

## Scientific Committee

### Chair

#### **DR TOMASZ SOBAŃSKI**

European Chemicals Agency, Finland

Tomasz Sobanski graduated in Computer Sciences and Biomedical Engineering. He was awarded a PhD in Metrology, specialising in data analysis for complex measurement systems. His post-doctoral research was in the field of development of the measurement system and data analysis for *in vitro* assays at the EC Joint Research Centre. In 2009, he started to work at the European Chemicals Agency in the field of computational toxicology. His major expertise is in the field of *in vitro* test methods development, computational assessment of chemicals and data intelligence. Since 2012, he is a member of the OECD QSAR Toolbox Steering group.

### Members

#### **DR TARA BARTON-MACLAREN**

Health Canada, Canada

Dr Tara Barton-Maclaren is a Risk Assessment Division Manager in the Existing Substances Risk Assessment Bureau, Healthy Environments and Consumer Safety Branch of Health Canada since 2012. As the focal point for hazard assessment expertise in the Bureau, the division follows advancements in toxicology and risk assessment and works toward the development of strategies for the integration of emerging data and novel methodologies for the assessment of chemicals existing in the Canadian marketplace. In support of the global transition to 21<sup>st</sup> Century toxicology, she participates in initiatives under the Organization for Economic Cooperation and Development (OECD) and engages in various scientific collaborations both nationally and internationally in the areas of QSAR, Adverse Outcome Pathways, Integrated Approaches to Testing and Assessment and new approaches to support regulatory decision-making.

Dr Tara Barton-Maclaren joined Health Canada in the Existing Substances Risk Assessment Bureau in 2007 and has led various risk assessment files as well as hazard methodology initiatives. She obtained her BSc Honours from the University of Guelph with a specialization in Biomedical Science in 2000 and her PhD in Reproductive Toxicology from McGill University, Montreal, Quebec in 2007.

#### **DR SONJA BEKEN**

European Medicines Agency, United Kingdom

#### **DR ELISABET BERGGREN**

European Commission, Joint Research Centre, Italy

Elisabet Berggren is Deputy Head of Unit at the Systems Toxicology Unit and the European Reference Laboratory for Alternatives to Animal Testing (Eurl ECVAM). The Unit focuses its activities to the development of a new and more efficient safety assessment of chemicals based on *in vitro*, *in silico* and *in chemico* methods. The aim is to develop new predictive methodologies more relevant to human health, encouraging innovation and avoiding animal testing. Elisabet started to work for the European Commission's Joint Research Centre in 1996, and she was responsible for the Technical Committee of Classification and Labelling of Dangerous Chemicals at the European Chemicals Bureau during many years. She was involved in the negotiations of the Globally Harmonised System, its implementation within the EU through the CLP Regulation. She also contributed to the negotiations of the Rotterdam Convention and its EU regulatory implementation. Elisabet made her PhD in physical chemistry at Stockholm's University in 1991. In her academic career she primarily focussed on the development of theoretical dynamic models for liquid crystals and biological relevant systems.

## **PROFESSOR IAN COTGREAVE**

Swetox, Sweden

Ian has been Professor of Toxicology at the Karolinska Institute in Sweden since 2002. Other positions include Director of Molecular Toxicology at AstraZeneca between 2004 and 2013 and Director of Strategic Scientific Development within the Swedish Toxicology Sciences Research Center (Swetox; [www.swetox.se](http://www.swetox.se)) from 2014. Ian is a previous member of the Board of the Swedish Society of Toxicology (SFT) from 1997-2001, was a member of the Medicinal Committee of the Swedish Medicinal Protection agency from 2001-2003, a member of the Swedish Central Committee for Alternatives to Animals (CFN), the Swedish Animal Protection Agency from 2002-2004 and the Chairman of the Swedish Central Committee for Alternatives to Animals (CFN), the Swedish Animal Protection Agency and Department of Agriculture from 2005-2008. More recently Ian was a member of the Swedish Science Research Councils M3R research grant committee from 2009-2014. From its inception, Ian has been Co-chair of the Scientific Advisory Board of SEURAT-1 since 2011. Ian was also active in initiating the Innovative Medicines Initiative (IMI) STEMBANCC program, as well as the UK government SC4SM project, both aimed at stem cell based models for predictive toxicology.

Ian has many years of experience of mechanism-based risk assessment ranging from modes of action of drugs and environmental chemicals based on generation to reactive intermediates, the role of protein and DNA adducts in triggering early events in toxicity and regulation of cellular redox homeostasis. A keen interest in the development of *in vitro* models and application of "Adverse Outcome pathway" thinking for risk assessment has spanned many organ and tissue types over the years, ranging from liver through blood vessels to lung, and utilizing stem cell-based approaches. In his present position as Director of Strategic Scientific Development at Swetox, Ian is well placed to stimulate and coordinate national and international efforts in qualification and validation of alternative methods, focused on incorporation into new paradigms of chemical risk assessment, increasingly involving mechanistic information as a central tool.

## **PROFESSOR MARK CRONIN**

Liverpool John Moores University, United Kingdom

Mark Cronin is Professor of Predictive Toxicology at the School of Pharmacy and Chemistry, Liverpool John Moores University (LJMU), Liverpool, England. He has over 25 years expertise in the application of *in silico* approaches to predict the toxicity and fate of chemicals; in addition to development of strategies (such as integrated testing strategies, IATA) to develop alternatives to whole animal testing for toxicity. Research in recent years has centred on the application of these alternatives for regulatory use (e.g. classification and labelling; prioritisation; data gap filling) and for product development and regulatory risk assessment. Current research includes the application of chemical grouping and read-across to assess human health and environmental endpoints, particular the linking of the Adverse Outcome Pathways (AOPs) to category formation. This research effort has resulted in four books and over 250 publications in all areas of the use of (Q)SARs, expert systems and read-across to predict toxicity. He has worked in numerous projects in this area including more than ten EU Framework Projects as well as assisting in the uptake of *in silico* methods for regulatory purposes. He co-ordinated the EU COSMOS Project as part of the SEURAT-1 Cluster.

## **DR JOOP DE KNECHT**

National Institute for Public Health and the Environment, The Netherlands

## **DR KAREL DE RAAT**

Advisor to European Chemicals Agency, The Netherlands

From October 2010 until January this year, Karel de Raat was a Senior Scientific Officer in toxicology at ECHA. He was involved in the evaluation of registration dossiers under REACH in the area of human toxicology. He thereby focused on the assessment of read-across proposals in REACH registration dossiers. This included the development of a framework for the assessment of read-across proposals (RAAF). After his retirement last January, Mr De Raat became an advisor to ECHA

in this area.

Before joining the Agency, Mr De Raat was a consultant in regulatory toxicology for 13 years. Before that period, he was a toxicological investigator and project leader at the Dutch Organisation for Applied Scientific Research (TNO) for 23 years.

Mr De Raat graduated as a biologist at the Free University of Amsterdam in 1975 and obtained his PhD at Leiden University in 1994.

#### **DR JEAN LOU DORNE**

European Food Safety Agency, Italy

Since 2006, Dr Jean Lou Dorne has been a senior scientific officer at the European Food Safety Authority in the Scientific Committee and Emerging Risks Unit after 9 years of research at the University of Southampton (UK). Dr Dorne received a DUT in applied biology (Lyon University), a BSc (Hons) in pharmacology (Coventry University), MSc Toxicology (of Surrey University), MSc Molecular Biology (Natural History Museum Paris) and a Ph.D Toxicology on human variability in toxicokinetics for the major metabolic pathways: applications to chemical risk assessment (Southampton University). His current work focuses on the development of harmonised methodologies applied to human health, animal health and ecological risk assessment of chemicals including chemical mixtures, integration of modern animal free methods and models with a particular emphasis on toxicokinetics and metabolism. Other topics include EFSA's chemical hazards database, refinement of uncertainty factors, weight of evidence methods, toxicology of chemicals in bee species, international scientific cooperation and the development of training programmes in the risk assessment area. He is an active member of EUROTOX and SETAC Europe with a contribution to over 80 papers and book chapters and 150 EFSA scientific opinions, guidance documents and scientific reports in the chemical risk assessment area.

#### **DR MATTHIAS HERZLER**

Federal Institute for Risk Assessment, Germany

Dr Matthias Herzler has more than 14 years of practical experience in the risk assessment of pesticides, biocides, and industrial chemicals under EU legislation and is currently working as senior scientist in the Department of Chemicals and Product Safety of the German Federal Institute for Risk Assessment (BfR). Aside from performing toxicological assessments under REACH and CLP, his scientific interests in the field of regulatory toxicology include – but are not limited to – in silico and other non-animal methods, Integrated Approaches to Testing and Assessment (IATA), and uncertainty in risk assessment. Since the beginning of his work at BfR in 2002, Dr. Herzler has been an active member of numerous EU, OECD, and WHO working groups, inter alia the OECD (Q)SAR Toolbox Management Group, the drafting groups for the WHO/IPCS Guidance on Evaluating and Expressing Uncertainty in Hazard Characterization and the OECD Guidance Document on an IATA for Skin Corrosion/Irritation (both released in 2014), and several ECHA Partner Expert Groups for updating the REACH guidance, most recently the endpoint-specific guidance documents on corrosion/irritation and sensitisation (2015/2016). He holds a diploma in chemistry from the Technical University Berlin, a PhD in analytical and environmental chemistry from the Humboldt University Berlin, and a post-graduate degree in toxicology from the University of Leipzig, and is a member of the German Society of Toxicology (GT/DGPT).

#### **DR DEREK KNIGHT**

European Chemicals Agency, Finland

Dr Derek J Knight, who is British, has worked at the European Chemicals Agency (ECHA) since September 2008. As the Senior Scientific Advisor, he is responsible for providing the Executive Director and the Director of Regulatory Affairs with expert scientific and technical advice on matters relating to chemical regulation, with the focus on the EU REACH, CLP and Biocidal Products regulations and the operations of ECHA. Previously, he headed a team of regulatory affairs professionals at a UK contract research organisation for almost 18 years, covering a wide range of regulatory schemes worldwide. He has also registered medicinal products and worked as a Technical Support Chemist. He has a broad understanding of the regulation of chemicals and is especially

interested in approaches to hazard and risk assessment using non-standard data. He is an external expert member of the Scientific Expert Panel of the SEURAT-1 research initiative 'Towards the replacement of *in vitro* repeated dose systemic toxicity testing'. He is a Fellow of the Royal Society of Chemistry and a Chartered Chemist, a Chartered Scientist and a Fellow of the Organisation of Professionals in Regulatory Affairs. His doctoral studies at the University of Oxford in the UK were in organosulphur chemistry.

**DR CATHERINE MAHONY**

Procter & Gamble, United Kingdom

Dr Catherine Mahony is a Principal Scientist for Procter & Gamble, UK with more than 15 years of Product Safety experience in the consumer product industry. Within that role, Dr. Mahony is responsible for providing scientific leadership for assessments aimed at characterising the safety of ingredients and new products. This includes pre-clinical evaluations utilizing an array of alternative models, as well as clinical evaluations. Her experience in the field of animal alternatives includes oversight of the Cosmetics Europe Systemic Toxicity Alternatives Programme. Dr. Mahony is the author or co-author on a number of publications and is a member of both the UK register of Toxicologists and the European Register of Toxicologists. She is also a member of the British Toxicology Society. Dr. Mahony received her Ph. D from King's College, University of London.

**DR TATIANA NETZEVA**

European Chemicals Agency, Finland

Dr Tatiana Netzeva is a pharmacist by training, with a PhD in computational chemistry and QSAR. Her post-doctoral research was in predicting toxicological and ecotoxicological endpoints. Since then, she has applied this experience in the Joint Research Centre (ex-ECB), and from the beginning of 2008 in ECHA's Computational Assessment and Dissemination Unit.

**DR CHRISTINE NORMAN**

Health Canada, Canada

Christine Norman holds a M.Sc. from McMaster University, Hamilton, Ontario. Christine has previously held leadership roles within Health Canada regulatory programs, including as Associate Director of the Consumer Product Safety program and in various positions within Health Canada's Pest Management Regulatory Agency (PMRA). While at PMRA, Christine was responsible for human health risk assessments for pesticides being considered for registration in Canada and, in that capacity, she led federal initiatives related to children and environmental exposures. As part of the North American Free Trade Agreement's Technical Working Group on Pesticides, she led many of the U.S. Environmental Protection Agency (U.S. EPA) and Health Canada joint reviews of pesticides.

Since 2009, Christine has been the Director of the Existing Substances Risk Assessment Bureau. She also represents the Government of Canada on Organisation for Economic Cooperation and Development (OECD) Existing Chemicals Programme initiatives, is the Branch representative on the WHO Risk Assessment Network and leads risk assessment initiatives under the US/Canada Regulatory Cooperation Council. Christine is director champion for the Safe Environment Directorate's network for scientific staff (SciNet) and for the Directorate's support of the Government of Canada Workplace Charitable Campaign.

**DR KERRY NUGENT**

National Industrial Chemicals Notification and Assessment Scheme, Australia

Dr Kerry Nugent is a long term NICNAS employee with 17 years experience. His original training was in inorganic chemistry and materials science, although he now focusses on toxicology and regulatory science. He has been involved in a range of innovative program developments within NICNAS, most recently being one of the main architects of the IMAP program, for which he has scientific oversight.

**DR MAGDALINI SACHANA**

Organisation for Economic Cooperation and Development, France

Dr Magda Sachana is Policy Analyst within the Health and Safety Division of the OECD's Environmental Directorate. She manages the development and implementation of policies in the field of chemical safety and contributes to both Pesticide and Hazard Assessment Programmes. Dr Sachana has significant experience in developing and assessing adverse outcome pathways (AOPs) from her previous work in the Institute of Health and Consumer Protection, JRC and in her current employment, as she is in charge of the external reviewing of AOPs that feature in the OECD's AOP workplan. She also served as a member of the working group for the adoption of an evolved and improved weight of evidence approach for the AOP framework. She has over 10 years of experience in academic research and scientific project management, having served as a Lecturer at the University of Liverpool in the United Kingdom and as an Assistant Professor at the Aristotle University of Thessaloniki in Greece. She has over 20 years of experience in in vivo and in vitro toxicity research and a track record of peer-reviewed publications, presentations and contributions to textbooks on the subjects of adult and developmental neurotoxicity. She has an interest in the integration of science along multiple lines of evidence (epidemiology, in vivo & in vitro experimental toxicology) and development of Integrated Approaches to Testing and Assessment (IATA). Dr Sachana is a trained veterinarian with an M.Sc. in Biotechnology from Nottingham Trent University in the United Kingdom and a Ph.D. in toxicology from the Aristotle University of Thessaloniki in Greece.

**PROFESSOR TERRY SCHULTZ**

University of Tennessee Knoxville, USA

Dr Terry Schultz is an emeritus professor at the College of Veterinary Medicine, University of Tennessee. His current research focuses on toxicological read-across, however, other research topics include: computational toxicology, adverse outcome pathways and non-animal methods. He has a long history of serving on advisory/expert panels both on a national and an international level. Dr. Schultz received his Ph.D. from The University of Tennessee and following a postdoctoral fellowship at Oak Ridge National Laboratory, he returned to the University, where he served as Director of the Biological Activity Testing and Modeling Laboratory. In 2013, Terry completed a five-year appointment at the OECD, where he served as the science advisor to the OECD QSAR Toolbox and the Extended Advisory Group on Molecular Screening and Toxicogenomics. In 2012, Dr. Schultz received the International QSAR Award acknowledging his outstanding contributions to the advancement of quantitative structure-activity relationships (QSARs) in environmental sciences. In 2015, he was a co-recipient of the Lush Black Box Prize for his contribution to the development of the Adverse Outcome Pathway for Skin Sensitization.

**PROFESSOR MICHAEL SCHWARZ**

Tübingen University, Germany

Prof. Dr. Michael Schwarz is the Director of the Department of Toxicology in the Institute of Experimental and Clinical Pharmacology and Toxicology at the University of Tübingen, Germany. MS has a PhD in Biology and the "Habilitation" in Toxicology. His special expertise is in molecular toxicology and chemical carcinogenesis. MS has coordinated the FP6 EU-project ReProTect and has gained through this project insight into newly developed alternative test methods in reproductive toxicology. He was also partner in the FP7 EU-projects CancerSys and ChemScreen and in the IMI project MARCAR. He is presently partner in the FP7 project COACH, the coordination action of the EU/Cosmetics Europe funded SEURAT-1 project.

**DR RUSTY THOMAS**

US Environmental Protection Agency, USA

Russell Thomas is the director of the National Center for Computational Toxicology at the U.S. Environmental Protection Agency. He has been at the EPA since 2013. The Center is researching new, more efficient, ways to evaluate the safety of chemicals, particularly in assessing chemicals for human health effects. Prior to coming to the U.S. EPA, Dr. Thomas was the director of the Institute for Chemical Safety Sciences at The Hamner Institutes for Health Sciences and worked in the biotech and biopharmaceutical industry. Dr. Thomas' academic training includes a B.A. in chemistry from Tabor College, an M.S. in radiation ecology and health physics from Colorado State University, and a Ph.D. in toxicology also at Colorado State. Following his doctoral studies, Dr. Thomas performed postdoctoral research in molecular biology and genomics at the McArdle Cancer Research Laboratory at the University of Wisconsin.

**DR BENNARD VAN RAVENZWAAY**

BASF, Germany

Prof. Dr. Bennard van Ravenzwaay, is working at BASF SE, Ludwigshafen as Senior Vice President of the Experimental Toxicology and Ecology Department and responsible for the conduct of all toxicological and ecotoxicological studies necessary for the notification and registration of chemicals, agrochemicals and cosmetic ingredients. In addition, one laboratory is devoted to the development and validation of alternative (in vitro) studies. He is an Associate professor of Reproduction Toxicity of the University of Wageningen, Netherlands. He is Chairman of the scientific committee Member of the European Centre for Ecotoxicology and Toxicology (ECETOC), and a Member of the Toxicology Expert Group of ECPA (European Crop Protection Association). Moreover he is Member of editorial board of "Archives of Toxicology" and Member of editorial board of "Frontiers in Research". He is Member of the board of trustees of Health and Environment Science Institute (HESI), Member of the German Society for Pharmacology and Toxicology and a European registered toxicologist as well as SOT-Member. He has a teaching assignment at the University of Kaiserslautern (for industrial toxicology) since 2006. 1988 degree as doctor of Environmental Sciences/Toxicology at University of Wageningen. 1985 – 1987 Preparation of doctoral thesis at the German Cancer Research Centre (DKFZ) Heidelberg (FRG); 1979 – 1985 Study of Environmental Hygiene/Toxicology, University of Wageningen. He is an author of more than 160 peer reviewed papers.

## Speakers

**DR ROMUALDO BENIGNI**

Istituto Superiore di Sanità, Italy

Romualdo Benigni received his education in chemistry at the University of Rome "La Sapienza". He then joined the Istituto Superiore di Sanità (Italian National Institute of Health) in 1977, and where he remained except for two sabbaticals (New York University, 1988; Jawaharlal Nehru University in New Delhi, 2000). After retiring in 2014, he has worked for two years at the OECD (Paris). He worked experimentally in the field of molecular biology and environmental chemical mutagenesis. In the 1980's, he turned his attention to the statistical analysis and modeling of toxicological data, and to the study of the relationships between the structure of organic compounds and their toxicological properties. He has published over 190 journal articles and book chapters, applying a wide variety of quantitative analysis techniques, including QSAR, to the examination of chemical toxicity information and to the construction of alternative prediction models.

**DR CHRISTIAN DESAINTE**

European Commission, DG Research & Innovation, Belgium

Dr Desaintes has worked for the Directorate-General for Research and Innovation at the European Commission since 2001. He is currently in charge of the Horizon 2020 research portfolio on human health and safety. At the Commission, Dr Desaintes has participated in the development and

implementation of European research programmes (FP4-FP7, Horizon 2020) in various fields, including radiation protection, systems biology, stem cells, animal models, infectious diseases, predictive toxicology and alternatives to animal testing. Dr Desaintes has been involved in the conception and setting up of several strategic international alliances for large-scale collaborative research programmes, such as the International Human Microbiome Consortium. With university degrees of Graduate Agronomist Engineer and Ph.D. in Molecular Biology, Dr Desaintes has performed biomedical and radiation research at various European research institutions. Dr Desaintes' research work has focused mainly on understanding the molecular pathways regulated by the oncogenic human papillomaviruses and by ionizing radiation.

#### **DR NORBERT FEDTKE**

European Chemicals Agency, Finland

Dr Norbert Fedtke is a biologist and toxicologist trained at the German Universities Bochum, Dortmund and at CIIT, North Carolina. His research interest was toxicity of industrial chemicals. For the next 20 years, he held various positions in companies of the German Chemical Industry. Since 2009, he has been working at ECHA in the Evaluation Directorate.

#### **DR GEORGE FOTAKIS**

European Chemicals Agency, Finland

Dr George Fotakis has been working as a risk assessor at ECHA since 2009. Before joining ECHA, he worked at the European Chemicals Bureau for the Biocidal Products Directive as a coordinator of the human health assessment of active substances. He has been involved in international work in the risk assessment of chemicals, particularly in the development of methodologies such as the WHO/IPCS mode of action, and the OECD adverse outcome pathways.

He has received a degree in Pharmaceutical Sciences from the University of Athens, a Masters degree in Toxicology from the University of Birmingham and a PhD in Toxicology from King's College London.

#### **DR TIMOTHY W GANT**

Public Health England, United Kingdom

Prof. Tim Gant is Head of the Department of Toxicology in the Centre for Radiation, Chemicals and Environmental Hazards; Public Health England; Honorary Visiting Professorship in the faculty of Health and Medical Science, University of Surrey and honorary Senior Research Fellow, Imperial College London. Formerly trained at the School of Pharmacy, University of London graduating BSc joint honours Toxicology and Pharmacology in 1985 and PhD in 1988. Joined the National Cancer Institute Bethesda Maryland, USA in 1988 in the laboratory of Dr Snorri S. Thorgeirsson and stayed until 1993 leaving for a position in the Medical Research Council Toxicology Unit (MRC-TU), Leicester, UK. Tenure achieved with the MRC in 2002. Made an honorary lecturer University of Leicester in 2000 (Biochemistry) and in 2010 honorary Reader (Genetics). In Sept 2011 left the MRC to join Public Health England (then the Health Protection Agency). Served on the External Scientific Advisory Panel of the European Confederation of Chemical Industries for seven years and chaired for four years. Current chair of the British Toxicology Society (BTS) Scientific Sub-Committee (four years) and serves on the BTS Executive Committee. Current member an incoming vice chair of the HESI Emerging Issues Committee. Served as reviewer for many papers and research programmes with MRC, BBSRC and CRUK. Member of the BTS and SOT.

#### **DR RICHARD JUDSON**

Endocrine Disruptor Screening Program, US Environmental Protection Agency, USA

Dr Judson is with the EPA National Center for Computational Toxicology where he is developing computer models and databases to help predict toxicological effects of environmental chemicals. As part of the EPA ToxCast team, one current major focus is on the development of models of chemicals interacting with the endocrine system. His team has developed numerous databases and



web sites including ACToR (Aggregated Computational Toxicology Resource), which is compiling publicly available data on environmental chemicals (<http://actor.epa.gov>); ToxCastDB, managing data from ToxCast; CPCat, a database of chemical and product categories, and EDSP21, providing data on chemicals subject to the EPA EDSP. He has published in areas including computational biology and chemistry, bioinformatics, genomics, human genetics, toxicology and applied mathematics. Prior to joining the EPA, Dr Judson was founder of GAMA BioConsulting, a bioinformatics company. From 1999-2006, Dr Judson was with Genaisance Pharmaceuticals where he was Senior Vice President and Chief Scientific Officer. Previously, he held research positions at CuraGen from 1997-1998, Sandia National Laboratories from 1990-1996 and University of Houston from 1994-1995. Dr Judson has a BA in Chemistry and Chemical Physics from Rice University and an MA and PhD in Chemistry from Princeton University.

#### **DR PANAGIOTIS KARAMERTZANIS**

European Chemicals Agency, Finland

Dr Panagiotis (Panos) Karamertzanis is a Scientific Officer working in the Computational Assessment Unit of the European Chemicals Agency. His main expertise is the use and development of materials modelling methods, ranging from molecular simulation to continuum models, to address problems of relevance to pharmaceutical and fine chemical development. Since he joined ECHA in 2010, Dr Karamertzanis has been actively involved in scientific data analysis of registration data and in the modelling of physico-chemical, environmental fate and (eco)toxicological properties of industrial chemicals. In the last three years, he has been working on substance and dossier prioritisation in support of REACH and CLP processes. Dr Karamertzanis holds a degree in Chemical Engineering from the National Technical University of Athens, an MSc degree in environmental and applied fluid dynamics from Von Karman Institute in Belgium, and a PhD in computational chemistry from Imperial College in the UK. Before joining ECHA, he was a researcher in molecular modelling and contributed to the writing of 40 academic papers and book chapters.

#### **DR ANDREA RICHAZ**

European Commission, Joint Research Centre, Italy

Dr Andrea Richarz is a Research Fellow in the Systems Toxicology Unit, Institute for Health and Consumer Protection at the European Commission Joint Research Centre in Ispra, Italy. Her current research in predictive toxicology focuses on read-across and chemical safety assessment case studies for conventional chemicals as well as nanomaterials and mixtures. She holds a diploma in Chemistry and a PhD in Analytical Chemistry from the Technical University Berlin, her studies including stays at the Ecole Nationale Supérieure de Chimie de Montpellier in France and Harvard Medical School in Boston. She was a post-doctoral researcher at the Hahn-Meitner-Institute Berlin and Managing Editor of the Journal of Trace Elements in Medicine and Biology. She managed two large international EU research projects in the area of computational toxicology and alternatives to animal testing, at the Helmholtz Centre for Environmental Research – UFZ in Leipzig and at Liverpool John Moores University, the latter part of the SEURAT-1 research initiative co-funded by Cosmetics Europe, where she was involved in the cross-cluster safety assessment case studies.

#### **MS SHARON STUARD**

Procter & Gamble, USA

Sharon Buring Stuard is a senior scientist employed at The Procter & Gamble Company (P&G). She works in the Chemical Registration and Evaluation Group and is responsible for development of hazard assessments for company ingredients. As a lead practitioner of SAR at P&G, she has worked with others in her group to continually advance the scientific robustness and transparency of SAR methods and assessments. She has published efforts to standardize the evaluation and documentation of uncertainty associated with read-across and has followed closely the read-across activities related to REACH, including ECHA's published Read-Across Assessment Framework (RAAF). Ms. Stuard received an Associate's degree in Chemistry before joining P&G and during her 30+ years of employment earned a Bachelor's degree in Biology and a Master's degree in Toxicology from the University of Cincinnati. She has been a Diplomat of the American Board of Toxicology



since 2008 and is a member of the Society of Toxicology.