

PORTO, PORTUGAL

PROGRAM

















LOCAL ORGANISING COMMITTEE

João Paulo Teixeira Ana Sofia Mendes Carla Costa Cristiana Costa Pereira Solange Costa Susana Pinho e Silva

SCIENTIFIC COMMITTEE

JOÃO PAULO TEIXEIRA (PORTUGAL) ANDREW COLLINS (NORWAY) BLANCA LAFFON (SPAIN) ELSA CASIMIRO (UK) **ERDEM COSKUM (TURKEY)** FELIX CARVALHO (PORTUGAL) FERNANDO BARBOSA (BRASIL) SAM KACEW (CANADA) STEFANO BONASSI (ITALY) SUSANA VIEGAS (PORTUGAL) ANA SOFIA MENDES (PORTUGAL) CARLA COSTA (PORTUGAL) CRISTIANA PEREIRA (PORTUGAL) SOLANGE COSTA (PORTUGAL) SUSANA SILVA (PORTUGAL) VANESSA VALDIGLESIAS (SPAIN)

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SEPTEMBER 16TH

8.30 AM - REGISTRATION

9.00 AM - WELCOME SESSION

PROF. FÉLIX CARVALHO, Secretary-General of EUROTOX
DR. CARLA COSTA, Co-Chair of the Organising Committee
PROF. JP TEIXEIRA, Chair of the Organising Committee

9.15 AM – SESSION GENETIC TOXICOLOGY

SESSION CHAIR: PROF. FÉLIX CARVALHO

Increased throughput of the comet assay for measuring DNA damage and repair Amaya Azqueta, University of Navarra, Spain

DNA and chromosome damaging effects in mice exposed to an estuary sediment extract Miguel Pinto, National Health Institute Dr. Ricardo Jorge, I.P., Portugal

DNA damage induced by Acrylamide and Glycidamide: BER pathway and Apoptosis João Pereira Lima, Universidade Nova de Lisboa, Portugal

Bisphenol A antagonizes Doxorubicin effects on expression patterns of cancer related genes in colon cancer cells HT29

Margarida Delgado, Instituto Superior de Agronomia, Portugal

 $Effect \ of \ chronic \ exposure \ to \ the \ antiretroviral \ drug \ nevirapine \ on \ Paraoxonase-1 \ activities \ in \ HIV-infected \ patients$

Clara Dias, Universidade Nova de Lisboa, Portugal

10.30 AM – COFFEE BREAK

11.00 AM – KEYNOTE LECTURE

Framing Atherosclerosis as a Nanotoxicology Problem
Prof. Lang Tran, Institute of Occupational Medicine, UK

11.30 AM – SESSION NANOTOXICOLOGY

SESSION CHAIR: PROF. LANG TRAN

 ${\bf Cadmium\ bioaccumulation\ in\ the\ freshwater\ bivalve\ \it Corbicula\ fluminea\ -\ The\ role\ of\ TiO2\ Nanoparticles}$

Gonçalo Vale, Instituto Superior Técnico, Portugal

Effect of concentration, pH and UVB radiation on the dissolution of manufactured ZnO NPs Carlos E. Monteiro, Centro Química Estrutural - Instituto Superior Técnico, Portugal

Stability of core/shell quantum dots: role of pH and small organic ligands Cristiana Franco, Instituto Superior Técnico, Portugal

Emission of nanoparticles during friction stir welding of aluminium alloys João Gomes, ISEL / IBB-IST, Portugal

12.30 AM – KEYNOTE LECTURE

Species sensitivity distributions for silver and zinc oxide nanoparticles: using taxonomic and traitbased risk assessment approaches

Prof. Susana Loureiro, Universidade Aveiro, Portugal

1.00 PM - LUNCH AND POSTER SESSION

2.30 PM – OPENING CEREMONY

PROF. JOSÉ MANUEL CALHEIROS, Portuguese National Institute of Health Dr. Ricardo Jorge
PROF. ARIS TSATSAKIS, President Elect of EUROTOX

PROF. SAM KACEW, Editor-in-Chief of the Journal of Toxicology and Environmental Health
PROF. JP TEIXEIRA, Chair of the Scientific Committee

2.45 PM - SESSION INDOOR AIR QUALITY

SESSION CHAIR: PROF. SUSANA VIEGAS

The Effects on Health of Indoor Air Quality and Thermal Comfort In Elderly Care Centers Ana Mendes, INSA, Portugal

GERIA Study – Indoor Air and Respiratory Health in residents of Elderly Care Centers in Lisbon: A Case Study

Adélia Rocha, Faculty of Medical Sciences - New University of Lisbon, Portugal

Biomonitoring study in indoor and outdoor environments of primary schools

Nuno Canha, Instituto Superior Técnico, Portugal

Indoor air levels of fine particulate matter in an urban nursery and a primary school in Porto, Portugal

Pedro Branco, Faculdade de Engenharia da Universidade do Porto, Portugal

Pollutants in the indoor air of the museum

Begnino Sanchez, CIEMAT, Spain

4.00 PM – COFFEE BREAK

4.30 PM - SESSION ECOTOXICOLOGY

SESSION CHAIR: PROF. LÚCIA GUILHERMINO

Comparison of Toxic Response Behavior to Caenorhabdities elegans in Different Toxic Chemicals M. Golam Mortuza, King Saud University, Kingdom Saudi Arabia

Impairment of fish mitochondrial energy metabolism by mercuric chloride

Claudia Mieiro, CESAM, Department of Chemistry, University of Aveiro, Portugal

Oxidative stress observed in the roots of tomato ($Lycopersicon\ esculentum\ L$.) after treatment with cadmium / zinc

Sbartai Hana, University of Badji Mokhtar, Algeria

Molecular tools for assessing ecological risk of Ciprofloxacin, Tamoxifen and Cyclophosphamide released in hospital waste water and surface water

Annie Pfohl-Leszkowicz, Institut National Polytechnique de Toulouse, France

INTERNATIONAL CONFERENCE ON OCCUPATIONAL & ENVIRONMENTAL TOXICOLOGY 2013

$Comparing \ the \ genotoxic \ potential \ of \ carcinogenic \ and \ non-carcinogenic \ sediment-bound \ PAHs \ in \ fish \ peripheral \ blood$

Marta Martins, IMAR, FCT-UNL, Portugal

Relationship between Bacteria Susceptibility to Mercury and Mercury Contamination on Tagus Estuary (Portugal)

Neusa Figueiredo, Faculty of Pharmacy of University of Lisbon, Portugal

6.00 PM - POSTER SESSION

6.30 PM - WELCOME RECEPTION

SEPTEMBER 17TH

9.15 AM – KEYNOTE LECTURE

High levels of arsenic in Brazilian rice samples: speciation analysis and estimation of inorganic arsenic daily intake

Prof. Fernando Barbosa Jr. University of São Paulo, Brazil

9.45 AM – SESSION METAL TOXICITY

SESSION CHAIR: PROF. FERNANDO BARBOSA

Metals and arsenic in cassava (*Manihot esculenta*) in the Zambian Copperbelt mining district: Health risks linked with their intake by human being

Bohdan Kříbek, Czech Geological Survey, Czech Republic

Evaluation of central nervous system parameters underlying mechanisms of arsenic (III)-induced neurotoxicity

Vanda Andrade, Faculty of Pharmacy, University of Lisbon, Portugal

Groundwater-soil-plant relationship with respect to arsenic: an environmental issue *Edgar Pinto*, *FFUP*, *Portugal*

Trace elements in human hair vs. trace elements in human brain

Patrícia Ramos, REQUIMTE, Porto University, Portugal

10.45 AM – COFFEE BREAK

11.15 AM – KEYNOTE LECTURE

Emerging health issues from chronic pesticide exposure: Innovative methodologies and effects on molecular cell and tissue level

Prof Aristidis M Tsatsakis, University of Crete, Greece

11.45 AM – SESSION OCCUPATIONAL TOXICOLOGY

SESSION CHAIR: PROF. SAM KACEW

Occupational exposure to particulate matter and fungal contamination in two Portuguese waste sorting units

Susana Viegas, ESTeSL-IPL, Portugal

Impact of co-exposure on toluene biomarkers in rats

Frédéric Cosnier, INRS, France

Assessment of genotoxic effects in Nurses handling cytostatics drugs

Carina Ladeira, ESTeSL, Portugal

12.30 AM – KEYNOTE LECTURE

Endocrine and immmunological biomonitoring of individuals exposed to Prestige oil seven years later

Prof. Blanca Laffon, University of A Coruña, Spain

1.00 PM – LUNCH AND POSTER SESSION

2.30 PM –SESSION ENVIRONMENTAL HEALTH

SESSION CHAIR: PROF ARISTIDIS M TSATSAKIS

Evaluating the risk of human exposure to environmental PCDD/Fs using biomonitors Sofia Augusto, FCUL-CBA, Portugal

Individual exposure to air pollutants in a Portuguese urban industrialized area Joana Valente, CESAM & University of Aveiro, Portugal

Fungal contamination in waste management – Aspergillus fumigatus complex treat Carla Viegas, ESTeSL, Portugal

Repeated major late summer Cylindrospermopsis raciborskii blooms in Alqueva reservoir and their toxicity risk

Sandra M. Caetano, Universidade do Algarve, Portugal

Fate of sulfadiazine and sulfapyridine under chlorine disinfection conditions

Vanessa Gaffney, Faculdade de Farmácia da Universidade de Lisboa, Portugal

4.00 PM – COFFEE BREAK

4.30 PM – SESSION ENVIRONMENTAL HEALTH (CONT.)

SESSION CHAIR: PROF. NURSEN BASARAN

Association between air pollution and birth weight in Sines region: results from GISA project Manuel Ribeiro, Instituto Superior Técnico, Portugal

Methylated derivatives of metal(loids) in landfill effluents

Jacek Czerwinski, Lublin University of Technology, Poland

Physiologically Based Pharmacokinetic Model (PBPK) for Bisphenol A: A Generic Model Predictors of Oral Doses Equivalent (ODE) from Various Species and Routes of Exposure Claude Emond, University of Montreal, Canada

Integrated approach to assess exposure to aerosol toxic elements in an industrial area Joana Lage, Instituto Superior Técnico, Universidade Técnica de Lisboa, Portugal

5.30 PM – AWARD ATTRIBUTION AND CLOSING SESSION

POSTER SESSIONS

SEPTEMBER 16TH

- P01. Mitochondrial ROS production and ERK activation modulate pxr and mdr1 gene expression in DC-like cells exposed to respiratory sensitizer HDI Ana Silva, University of Coimbra, Portugal
- P02. Influence of sex, age and ochratoxin A on the expression of RT-qPCR reference genes Ariane Vettorazzi, University of Navarra, Spain
- P03. Na+ and K+ ion imbalances: age-related changes and anatomic region differences Edgar Pinto, University of Porto, Portugal
- P04. Chromosome breakage and cellular death are not induced in oral epithelial cells of crack users: a preliminary study

 Victor Silva, Federal University of Sao Paulo, Brazil
- P05. Study on the blueberry potential effect antigenotoxic in Drosophila melanogaster Isabel Gaivão, University of Trás-os-Montes e Alto Douro (CECAV-UTAD), Portugal
- P06. In silico analysis of non-synonymous SNPs in toxicogenomic studies: impact of genetic variation on the FANC DNA repair pathway and susceptibility to DPC- and ICL-inducing chemical agents

 Luís Silva Santos Universidade Católica Portuguesa, Portugal
- P07. Cytotoxicity and DNA damage of Pelagia noctiluca venom mediated by oxidative stress in human colon cancer cells

 Yosra Ayed, Faculty of Dentistry, Tunisia
- P08. Acetaminophen prevents oxidative burst and delays apoptosis in human neutrophils in vitro

 Marisa Freitas, University of Porto, Portugal
- P09. Head and neck neoplasia prevalence in patients irradiated in childhood for tinea capitis treatment

 Paula Boaventura, IPATIMUP University of Porto, Portugal
- **P10.** Inborn errors of metabolism: toxicity of natural metabolites *Piet Pretorius, North-West University, South Africa*
- P11. Oxidative Stress and DNA damage in interventional cardiologists exposed to low-dose ionizing radiation

 Amina Sakly, University School of Medicine of Monastir, Tunisia.
- P12. Anacardium occidentale stem bark in vivo genotoxicity assessment using the micronucleus assay
 Sofia Encarnação, University of Lisbon, Portugal
- P13. Energetic and signaling significance of adenosine nucleotides in the crosstalk between skin keratinocytes and dendritic cells exposed to a skin allergen

 Maria Teresa Cruz, University of Coimbra, Portugal
- P14. Cytotoxicity of Trifluralin on V79 Cell Line Zehra Sarıgöl, Hacettepe University, Turkey
- P15. Cytotoxic activities of some plants growing in Anatolia Region Sanem Hosbas, Gazi Üniversity, Turkey
- P16. Toxicity and permeability of NP deigned to cross biological barriers, ALEXANDER Project

 Amaya Azqueta, University of Navarra, Spain

P17. Comparative Protective Effects of Curcumin and Resveratrol Titanium Dioxide Induced DNA Damage

Deniz Özkan Vardar, Hitit University, Turkey

P18. Emission of nanoparticles emissions from arc welding of mild steel João Gomes, ISEL/IBB-IST, Portugal

P19. Bioaccumulation and Ecotoxicity of Carbon Nanotubes

Petra Jackson, National Research Centre for the Working Environment, Denmark

P20. Evaluation of silver nanoparticles cytotoxicity and genotoxicity on a human keratinocyte cell line

Helena Oliveira, University of Aveiro, Portugal

P21. Airborne bacteria and fungi levels in primary Portuguese schools *Joana Madureira, University of Porto, Portugal*

P22. Elderly exposure assessment to indoor air pollutants

Marina Almeida Silva, IST/ITN Universidade Técnica de Lisboa, Portugal

P23. Gymnasiums: a place to improve health condition or to increase the personal exposure to pollutants?

Nuno Canha, IST/ITN Universidade Técnica de Lisboa, Portugal

P24. Indoor air quality assessment in different hospital areas
S. Marta Almeida, IST/ITN, Universidade Técnica de Lisboa, Portugal

P25. Effects of exposure to particles and ozone on hospital admissions for cardiorespiratory diseases in Setúbal, Portugal

S. Marta Almeida - IST/ITN, Universidade Técnica de Lisboa, Portugal

P26. Indoor Environment and Ventilation Assessment in Children Day Care Centers in ENVIRH Project – results from 9 Oporto schools

Ana Mendes, National Health Institute Dr. Ricardo Jorge, Porto, Portugal

P27. Biological air contamination in Elderly Care Centers – GERIA Project Lívia Aguiar, National Health Institute Dr. Ricardo Jorge, Porto, Portugal

P28. Lepomis gibbosus exposed to the anticonvulsant drug phenytoin: biochemical effects Fátima P. Brandão, University of Aveiro, Portugal

P29. Lepomis gibbosus exposed to anticonvulsant drugs (diazepam, carbamazepine and phenytoin): behavioral effects

Fátima P. Brandão, University of Aveiro, Portugal

P30. Antioxidant enzyme activities and lipid peroxidation in the freshwater ciliated protozoa Paramecium sp exposed to hydrazine carboxylate (Bifenazate)

Sbartai Ibtissem, University of El-Tarf, Algeria

P31. Evaluation of genotoxicity of sediments from the Sado river estuary using solvent extractions of different polarities

Joana Sacadura, National Health Institute Dr. Ricardo Jorge, Portugal

P32. Paraquat formulation containing lysine acetylsalicylate protects green algae against the herbicide cytotoxicity

Maria Teresa Baltazar-REQUIMTE, University of Porto, Portugal

P33. Genotoxic effects of Bisphenol A: Transmissible point mutations in C. elegans Margarida Delgado, Universidade Técnica de Lisboa, Portugal

P34. Use of urban groundwater for public lakes supply: terrestrial ecotoxicologial evaluation *Piedade Barros, CISA, ESTSP-IPP, Portugal*

- P35. Effects of low doses of external radiation from 137Cs on Lactuca sativa seedling and Daphnia magna reproduction
 - Piedade Barros, CISA, ESTSP-IPP, Portugal
- P36. In vivo exposure to formamide on lactate dehydrogenase, alanine aminotransferase and aspartate aminotransferase activity of Helix aspersa

 Teresa Moreira, CISA, ESTSP-IPP, Portugal
- P37. Differential toxicity responses of green algae and cyanobacteria to formamide Teresa Moreira, CISA, ESTSP-IPP, Portugal
- P38. Isolation and Characterization of Mercury-resistant Bacteria from Salt Marsh of Tagus Estuary

Cristina Carvalho, iMed.UL, University of Lisbon, Portugal

SEPTEMBER 17TH

- **P39.** Maternal and umbilical cord blood levels of mercury in South Portugal Ângela Serafim CIMA, University of Algarve, Portugal
- P40. Investigating the accumulation of metals in wild populations of the Asian clam (Corbicula fluminea): a new "delicacy" of the human diet in certain areas of Portugal?

 Lúcia Guilhermino, ICBAS, CIIMAR/CIMAR, University of Porto, Portugal
- P41. As, U and Co hazardous effects on animal and human health. Reviewing toxicological data for improving food safety, human and animal health protection

 A. Cristina S. Rocha, Universidade de Coimbra, Portugal
- P42. Changes in microRNA expression profiles trigged by inorganic arsenic exposure *Priscilla Boccia, INAIL, DIPIA, Italy*
- P43. Delay in "Reactive" Response of Primary Human Astrocytes after Methylmercury Exposure

 Giuseppe Malfa, University of Catania, Italy
- P44. Comet assay to assess DNA damage induced by Lead in Lactuca sativa L. root cells Isabel Gaivão, University of Trás-os-Montes e Alto Douro (CECAV-UTAD), Portugal
- P45. Assessment of lead exposure by dietary intake in pre-school children from Zadar County, Croatia

 Judita Grzunov, Institute of Public Health Zadar, Croatia
- **P46.** Tale of two cities: a household survey of metal(loids) in dust Ana C.A. Sousa, University of Aveiro, Portugal
- P47. Levels of Persistent Organic Pollutants (POPs) and Organotins (OTs) in seafood samples from Maio Island, Cape Verde Archipelago A preliminary approach Sónia Coelho, University of Aveiro, Portugal
- P48. Metal levels and potential public health risks associated with squid consumption Simone Morais, REQUIMTE, Instituto Superior de Engenharia do Porto, Portugal
- P49. Occupational exposure to Mercury: Association with Human Paraoxonase activity and Vitamin E

 Ana de Oliveira, ESTeSL, Portugal
- P50. Biomonitoring occupational exposure to formaldehyde: The influence of antioxidant vitamins on genotoxicity biomarkers

 *Carina Ladeira, ESTeSL, CMDT-ENSP, Portugal**
- P51. Aspergillus flavus contamination in two waste water treatment plants: An occupational treat

 Carla Viegas, ESTeSL, Portugal

P52. Using the Knowledge-based Artificial Intelligence Models to Calculate the Exposure on TDI in Foaming Process

Małgorzata Dobecka, Nofer Institute of Occupational Medicine, Poland

P53. Occupational Hazards to Methanol Associated with the use Means of Protection in Pathological Anatomy Laboratory

Mónica Dias-Teixeira, REQUIMTE, Instituto Superior de Engenharia do Porto, Portugal

- P54. Surfaces contamination with antineoplastic drugs in two Portuguese Hospitals Susana Viegas, ESTeSL, CIESP-ENSP, Portugal
- P55. Increased Chromosomal Aberrations and DNA damage in a group of anatomy-pathology laboratory workers exposed to formaldehyde

 Sandra Carvalho, National Institute of Health Dr. Ricardo Jorge, Portugal
- **P56.** Degradation of odorous compounds from food production by oxidation methods *Adam Piotrowicz, Lublin University of Technology, Poland*
- P57. The raise of temperature increases the toxicity of florfenicol, a veterinary antibiotic of wide use: implications for the environmental risk assessment of veterinary medicines *Alexandra Martins, ICBAS, CIIMAR/CIMAR, Portugal*
- P58. Formation of emerging desinfection byproducts in water and evaluation of potential genotoxic effects: the case of halogenated aromatic hydrocarbons

 Ana Sofia Cardoso, Instituto Nacional de Saúde Doutor Ricardo Jorge, Portugal
- P59. Characterization of fungal diversity in house dust samples collected from two Portuguese c cities a preliminary survey

 Ana C.A. Sousa, University of Aveiro, Portugal
- P60. Maternal and umbilical cord serum concentrations of persistent organic pollutants (POPs) in a human cohort from South Portugal

 Belisandra Lopes, University of Algarve, Portugal
- **P61.** Impact of forest fires on PAH levels in groundwater from mountain areas Catarina Mansilha, Portuguese National Institute of Health, Portugal
- P62. The Effect of UV-B Irradiation on Human Keratinocytes after Lycopene Exposure Helena Oliveira, CESAM, Universidade de Aveiro, Portugal
- **P63.** Exposure to aerosol toxic elements in Cape Verde

 Joana Lage, Instituto Superior Técnico, Universidade Técnica de Lisboa, Portugal
- P64. Blood lead levels in hemodialysis patients Results from a monitoring study on a Portuguese population

 Leonardo Araújo, REQUIMTE, University of Porto, Portugal
- P65. Evidences pointing mycotoxins contaminated-pet foof as responsible of reduced fertility and stillbirth of companion animals

 Annie Pfohl-Leszkowicz, University of Toulouse, France
- P66. Determination of Pesticide Residues in Ready-to-eat Lettuce Using QuEChERS Extraction and GC/MS

 Maria Luísa Mateus, University of Lisbon, Portugal
- P67. Indicators of depression and use of antidepressants in residents of nursing homes in Lisbon

 GERIA Study

 Manuela Correia, New University of Lisbon, Portugal
- P68. Advantages and challenges of adaptation to European Union legislative framework on pesticides to the Brazilian law

 Márcia Goncalves, Universidade de Lisboa, Portugal

P69. Method Optimization for the Determination of Bisphenol A in Human Plasma by SPE and GC-MS

Luísa Correia-Sá, REQUIMTE, ISEP, Portugal

P70. Seasonality of air pollutants in Santiago Island, Cape Verde: the influence of Sahara dust intrusions

Marina Almeida-Silva, IST/ITN, Universidade Técnica de Lisboa, Portugal

- **P71.** Evaluation of 1-hydroxypyrene levels in the urine of Portuguese pre-school children *Maria Carmo Pereira, LEPAE, Universidade do Porto, Portugal*
- P72. Assessment of ultrafine particles in an urban Portuguese pre-school: levels and sources identification

 Maria Carmo Pereira, LEPAE, Universidade do Porto, Portugal
- P73. Relationship between exposure to xylenes and ethybenzene expressed either in concentration in air and amount of their metabolites excreted in the urine *Mónica Dias-Teixeira*, *REOUIMTE*, *ISEP*, *Portugal*
- **P74.** Biomonitoring of current use pesticides (CUPs) by pine needles *Nuno Ratola, University of Murcia, Spain*
- P75. GERIA Study Environment and Well-being of residents from Lisbon nursing homes: An exploratory study of elderly people with dementia
 Rita Paraíso, New University of Lisbon, Portugal
- **P76.** Applicability of an in vitro model to assess the bioaccessibility of food contaminants *Paula Alvito, National Institute of Health Dr. Ricardo Jorge, Portugal*
- P77. Estimating daily exposure of children to particulate matter the microenvironmental modelling approach

 Pedro Branco, LEPAE, Universidade do Porto, Portugal
- P78. The influence of natural radioactivity in water quality in the semiarid region of Brazil Natalia Barbosa, Universidade Federal do Rio Grande do Norte, Brazil
- **P79.** GERIA Study Risk factors for falls in institutionalized elderly: medication load Rita Paraíso, New University of Lisbon, Portugal
- P80. Simulation of Copper-mine-emitted Hydrogen Sulfide Dispersion in the Atmospheric Air by Atmospheric Dispersion Modeling
 Slawomir Czerczak, Nofer Institute of Occupational Medicine, Poland
- P81. Characterization of the toxicological effects of aminocarb by in vivo assays: hematological, biochemical and histological studies

 Simone Morais, REQUIMTE, Instituto Superior de Engenharia do Porto, Portugal
- P82. Occupational exposure to particulate matter A case of flat grinding in a metallurgical industry

 Tiago Mesquita, Higher School of Health Technology, Portugal
- **P83.** Occurrence study of priority pharmaceutical compounds in EPAL's waters Vanessa Gaffney, Faculdade de Farmácia da Universidade de Lisboa, Portugal
- **P84.** In vitro effects of different chlorinated contaminants on porcine macrophages Rosario Russo, University of Naples Federico II, Italy