship as 1st graduate of the School (*Grade 8.5, Excellent*)
- H.P.E.E.A.E.K, (2003-2004) / Scholarship as a postgraduate student (*Graduation with a grade of 9.33, Excellent*)
- EUROPEAN COMMISSION, JOINT RESEARCH CENTER, ISPRA ITALY (2007-2008) (*Trainee*)
- EUROPEAN COMMISSION, JOINT RESEARCH CENTER, ISPRA ITALY (2008-2011) (*Post-Doc*)
- **Winner of the CFIC LRI Award 2017 - Dose response for chemical mixtures (100.000 € award)**

PUBLISHED WORK

- 110 publications in international journals
- 343 papers presented at international conferences
- 7 Chapters in books
- 1 Master's thesis
- 1 Doctoral thesis
- 1 Diploma thesis
- ✓ 4616 references (Google Scholar)
- ✓ h-index (Google scholar): 36
- ✓ i10-index (Google scholar): 72

RESEARCH PROGRAMMES

- Participation in 35 European Research Projects
- Participation in 4 National Research Programmes

EDUCATION AND TRAINING

DEGREE FROM A HIGHER EDUCATIONAL INSTITUTION:

UNIVERSITY OF IOANNON, MSc in SCIENCES AND CULTURE (supported by the Dept. of Physics), major in Environmental Sciences (2002)
(GRADE **8.5/10 - Excellent**, 1st out of 60 students).

THESIS TITLE:

"Car, pollution and anti-pollution technology"

Supervising professor:

Paul the Prodigal

Master's degree (Master):

UNIVERSITY OF IOANNON, CHEMISTRY DEPARTMENT OF CHEMISTRY (2004)
M.Sc. in "Environmental and computational chemistry-simulation" (M.O. Course grade 9.33).

THESIS TITLE:

"Measurements of aromatic hydrocarbons in the city of Ioannina and their correlation with traffic characteristics"

Supervising professor:

Pelidis Georgios

DOCTORIAL:

UNIVERSITY OF IOANNON, DEPARTMENT OF BIOLOGICAL APPLICATIONS AND TECHNOLOGIES (presentation-examination of thesis on 22-5-2008, orcomorphy on 9-10-2009)

THESIS TITLE:

"Exposure of population groups to benzene and its determinants"

Advisory Committee:

Pelidis Georgios (Supervisor), Kassomenos Pavlos, Stalikas Konstantinos

RESEARCH EXPERIENCE

Environmental Engineering Laboratory / Department of Chemical Engineering / Aristotle University of Thessaloniki (2011 - until now)

1. PARC - Partnership for Risk Assessment (HORIZON EUROPE) - Budget: 400,000,000 € / (2022 - 2029)
Deputy Assistant Dir. Responsible
2. ENVESOME - The Environmental Exposome And Health (HORIZON) - - - Budget: 7,999,798 € / (2024 - 2028)
Deputy Lt. Responsible
3. AURORA - Demonstrating trAnsformative solUtions to empower climate Resilience tOWards impROved public health stAtus in the EU Boreal Region (HORIZON) - Budget: 6,099,870€ / (2024 - 2027) Deputy Assistant Director. Deputy Assistant Director
4. IHEN - International Human Exposome Network Project (HORIZON) - Budget: 2,999,957 € / (2024 - 2026)
Deputy Lt. Responsible
5. INSIGHT - Integrated Models for the Development and Assessment of High Impact Chemicals and Materials (HORIZON EUROPE) - Budget: 4,130,318 € / (2024 - 2027) Deputy Assistant Director. Responsible
6. EIRENE - Environmental Exposure Assessment Research Infrastructure Preparatory Phase Project (HORIZON EUROPE) - - Budget: 2,945,449 € / (2024 - 2026) Deputy Assistant Director. Assistant Deputy Deputy Director
7. RAISE - Research Analysis Identifier SystEm (HORIZON EUROPE) - Budget: 5,050,625 € / (2022 - 2026)
8. URBANOME - Urban observatory for multi-participatory enhancement of health and wellbeing - Budget: 4.974.015 € / (PI) (2021 - 2024) - Deputy Assistant Director. Responsible
9. OBERON - An integrative strategy of testing systems for identification of EDs related to metabolic disorders - Budget 6,500,000 € / (PI) (2019 - 2023) - Deputy Assistant Director. Responsible
10. HERA - Health Environment Research Agenda (HORIZON 2020) - Budget 2,500,000 € / (2019 - 2021) - Deputy Assistant Director. Responsible
11. Development of "green tile". (Project Budget: 227.156 € / (PI) (2018 - 2021) - (Competitive National Funding). Responsible
12. NEUROSOME - Exploring neurological exposome Initiative (Horizon 2020) - Budget 7,000,000 € / (2017 - 2020) - Deputy Assistant Director. Responsible
13. **DOREMI - Dose response for chemical mixtures (CEFIC LRI) - Budget 350,000 € / (2017 - 2020)**
- Project Coordinator
14. HBM4EU - Human Biomonitoring Initiative (Horizon 2020) - Budget 70,000,000 € / (2017 - 2020) - Deputy Assistant Dir. Responsible
15. GRIN - GRIN - GReen INfrastructures for disaster risk reduction protection: evidence, policy instruments and marketability - DG ECHO) - Budget: 681,153 € / (2017 - 2018) - Deputy Assistant Director. Assistant Deputy Director
16. ICARUS - Integrated Climate forcing and Air pollution Reduction in Urban Systems (HORIZON 2020) - Budget: € 6,472,015 € / (2016 - 2019) - Deputy Assistant Director. Responsible
17. 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 € / (2016 - 2019) - Deputy Assistant Director. Responsible
18. PEC - Post-Emergency, multi-hazard health risk assessment in Chemical Disasters (Civil Protection mechanism of the EC - DG Environment) - Budget: 788,803 € / (2016 - 2017) - Deputy Assistant Director. Assistant Deputy Deputy Director
19. **ERNICIP - European Reference Network for Critical Infrastructure Protection - Thematic Group "Detection of Indoor Airborne Chemical-Biological Agents" / Joint Research Center - European Commission / - Budget 50,000 € / (2015 - 2016) & 50,000 € / (2017 & 2018)** - Project Coordinator
20. Industrially Contaminated Sites and Health Network (ICSHNet) - Budget 1,500,000 € / (2015 - 2018) - Deputy Assistant Director. Responsible

- 21. CheRRIE - Chemical and Radiological Risk in the Indoor Environment (*European Territorial Cooperation Programme Greece- Bulgaria 2007-2013 INTERREG IV*) - Budget: 1,420,569 € / (2014 - 2015)
- 22. CROME - Cross-Mediterranean Environment and Health Network (*LIFE+ European Commission/DG Environment*) - Budget: 1,760,190 € / (2013 - 2016) - Deputy Assistant Director. Assistant Deputy Assistant Director
- 23. HEALS - Health and Environment-wide Associations based on Large population Surveys (*7th FP - Large scale project*) - Budget: 14,866,648 € / (2013 - 2018) - Deputy Assistant Director. Responsible
- 24. TRANSPHORM - Transport related Air Pollution and Health impacts (*7th FP - Large scale project*) - Budget: € 8,696,697 million (2010 - 2014)

National Centre for Research and Technological Development (NERTH) / Institute of Chemical Process Engineering / Laboratory of Natural Resources and Alternative Energy (2011 - 2015)

- 25. INTEGRA - Integrated External and Internal Exposure Modelling Platform (*CEFIC-LRI*) - Budget: 300,000 € / (2013 - 2015)
- 26. URGENCHE - Urban Reduction of GHG Emissions in China and Europe (*7th FP - Large scale project*) - Budget: 4,652,549 € / (2011 - 2015)
- 27. TAGS - Tiered Aggregate Exposure assessment of Chemical Substances (*CEFIC-LRI*) Budget: 400,000 € / (2010 - 2013)
- 28. INTERA - Integrated Exposure for Risk Assessment in Indoor Environments (*CEFIC-LRI*) - Budget: 400,000 € / (2010 - 2013)

Joint Research Center / Consumer Health Protection Institute / Chemical Risk Assessment Unit (2008 - 2011) - Post-doctoral Research Grant on "Chemical Risk Assessment using Biology-based Dose-Response Relationships"

- 29. GENESIS - GENeric European Sustainable Information Space for environment (*7th FP - Large scale project*) - Budget: € 5 million (2009 - 2013)
- 30. HEREPLUS - Health Risk of Environmental Pollution Levels in Urban Systems (*7th FP - Concerted action*) - Budget: € 2 million (2007 - 2010)
- 31. CAIR4HEALTH - Clean Air for health (*6th FP - scientific support action*) - Budget: € 1 million (2009 - 2013)
- 32. HEIMTSA - Health and Environment Integrated Methodology and Toolbox for Scenario Assessment (*6th FP - Integrated project*) - Budget: € 5 million (2007 - 2010)
- 33. 2-FUN - Full-chain and UNcertainty Approaches for Assessing Health Risks in Future ENvironmental Scenarios (*6th FP - Integrated project*) - Budget: € 3 million (2007 - 2010)
- 34. NO MIRACLE - NOvel Methods for Integrated Risk Assessment of Cumulative stressors in Europe (*6th FP - Integrated project*) - Budget: € 6 million (2006 - 2009)
- 35. HENVINET - Health And Environment Network (6th FP - Thematic Network) - Budget: € 2 million (2007 - 2009)

Research projects during the period of the doctoral thesis - University of Ioannina

- 36. European Community DG XII (Sub-contractor) A non-destructive Pulse Neutron Multiple Detector Tool for use in environmental, hydrocarbon and mineral exploration (2002) Budget: 24.000 € (2002 - 2005)
- 37. Ministry of Education, Program Pythagoras, Human exposure to atmospheric pollutants, Budget: 50.000 € / (2005 - 2006)
- 38. Research Committee of the University of Ioannina: Atmospheric pollution in the city of Ioannina and proposals for the regulation of traffic Budget: 13.200 € / (2002 - 2004)
- 39. General Secretariat for Research and Development, Program PRAXE: Pilot unit for the treatment of wastewaters from table olives (2002) Budget: 44.000 € / (2002 - 2003)

FULL LIST OF PUBLICATIONS IN JOURNALS AND CONFERENCES

PUBLICATIONS IN INTERNATIONAL JOURNALS

1. Gastellu, T., Karakoltzidis, A., Ratier, A., Bellouard, M., Alvarez, J.-C., Le Bizec, B., Rivière, G., Karakitsios, S., Sarigiannis, D. A., & Vogs, C. (2025). A comprehensive library of lifetime physiological equations for PBK models: enhancing dietary exposure modeling with mercury as a case study. *Environmental Research*, 265, 120393.
2. Tariq, F., Ahrens, L., Alygizakis, N. A., Audouze, K., Benfenati, E., Carvalho, P. N., Chelcea, I., Karakitsios, S., Karakoltzidis, A., Kumar, V., Mora Lagares, L., Sarigiannis, D., Selvestrel, G., Taboureau, O., Vorkamp, K., & Andersson, P. L. (2024). computational tools to facilitate early warning of new emerging risk chemicals. *Toxics*, 12(10), 736.
3. Kolokathis, P. D., Sidiropoulos, N. K., Zouraris, D., Varsou, D.-D., Mintis, D. G., Tsoumanis, A., Dondero, F., Exner, T. E., Sarimveis, H., Chaideftou, E., Paparella, M., Nikiforou, F., Karakoltzidis, A., Karakitsios, S., Sarigiannis, D., Friis, J., Goldbeck, G., Winkler, D. A., Peijnenburg, W., Serra, A., Greco, D., Melagraki, G., Lynch, I., & Afantitis, A. (2024). Easy-MODA: Simplifying standardized registration of scientific simulation workflows through MODA template guidelines powered by the Enalos Cloud Platform. *Computational and Structural Biotechnology Journal*, 25, 256-268.
4. Leso, V., T. Rydberg, M. Halling, S. Karakitsios, F. Nikiforou, A. Karakoltzidis, D.A. Sarigiannis, and I. Iavicoli, Safety and sustainability by design: an explorative survey on concepts' knowledge and application. *Environmental Science & Policy*, 2024. 162: p. 103909.
5. Olea, E.S., Hernández, J.S., Suarez, J.L., Artiñano, B., Briz, V., Karakitsios, S., Sarigiannis, D., Dos Santos, S.G., Nuñez-Corcuera, B., Ramis, R. Urban environmental noise and depression causal pathway: potential role of chronic conditions as mediator, 11 March 2024, PREPRINT (Version 1) available at Research Square [<https://doi.org/10.21203/rs.3.rs-4018639/v1>].
6. K. Yu. Kirichenko, A. K. Stratidakis, A. S. Kholodov et al. Features of fume distribution in the working zone during arc welding operations with various covered electrodes, 31 January 2024, PREPRINT (Version 1) available at Research Square [<https://doi.org/10.21203/rs.3.rs-3892835/v1>]
7. Karakoltzidis, A., Battistelli, C., Bossa, C., Bouman, E., Garmendia Aguirre, I., Iavicoli, I., Zare Jeddi, M., Karakitsios, S., Leso, V., Løfstedt, M., Magagna, B., Sarigiannis, D., Schultes, E., Soeteman-Hernandez, L., Subramanian, V., Nymark, P. The FAIR Principles as a Key Enabler to Operationalize Safe and Sustainable by Design Approaches. *RSC Sustain.*, 2024. DOI: 10.1039/D4SU00171K
8. Desalegn, A., T. Schillemans, E. Papadopoulou, A.K. Sakhi, L.S. Haug, I. Henriette Caspersen, A. Rodriguez-Carrillo, S. Remy, G. Schoeters, A. Covaci, M. Laeremans, M.F. Fernández, S. Pedraza-Diaz, T. Kold Jensen, H. Frederiksen, A. Åkesson, B. Cox, S. Cynthia D'Cruz, L. Rambaud, M. Riou, M. Kolossa-Gehring, A. Gerofke, A. Murawski, N. Vogel, C. Gabriel, S. Karakitsios, N. Papaioannou, D. Sarigiannis, F. Barbone, V. Rosolen, S. Lignell, A. Karin Lindroos, J. Snoj Tratnik, A. Stajniko, T. Kosjek, Ž. Tkalec, L. Fabelova, L. Palkovicova Murinova, B. Kolena, S. Wimmerova, T. Szigeti, S. Középesy, A. van den Brand, J.-P. Zock, B. Janasik, W. Wasowicz, A. De Decker, S. De Henauw, E. Govarts, and N. Iszatt, Urinary concentrations of phthalate/DINCH metabolites and body mass index among European children and adolescents in the HBM4EU Aligned Studies: A cross-sectional multi-country study. *Environment International*, 2024. 190: p. 108931.
9. Niarchos, G., N. Alygizakis, M. Carere, V. Dulio, M. Engwall, T. Hyötyläinen, R. Kallenborn, S. Karakitsios, A. Karakoltzidis, A. Kärman, M. Lamoree, M. Larsson, J. Lundqvist, L. Mancini, J. Mottaghipisheh, P. Rostkowski, D. Sarigiannis, K. Vorkamp, and L. Ahrens, Pioneering an effect-based early warning system for hazardous chemicals in the environment. *TrAC Trends in Analytical Chemistry*, 2024. 180: p. 117901.
10. Marx-Stoelting, P., Rivière, G., Luijten, M., Aiello-Holden, K., Bandow, K., Baken, K., Cañas, A., Castano, A., Denys, S., Fillol, C., Herzler, M., Iavicoli, I., Karakitsios, S., Klanova, J., Kolossa-Gehring, M., Koutsodimou, A., Lobo Vicente, J., Lynch, I., Namorado, S., Norager, S., Pittman, A., Rotter, S., Sarigiannis, D., Silva, M.J., Theunis, J., Tralau, T., Uhl, M., van Klaveren, J., Wendt-Rasch, L., Westerholm, E., Rousselle C., Sanders, P. (2023). A walk in the PARC: developing and implementing 21st century chemical risk assessment in Europe. *Archives of Toxicology*, 97:893-908.
11. Zare Jeddi M, Galea KS, Viegas S, Fantke P, Louro H, Theunis J, Govarts E, Denys S, Fillol C, Rambaud L, Kolossa-Gehring M, Santonen T, van der Voet H, Ghosh M, Costa C, Teixeira JP, Verhagen H, Duca R-C, Van Nieuwenhuysse A, Jones K, Sams C, Sepai O, Tranfo G, Bakker M, Palmen N, van Klaveren J, Scheepers PTJ, Paini A, Canova C, von Goetz N, Katsonouri A, Karakitsios S, Sarigiannis DA, Bessems J, Machera K, Harrad S and Hopf NB (2023). FAIR environmental and health registry (FAIREHR)- supporting the science to policy

interface and life science research, development and innovation. *front. Toxicol.* 5:1116707. doi:10.3389/ftox.2023.

12. Katsonouri, A., Gabriel, C., Esteban López, M., Namorado, S., Halldorsson, T., Snoj Tratnik, J., Rodriguez Martin, L., Karakoltzidis, A., Chatzimpaloglou, A., Giannadaki, D., Anastasi, E., Thoma, A., Domínguez-Morueco, N., Cañas Portilla, A., Jacobsen, E., Assunção, R., Peres, M., Santiago, S., Nunes, C., Pedraza-Díaz, S., Iavicoli, I., Leso, V., Lacasaña, M., González-Alzaga, B., Horvat, M., Sepai, O., Castano, A., Kolossa-Gehring, M., Karakitsios, S., Sarigiannis, D. HBM4EU-MOM: Prenatal methylmercury-exposure control in five countries through suitable dietary advice for pregnancy-Study design and characteristics of participants. *International Journal of Hygiene and Environmental Health*, 252; 114213.
13. M. Kermenidou, I.S. Frydas E. Moschoula, D. Kousis, D. Christofilos, S. Karakitsios, D. Sarigiannis. Quantification and characterization of microplastics in the Thermaic Gulf, in the North Aegean Sea. *Science of The Total Environment*, Vol 892:20, 2023, 164299.
14. M. Kermenidou, E. Koulaouzidou, V. Chasoglou, O. Anesti, K. Tolidis, S. Karakitsios, D. Sarigiannis. Determination of Particulate Matter in Dental Clinics: The Effectiveness of Different Air Purifiers and the Central Ventilation System. *Indoor Air*, Volume 2023 | Article ID 7258634 | <https://doi.org/10.1155/2023/7258634>
15. Vogel N, Schmidt P, Lange R, Gerofke A, Sakhi AK, Haug LS, Jensen TK, Frederiksen H, Szigeti T, Csákó Z, Murinova LP, Sidlovska M, Janasik B, Wasowicz W, Tratnik JS, Mazej D, Gabriel C, Karakitsios S, Barbone F, Rosolen V, Rambaud L, Riou M, Murawski A, Leseman D, Koppen G, Covaci A, Lignell S, Lindroos AK, Zvonar M, Andryskova L, Fabelova L, Richterova D, Horvat M, Kosjek T, Sarigiannis D, Maroulis M, Pedraza-Díaz S, Cañas A, Verheyen VJ, Bastiaensen M, Gilles L, Schoeters G, Esteban-López M, Castaño A, Govarts E, Koch HM, Kolossa-Gehring M. Current exposure to phthalates and DINCH in European children and adolescents - Results from the HBM4EU Aligned Studies 2014 to 2021. *Int J Hyg Environ Health*. 2023 249:114101.
16. Gerofke A, David M, Schmidt P, Vicente JL, Buekers J, Gilles L, Colles A, Bessems J, Bastiaensen M, Covaci A, Den Hond E, Koppen G, Laeremans M, Verheyen VJ, Černá M, Klánová J, Krsková A, Zvonar M, Knudsen LE, Koch HM, Jensen TK, Rambaud L, Riou M, Vogel N, Gabriel C, Karakitsios S, Papaioannou N, Sarigiannis D, Kakucs R, Középesy S, Rudnai P, Szigeti T, Barbone F, Rosolen V, Guignard C, Gutleb AC, Sakhi AK, Haug LS, Janasik B, Ligočka D, Estokova M, Fabelova L, Kolena B, Murinova LP, Petrovicova I, Richterova D, Horvat M, Mazej D, Tratnik JS, Runkel AA, Castaño A, Esteban-López M, Pedraza-Díaz S, Åkesson A, Lignell S, Vlaanderen J, Zock JP, Schoeters G, Kolossa-Gehring M. From science to policy: How European HBM indicators help to answer policy questions related to phthalates and DINCH exposure *Int J Hyg Environ Health*. 2023 247:114073.
17. Sy, M., Eleftheriadou, D., Jung, Ψ., Lindtner, O., Karakitsios, S., Sarigiannis, D., Weber, T., Kolossa-Gehring, M., Greiner, M. Assessment of the Long-Term Exposure to Lead in Four European Countries Using PBPK Modeling. *Exposure and Health*, 2023. 10.1007/s12403-023-00535-2
18. Govarts, E., L. Gilles, L. Rodriguez Martin, T. Santonen, P. Apel, P. Alvito, E. Anastasi, H. R. Andersen, A.-M. Andersson, L. Andryskova, J.-P. Antignac, B. Appenzeller, F. Barbone, Z. Barnett-Itzhaki, R. Barouki, T. Berman, W. Bil, T. Borges, J. Buekers, A. Cañas-Portilla, A. Covaci, Z. Csako, E. Den Hond, D. Dvorakova, L. Fabelova, T. Fletcher, H. Frederiksen, C. Gabriel, C. Ganzleben, T. Göen, T. Göen, T. I. Halldorsson, L. S. Haug, M. Horvat, P. Huuskonen, M. Imboden, M. Jagodic Hudobivnik, B. Janasik, N. Janev Holcer, S. Karakitsios, A. Katsonouri, J. Klanova, V. Kokaraki, T. Kold Jensen, J. Koponen, M. Laeremans, F. Laguzzi, R. Lange, N. Lemke, S. Lignell, A. K. Lindroos, J. Lobo Vicente, M. Luijten, K. C. Makris, D. Mazej, L. Melymuk, M. Meslin, H. Mol, P. Montazeri, A. Murawski, S. Namorado, L. Niemann, S. Nübler, B. Nunes, K. Olafsdottir, L. Palkovicova Murinova, N. Papaioannou, S. Pedraza-Díaz, P. Piler, V. Plichta, M. Poteser, N. Probst-Hensch, L. Rambaud, E. Rauscher-Gabernig, K. Rausova, S. Remy, M. Riou, V. Rosolen, C. Rousselle, M. Rütther, D. Sarigiannis, M. J. Silva, Z. Šlejkovec, J. Snoj Tratnik, A. Stajniko, T. Szigeti, J. V. Tarazona, C. Thomsen, Ž. Tkalec, H. Tolonen, T. Trnovec, M. Uhl, A. Van Nieuwenhuijse, E. Vasco, V. J. Verheyen, S. Viegas, A. M. Vinggaard, N. Vogel, K. Vorkamp, W. Wasowicz, T. Weber, S. Wimmerova, M. Woutersen, P. Zimmermann, M. Zvonar, H. Koch, M. Kolossa-Gehring, M. Esteban López, A. Castaño, L. Stewart, O. Sepai and G. Schoeters (2023). "Harmonized human biomonitoring in European children, teenagers and adults: EU-wide exposure data of 11 chemical substance groups from the HBM4EU Aligned Studies (2014-2021)." *International Journal of Hygiene and Environmental Health* 249: 114119.
19. Bajard L, Adamovsky O, Audouze K, Baken K, Barouki R, Beltman JB, Beronius A, Bonefeld-Jørgensen EC, Cano-Sancho G, de Baat ML, Di Tillio F, Fernández MF, FitzGerald RE, Gundacker C, Hernández AF, Hilscherova K, Karakitsios S, Kuchovska E, Long M, Luijten M, Majid S, Marx-Stoelting P, Mustieles V, Negi CK, Sarigiannis D, Scholz S, Sovadinova I, Stierum R, Tanabe S, Tollefsen KE, van den Brand AD, Vogts C, Wielsøe M, Wittwehr C, Blaha L. Application of AOPs to assist regulatory assessment of chemical risks - Case studies, needs and recommendations. *Environ Res*. 2023 217:114650.

20. Anesti O., Papaioannou N., Gabrie C., Dzhezheia 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* (2023), 10;871218.
21. Gilles L, Govarts E, Rodriguez Martin L, Andersson AM, Appenzeller BMR, Barbone F, Castaño A, Coertjens D, Den Hond E, Dzhezheia V, Eržen I, López ME, Fábelová L, Fillol C, Franken C, Frederiksen H, Gabriel C, Haug LS, Horvat M, Halldórsson TI, Janasik B, Holcer NJ, Kakucs R, Karakitsios S, Katsonouri A, Klánová J, Kold-Jensen T, Kolossa-Gehring M, Konstantinou C, Koponen J, Lignell S, Lindroos AK, Makris KC, Mazej D, Morrens B, Murínová ĽP, Namorado S, Pedraza-Diaz S, Peisker J, Probst-Hensch N, Rambaud L, Rosolen V, Rucic E, Rütther M, Sarigiannis D, Tratnik JS, Standaert A, Stewart L, Szigeti T, Thomsen C, Tolonen H, Eiríksdóttir Á, Van Nieuwenhuysse A, Verheyen VJ, Vlaanderen J, Vogel N, Wasowicz W, Weber T, Zock JP, Sepai O, Schoeters G. Harmonization of Human Biomonitoring Studies in Europe: Characteristics of the HBM4EU-Aligned Studies Participants *Int J Environ Res Public Health*, 19;6757, 2022
22. Lange, R, N. Vogel, P. Schmidt, A. Gerofke, M. Luijten, W. Bil, T. Santonen, G. Schoeters, L. Gilles, A. K. Sakhi, L. S. Haug, T. K. Jensen, H. Frederiksen, H. M. Koch, T. Szigeti, M. Szabados, J. S. Tratnik, D. Mazej, C. Gabriel, D. Sarigiannis, V. Dzhezheia, S. Karakitsios, L. Rambaud, M. Riou, G. Koppen, A. Covaci, M. Zvonař, P. Piler, J. Klánová, L. Fábelová, D. Richterová, T. Kosjek, A. Runkel, S. Pedraza-Díaz, V. Verheyen, M. Bastiaensen, M. Esteban-López, A. Castaño and M. Kolossa-Gehring. Cumulative risk assessment of five phthalates in European children and adolescents. *International Journal of Hygiene and Environmental Health*, 2022 246: 114052.
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ANNOUNCEMENTS AT INTERNATIONAL CONFERENCES (Selected from 343)

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2. D.A. Sarigiannis, M. Kermenidou, S. Karakitsios. Refining PM exposure using low-cost portable sensor data and human respiratory tract deposition modelling. CEMEPE and SECOTOX Conference 2022, Mykonos, Greece, 5-9/6/2022.
3. D.A. Sarigiannis, V. Kokkaraki, S. Karakitsios. Toxicokinetic interactions of industrial chemical mixtures as internal exposure modifiers. CEMEPE SECOTOX Conference 2022, Mykonos, Greece, 5-9/6/2022.
4. D.A. Sarigiannis, A. Gypakis, A. Gotti, S. Karakitsios. the climate exposome. suST 2022, Nisyros, Greece, 14-17/09/2022.
5. S. Karakitsios, I. Petridis, V. Kokkaraki, D. Sarigiannis. Toxicokinetic interactions of industrial chemical mixtures as internal exposure modifiers. EUROTOX 2021, Virtual, 2021.
6. D. Chapizanis, S. Karakitsios, D. Sarigiannis. A Personal Exposure Agent Based Model (ABM) with the Capacity of Aggregation at Various Levels of Population Size. American Institute of Chemical Engineers 2019, Orlando FL, USA, 10-15/11/2019.
7. D. Sarigiannis, N. Papaioannou, M. Fafouti, M. Dickinson, A. Gabriel, S. Karakitsios. Risk Characterization of Cadmium Based on Human Biomonitoring Data, American Institute of Chemical Engineers 2019, Orlando FL, USA, 10-15/11/2019.
8. S. Karakitsios, I. Petridis, D.A. Sarigiannis. Exposure modelling and exposure reconstruction for cadmium, 10th International Conference "Biomaterials and Nanobiomaterials, Heraklion, Crete, 5-12/5/2019.

9. S. Karakitsios, V. Kokaraki, A. Gotti, D.A. Sarigiannis. integrative and cumulative health risk from xenobiotics exposure 10th International Conference "Biomaterials and Nanobiomaterials, Heraklion, Crete, 5-12/5/2019.
10. S. Karakitsios, R. Razaee, D. Sarigiannis. Risk Assessment of EDCs in europe based on human biomonitoring data, 10th International Conference "Biomaterials and Nanobiomaterials, Heraklion, Crete, 5-12/5/2019.

INVITED SPEECHES

- UIC fourth security week, 18-21/6/2018, Paris, France. Title of speech "**Advancing CB protection in railways exploring sensor technologies: challenges and opportunities**".
- 19th ANNUAL CEFIC-LRI WORKSHOP, 15-16/11/2017, Brussels, Belgium. Title of the talk "**The DOREMI project (DOse REsponse of MIxtures)**".
- CONCAWE workshop "PAH integrated **exposure** modelling", Brussels, Belgium, 8-9/10/2015.
- 17th Transport and Air Pollution Symposium and 3rd Environment and Transport Symposium, Toulouse, France, 2-4/6/2009. Title of speech "**The effect of traffic fleet on overall exposure to benzene**".

TEACHING EXPERIENCE

- "**Environmental Science**" (theory and laboratories) of the Department of Biological Applications & Technologies, on topics related to air pollution and environmental chemistry (2006, 2007 and 2008).
- **Master's degree in Toxicology and Environmental Risk Assessment** at the Department of Medicine, University of Pavia, Italy, focusing on toxicological mechanisms and human health effects (2009 and 2010).
- "**Environmental Engineering**" (core course), "**Waste Gas Processes**" (elective) and "**Chemicals in the Environment**" (postgraduate course) of the Department of Chemical Engineering of the Aristotle University of Thessaloniki on topics related to environmental pollution and environmental chemistry (2017 and 2018).
- Postgraduate Doctoral Program at the School of Advanced Studies of the University of Pavia in Italy in the courses "**Environment & Health**" and "**Computational Methods**".
- "**Computational Toxicology**" at the University of Thessaly, in the Interdepartmental Postgraduate Program in Toxicology (2017, 2018, 2019, 2020).
- "**Environmental Chemistry**", Department of Chemical Engineering AUTH, Spring Semester 2018, independent teaching
- "**Analysis of Energy and Environmental Systems**", Department of Chemical Engineering, Aristotle University of Thessaloniki, Spring Semester 2019, independent teaching
- "**Risk analysis of industrial chemicals**", MSc Environment and Health, Department of Medicine, Aristotle University of Thessaloniki (2020, 2021)
- "**Dose-response relationships based on biology**", MSc Environment and Health, Department of Medicine, Aristotle University of Thessaloniki (2020, 2021)

PARTICIPATION IN SCIENTIFIC ORGANISATIONS

- 2017 - today: Secretary of the Mediterranean Scientific Association for Environmental Protection
- Member of the Hellenic Society of Toxicology since 2017
- Member of the International Society for Exposure Science since 2016
- Member of the Society of Environmental Toxicology and Chemistry since 2015

ORGANISATION OF CONFERENCES

- 4-6 October 2017: 19th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean region - Environmental and health inequity; science in the service of society, in Rome (Italy). Organizer of the symposium - Secretary General of MESAEP.
- 6-7 February 2017: third International Conference of the Industrial Contaminated Sites and Health Network (Third Plenary Conference COST Action IS1408 - ICSHNet), Thessaloniki, KEDEA Building. Conference Organizer.
- 8-9 April 2005: "A non-destructive multiple pulse detector for use in environmental studies", UNIVERSITY OF IOANNON

DRAFTING OF TECHNICAL SPECIFICATIONS AND MONITORING OF PROCEDURES FOR INTERNATIONAL AND NATIONAL COMPETITIONS FOR THE PURCHASE OF EQUIPMENT

- Technical specifications for Air Quality Monitoring stations equipment (cost **362.000** €) / REQUEST No. IPA/TAIB2012/9.11/LOT6/18 Preparation of Technical Specification for TAIB 2012 Supply Contract for supply of appropriate equipment to exchange and manage information and monitoring for water, waste, air management, nature and climate change, REQUEST No. IPA/TAIB2012/9.11/LOT6/18 FWC BENEFICIARIES 2013 - LOT 6: Environment EuropeAid/132633/C/SER/multi
- Technical specifications of LC/MS-MS (cost **250.000** €) / HEALS FP7 project
- Technical specifications of GC/MS-MS (cost **155.000** €) / CheRRIE (Interreg) project
- Technical specifications of Microarray Scanner (cost **55.000** €) / HEALS FP7 project
- Technical specifications for PM samplers (cost **25.000** €) / TRANSPHORM FP7 project
- Technical specification for PM optical counter (cost **15.000** €) / CROME LIFE+ project