



ENSER Annual Conference 2014
SCIENCE IN THE EYE OF THE STORM

September 10 - 12, 2014

Technical University Berlin

PARTNERS



Federation of German Scientists



Wednesday, 10 September 2014

12:00 – 13:15 H • REGISTRATION

All Plenary Symposia are taking place in the Lecture Hall HG 110. The only exception is the Parallel Symposium VI, which is taking place in the Seminar Room H3012.

13:15 – 13:30 H • PLENARY SESSION OPENING OF CONFERENCE AND SETTING THE STAGE

Speaker: **Angelika Hilbeck** (ENSSER / ETH Zurich, Switzerland)

13:30 – 15:30 H • PLENARY SYMPOSIUM I DEVELOPMENT TOWARDS SUSTAINABILITY - LOCAL, REGIONAL, GLOBAL

Chair: **Michael Dittmar** (ETH Zurich / conCERNed for Humanity club at CERN, Switzerland)

Co-Chair: **Lucas Wirl** (ENSSER)

Most of us seem to accept that today's global energy system, based to roughly 90% on the burning of fossil fuels and uranium, is unsustainable. While most of us seem to accept that the dominant energy resources are finite, and that their use leads us to the CO₂ problem and other waste related dangerous environmental degradations, our quantitative knowledge about the required transition speed towards a sustainable global, regional and local system is at best very limited. During this session the energetic boundary conditions for this future transition towards a sustainable way of life are discussed.

Speakers: **Michael Dittmar** (ETH Zurich / conCERNed for Humanity club at CERN, Switzerland):

"Energy resource constraints for a successful transition towards sustainability"

Hartmut Grassl (VDW, former director of Max Planck Institute for Meteorology, Germany):

"Potential and limits of new renewable energy projects (Solar, Wind, and others)"

Discussion with the speakers on "the great transition towards sustainability":

"How to live well within the natural boundary conditions?"

15:30 – 16:00 H • COFFEE BREAK

16:00 – 18:00 H • PLENARY SYMPOSIUM II
REGULATIONS OF GENETICALLY MODIFIED PLANTS AND PESTICIDES -
A D(H)AUNTING NEGLECTED ISSUE OF RISK ASSESSMENT

Chair: **András Székács** (Agro-Environmental Research Institute, NARIC, Hungary)
Co-chair: **Ricarda Steinbrecher** (Econexus, UK)

Current controversial issues around genetically modified crops and food will be discussed, notably their relationship to food security, the claimed substantial equivalence of GM crops to unmodified crops and the hazards and re-evaluation of the associated herbicide Roundup.

Speakers: **Thomas Bøhn** (Genøkologi ved Universitetet i Tromsø, Norway)
Nicolas Defarge (CRIIGEN, France):
"Conflicts of interests, confidentiality and censorship in health risk assessment. The example of the fate of 'Long-term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize."
Monika Krüger (University of Leipzig, Germany)
Eszter Takács (Agro-Environmental Research Institute, NARIC, Hungary):
"Pesticide applications by and with genetically modified (GM) crops: misregulated pesticide issues"

18:00 – 19:30 H • DINNER BREAK

19:30 – 21:30 H • PUBLIC EVENING EVENT
THE CONVERGENCE OF CRISES - BREWING OF 'THE PERFECT STORM'?

Chair: **Angelika Hilbeck** (ENSSER / ETH Zurich, Switzerland)

The current state of crisis involves the convergence of various adverse effects related to the changing climate, land degradation and environmental pollution, continuing perverse economic incentives rewarding ecologically destructive behavior and abuse of human labour - none of these precarious issues act in isolation but converge in as of yet unpredictable ways. A recent study partly funded by NASA took on, for the first time, the challenge to model the convergence of economic and societal asymmetries with environmental crises and compared their findings to the brewing of a 'perfect storm'¹. ENSSER scientists work across a number of fields and issues that are critical elements of this brewing storm. This evening panel discussion will set the context for the following days of presentations and discussions on selected scientific elements of the brewing storm. Panel members will speak on the following questions: how can and should such 'mega' messages be communicated to political decision makers and the public at large; and how can we influence the research and science agenda setting of Europe?

Panel members: **David Gee** (former Senior Advisor for Science, Policy and Emerging Issues at the European Environment Agency):
"Some common causes, consequences and solutions to the three crises: Financial, Energy/Climate, Ecosystems"
Hartmut Graßl (VDW, former director of Max Planck Institute for Meteorology, Germany)
Brian Wynne (Lancaster University, UK)
Ernst Ulrich von Weizsäcker (Co-President Club of Rome, Co-President UNEP Resource Panel, Germany)

¹ <http://www.theguardian.com/environment/earth-insight/2014/mar/14/nasa-civilisation-irreversible-collapse-study-scientists>

Thursday, 11 September 2014

8:30 – 10:30 H • PLENARY SYMPOSIUM III

**DEMOCRATIZING RESEARCH & SCIENCE AGENDA SETTING TO COUNTER
CONFLICTS OF INTEREST**

Chair: **Steffi Ober** (Project Forschungswende, Germany)
Co-Chairs: **Caroline Paulick-Thiel** (Project Forschungswende, Germany)
Stella Veciana-Schultheiss (Project Forschungswende, Germany)

Today science mainly focuses on technological innovations and efficiency to tackle the grand challenges of society – climate change, decrease of resources, urbanization etc. More societal actors are needed in order to have a cultural change towards sustainability. Changes in the scientific system towards more participatory and transparent structures and involvement of civil society are required.

Speakers: **Simon Pfersdorf** (KIT Karlsruhe / Engage 2020, Germany):
"Insights from the two EU projects: CONSIDER and ENGAGE2020"
Norbert Steinhaus (Wila Bonn, Germany)

10:30 – 11:00 H • COFFEE BREAK

11:00 – 13:00 H • PLENARY SYMPOSIUM IV

**CHEMICALS AND COMPLEXITY: TOWARDS TRANSPARENT, CONSISTENT AND
PRECAUTIONARY EVALUATIONS OF CONTROVERSIAL EVIDENCE**

Chair: **David Gee** (former Senior Advisor for Science, Policy and Emerging Issues at the European Environment Agency)

Synthetic chemicals of many kinds have not only brought many benefits to society, but also many hazards and problems. The nature and extent of these hazards and problems are increasingly hidden from the public eye, endangering the exercise of precaution. Current examples are the effect of neonicotinoid insecticides on bees and that of bisphenol A on human health.

Speakers: **David Gee** (former Senior Advisor for Science, Policy and Emerging Issues at the European Environment Agency)
Laura Maxim (Institut des Sciences de la Communication du CNRS, Paris)
Paul Whaley (Lancaster University, UK):
"Appraisal of the methodological quality of literature review and data synthesis in the European Food Safety Authority's risk assessments of bisphenol A"

13:00-14:30 H • LUNCH BREAK

14:30 – 16:30 H • PARALLEL SYMPOSIUM V • LECTURE HALL HG 110
EXPOSURE AND EFFECTS OF GENETICALLY MODIFIED PLANT RESIDUES
IN AQUATIC ECOSYSTEMS

Chair: **Frieder Hofmann** (TIEM GmbH, Germany)
Co-Chair: **Mathias Otto** (German Federal Agency for Nature Conservation, Bonn, Germany)

An aspect of GM crops that has been receiving growing attention in recent years is the influence of GM plant residues on natural water ecosystems. Recent research in this field will be presented in this symposium.

Speakers: **Thomas Bøhn** (Genøkologi ved Universitetet i Tromsø, Norway):
*“The freshwater water flea *Daphnia magna* as an integrative model in biosafety testing of GM crops – the case of Roundup Ready GM soy”*
Frieder Hofmann (TIEM GmbH, Germany):
„Exposure of Bt-maize residues to aquatic ecosystems and selection of freshwater ecosystems for an environmental risk assessment (ERA) of GM crops“
Angelika Hilbeck (ETH Zurich; Switzerland):
„Selection of aquatic testing organisms in context of environmental risk assessment of GM crops on aquatic systems“

General discussion:
„Future demands for risk assessment and management of GM crops and aquatic ecosystems“

14:30 – 16:30 H • PARALLEL SYMPOSIUM VI • SEMINAR ROOM H3012
DEMOCRATISING MEDICAL SCIENCE

Chair: **Ivan Wolffers**
Lukas Fendel (UAEM Europe)

Medical science is rife with conflicts of interest, leading to numerous problems related to accountability, affordability, and accessibility and making it increasingly one sided and focused on products (medicines), while ignoring prevention and the role of lifestyle. We will explore the spectrum of problems and present ideas of how to shape medical science in the public interest.

Speakers: **Lukas Fendel** (UAEM Europe):
“On the Road towards an Equitable, Needs-driven Biomedical R&D Paradigm. Trends, Threats and Opportunities”
Peter Tinnemann (Charité University Medical Center in Berlin, Germany):
“Corporate capture of health: Pharmaceutical companies threaten freedom and reputation of independent health research globally”
Ivan Wolffers (publicist, physician and former professor Healthcare and Culture, VU University Amsterdam):
“The mismatch between medical research and health needs”

16:30 – 17:00 H • COFFEE BREAK

17:00 – 18:00 H • PLENARY CLOSING SESSION
THE CONVERGENCE OF SOLUTIONS

Structured, moderated discussion to connect to the conference themes discussed in the public evening session on the first day. What will it take to democratize science and research agenda setting at EU level? What can and should ENSSER do to influence this?

Friday, 12 September 2014

9:00 – 17:00 H
ANNUAL GENERAL MEETING OF ENSSER

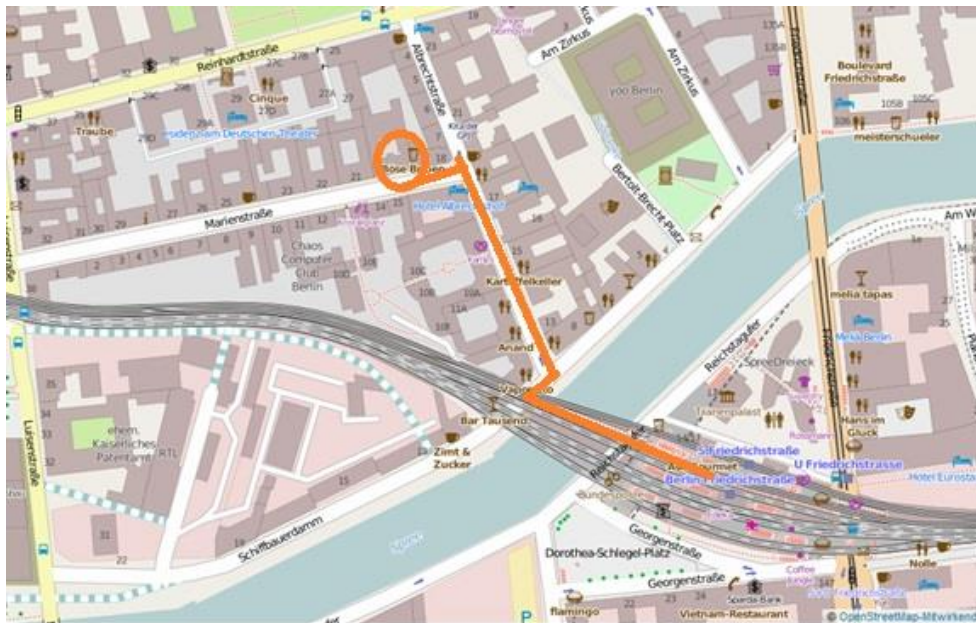
Please Note: MEMBERS ONLY! See separate agenda.

Venue: ENSSER Office
Marienstr. 19/20
10117 Berlin

How to get to Marienstraße 19/20

Take S-Bahn to station
“Friedrichstraße”.

From the S-Bahn, stay on the platform and walk on it towards direction Hauptbahnhof. At the end of the platform there is a stair bringing you to a foot bridge over the river Spree. Cross the river and walk into Albrechtstraße. Take the first left. Pass the Bar/Restaurant “Böse Buben Bar” and enter the building through the entrance door at the side walk (do not go through the gate to the yard). For entering the building, please dial the door code at the touch pad.



Logistical Information

REGISTRATION

Participation is free for ENSSER members and for all students. For non-members who are not students, the registration fee is € 50. Please transfer the fee to:

ENSSER e.V.
IBAN DE21 4306 0967 4030 7947 00
BIC GENODEM1GLS
Keyword: AC 2014

CONFERENCE VENUE

Technical University Berlin
Straße des 17. Juni 135
10623 Berlin

Lecture Hall EG 110

CONFERENCE LANGUAGE

The conference will be conducted in English.

Biographical information of the speakers

THOMAS BØHN

Is Senior Scientist / Program Coordinator and holds a chair at the University of Tromsø, Norway. His research interests are focused on the impact of modern biotechnologies, especially genetically modified organisms (GMOs) on experimental model systems and on real food-webs. He is particularly interested in risk assessment and effect studies of products of modern biotechnologies, predominantly in the food quality and ecotoxicity of GM plants. In the field, he works with impacts of modern biotechnologies biodiversity and food-webs, both in terrestrial and aquatic systems. He is also interested in gene flow, modeling, evolution, biodiversity, ecological interactions and invasion biology.

NICOLAS DEFARGE

Is a doctoral student in biology at the Institute of Basic Applied Biology at the Université de Caen Basse-Normandie and part of Prof. Séralini's team. Within CRIIGEN (Committee for research and independent information on genetic engineering), he is working on the combined effects of Roundup and PCBs (polychlorinated biphenyls). He also works independently on GMOs with expertise and research on their effects on health and the environment. During 8 years of teaching experience as a professor at SVT, he educated his students on environmental issues during classroom work and in the field. Being passionate about research on the environment, he developed the urge to join the world of basic research. His engagement in CRIIGEN illustrates his commitment to public health and the environment, both of which are closely linked. His seeks to bring scientific knowledge to the public to help society to form an independent opinion on these 'new technologies'.

MICHAEL DITTMAR

Is Senior Scientist at ETH Zurich and CERN Physicist.

LUKAS FENDEL

Is Executive Director of UAEM Europe (Universities Allied for Essential Medicines).

DAVID GEE

David was educated in politics and economics at York University (1965-68) and has worked for over 40 years at the science/policy interface of occupational, public, and environmental risk assessment & reduction, with UK Trade Unions; with the UK Environmental Group, Friends of the Earth, where he was Director; and, from December 1995 to May 2013, with the European Environment Agency, an EU environmental information providing body in Copenhagen, where he was Senior Adviser on Science, Policy, Emerging Issues. He has published reports and peer reviewed articles and lectured on Scientific Uncertainty; the Precautionary Principle; Environmental Health; Environmental Taxes and Ecological Tax Reform; Clean production/ Eco-efficiency; Endocrine disrupting chemicals; Electro-magnetic fields; Evaluating evidence; and anticipatory research. He is initiator, co-editor and contributor to the widely cited and used EEA reports, "Late Lessons from Early Warnings: the Precautionary Principle 1898-2000" (2001), and "Late Lessons from Early Warnings: Science, Precaution, Innovation" (EEA, 2013).

HARTMUT GRAßL

Is Director Emeritus at the Max Planck Institute for Meteorology Hamburg, Germany, and retired Professor of the University of Hamburg. He studied Physics in Munich before obtaining a Ph.D. in Meteorology. He then went to the University of Hamburg to habilitate in Meteorology. His main research focus lies on satellite-supported remote sensing, remote sensing of the lower atmosphere with lidar and radar, aerosols and climate, and global climate change. During his scientific career, he held various high-level functions such as Professorships for Theoretical and General Meteorology at the University of Kiel, Germany, and the University of Hamburg; Director at the Max Planck Institute for Meteorology Hamburg; Director of the World Climate Research Programme at the World Meteorological Organization Geneva, Switzerland; Vice-President of the Nansen International Environment and Remote Sensing Centre (NIERSC) Foundation in St. Petersburg, Russia; Chair of the Scientific Advisory Board of the Leibniz Institute for Marine Sciences in Kiel, Germany; Vice-Chair of the Panel on World Data Centres (Geosciences) of the International Council for Science (ICSU); and Member of the Advisory Council on Climate Protection of the Government of the Federal State of Hamburg and of the Federal State of Bavaria. He received several awards, such as the Max Planck Prize in 1991; the German Order of Merit in 1995; the German Environmental Prize in 1998; and the Grand German Order of Merit in 2002.

ANGELIKA HILBECK

Is a senior scientist at the Institute of Integrative Biology (formerly Geobotanical Institute) at ETH Zurich and adjunct faculty to Genøk, the Centre for Biosafety, Tromsø, Norway. Her studies and research focus on Agroecology and Biodiversity, including biocontrol, sustainable farming practices, insect-plant interactions. Since 1994, her research centers on biosafety issues of GMOs and the development of concepts for environmental risk assessment and post-release monitoring of GMOs. With numerous research and capacity building projects she is engaged in developing countries in Africa, South America and Vietnam. Her research and conceptual work also contributes to the implementation and shaping of the (UNEP CBD) Cartagena Protocol on Biosafety and capacity building in developing countries. She actively participates in the Meetings of the Parties (MOP) and related activities of the Protocol. In 2006, she was appointed as lead author of Global Chapter 3 and the Synthesis Report on Biotechnology of the International Assessment Agricultural Science Technology for Development (IAASTD). Through her international work, she is increasingly involved in broader issues of technology development towards a democratically legitimated, sustainable global future and actively contributes to the debate on biosafety, international agriculture, hunger and poverty alleviation. She is a member of the board of directors of the Vereinigung Deutscher Wissenschaftler VDW (Federation of German Scientists). She is co-founder and acting chairperson of the European Network of Scientists for Social and Environmental Responsibility (ENSSER).

FRIEDER HOFMAN

Studied Biology and Environmental Sciences at University of Bremen, Imperial College of Science & Technology, London, and Mahidol University, Bangkok. He works since 1990 as scientific consultant at “Ökologiebüro”, Bremen, in the field of environmental monitoring and biomonitoring and he is partner of TIEM Integrated Environmental Monitoring GbR since 1993. He has been involved in the field of GMO – monitoring and risk assessment for more than 15 years leading several research projects in Germany, European countries and overseas. He developed various methods in the field of biomonitoring that became standardized as national and European standards (VDI, CEN TS), for example the GMO-pollen monitoring. Frieder Hofmann is member and vice-chair of the VDI board on Biodiversity, GMO-Monitoring and Risk Assessment, a member of the KRdL/DIN-board on Air Quality and the convenor of the CEN Technical Committee TC264 WG 39. He led the first research project on the exposure of aquatic ecosystems to Bt-maize residues in Germany and is a partner in the following ongoing research project on “GMO and Aquatic Ecosystems” which will be presented at this conference.

MONIKA KRÜGER

Holds a doctor of Veterinary Medicine with specialization in Bacteriology and Mycology. She is former director of the Institute of Bacteriology and Mycology of the Veterinary Faculty of the University of Leipzig (1993 – 2014). She was educated at Humboldt University Berlin, Germany and worked as a Junior and Senior Scientist at the Institute of Microbiology and Infectious Diseases, Berlin, before receiving a chair as professor of bacteriology, mycology and defense of infectious diseases in animals at the Veterinary Faculty of the University of Leipzig. From 1999 – 2003, she also served as the Vice President of the University of Leipzig. Her main scientific and practical interest lies in bacterial and mycological diseases in animals, respiratory infections, gastrointestinal infections, immune system, regulations of gastrointestinal flora in relation to prebiotics and probiotics, gastrointestinal flora and immune system, *Clostridium* associated infections of animals, especially *Clostridium botulinum* in relation to environmental influences like the herbicide glyphosate, its neutralization with humic acids and identification and control of *C. botulinum* associated diseases by vaccination, pre- and probiosis, and investigations to pathogen *Clostridium* spp. in biogas plants. Throughout her career, she authored about 80 scientific papers and 1 book about bacteriology.

LAURA MAXIM

Is a researcher at the CNRS Institute for Communication Sciences (ISCC). She studied ecology and got her PhD in ecological economics. She presently leads interdisciplinary research on the status of chemistry in western European societies. More precisely, she studies the production and communication of scientific knowledge on chemical risks in their social, economic and political context. She is mainly interested in scientific knowledge produced in two situations, namely regulatory processes, such as the European Regulation REACH and the regulation governing pesticides' marketing, and innovation processes in the field of sustainable and green chemistry. In her recent projects, her focus is on the particular category of substances called endocrine disrupters.

STEFFI OBER

Is an initiator and founder of *Forschungswende*, a platform of CSOs for more transparency and participation in research and innovation policy, hosted by VDW e.V. She is Policy Officer for Sustainable Research at the union for nature conservation, NABU e.V. Steffi Ober studied Veterinary Medicine and Public Policy.

MATHIAS OTTO

Holds a doctoral degree and works at the Federal Agency for Nature Conservation. He is specialized in food produced from genetically modified organisms and its impact on the environment.

CAROLINE PAULICK-THIEL

Is a representative for *Forschungswende*, a platform promoting transparency and participation in research and innovation policy. She is the presiding chair of nextlearning.net, founder of prosumetime.net, lecturer at masterpublicpolicy.de – and passionate about developing new learning cultures supporting a societal transition toward more sustainable ways of living.

SIMON PFERSDORF

Has been working at the Institute for Technology Assessment and Systems Analysis for the last six years. Apart from his PhD on knowledge politics and the regulation of nanotechnology, he puts his main research emphasis on public participation in science and science policy. He has been involved in several EU projects. Among them are the CONSIDER and the ENGAGE2020 project, within which current participation practices and related criteria of success and pitfalls have been discovered. The consortia of the projects will develop recommendations and guidelines to strengthen public engagement on different levels of science and science policy.

RICARDA STEINBRECHER

Is a molecular geneticist and developmental biologist. She has a PhD from the University of London, UK, and a first class honours M.Sc. from the University of Kiel, Germany (1985). She has specialised in gene regulation and gene modification and has worked as a research scientist in the field of mutational analysis, gene identification and gene therapy in university and hospital settings. Since 1995 she has been working on genetically modified organisms, their risks and potential consequences on health, food security, agriculture, biodiversity and ecosystems. GM trees, GM mosquitoes and genetic use restriction technologies (GURTs, e.g. terminator technology) are a particular focus. Synthetic biology has become an added focus since 2007, as well as certain aspects of geo-engineering. She is advisor and consultant to many national and international organisations and processes and has acted as scientific expert in governmental and public consultations and court cases. She collaborates and works alongside civil society organisations, women's organisations and farmers' groups in the global North and South, in particular Asia. She is also on the board of several organisations. She is a member of the Federation of German Scientists and a founding member of ENSSER. She is presently co-director of Econexus.

NORBERT STEINHAUS

Is board member of Wissenschaftsladen Bonn (Bonn Science Shop) since 1990. For the last 14 years he cooperated in international projects on training and mentoring Science Shops, citizen participation in science and technology or responsible research and innovation. Recent European co-operation projects are '*PERARES - Public Engagement in Research and Researchers Engaging with Society*' or '*RRI-Tools (Development of a toolkit for Responsible Research and Innovation)*'. Since the end of 2007 he is coordinator and international contact point of LIVING KNOWLEDGE, the international Science Shop network, organizing national and international workshops and conferences and being responsible editor for *Living Knowledge - International Journal of Community Based Research*.

ANDRÁS SZÉKÁCS

Is a chemical engineer – biochemist, DSc (in chemistry). Director of the Agro-Environmental Research Institute of Hungary's National Agricultural Research and Innovation Centre. Previously Director-General of the Central Environmental and Food Science Research Institute between 2012 and 2013; researcher of the Plant Protection Institute of the Hungarian Academy of Sciences between 1982 and 2011, where he was Head of the Department of Ecotoxicology and Environmental Analysis between 2004 and 2011. His research fields of activity include chemical and genetic safety of agricultural technologies, thus, organic micropollutants in the food chain, environmental and food analysis, environmental risk assessment of pesticides and genetically modified organisms (GMOs) and ecotoxicology. He is Honorary Professor and Head of Extension Department of Ecotoxicology at the Szent István University, and habilitated Doctor of the Budapest University of Technology and Economics (BME). He is a member of advisory bodies in environmental and food safety, including the Management Board of the European Food Safety Authority (EFSA), the Hungarian Gene Technology Advisory Committee, Codex Alimentarius, Hungary's National Association for Consumer Protection, and a Member of the Board of the European Network of Scientists for Social and Environmental Responsibility (ENSSER).

ESZTER TAKÁCS

Is a PhD student at Szent István University, Doctor School of Environmental Sciences. She works at the Department of Environmental Analysis, Agro-Environmental Research Institute, National Agricultural Research and Innovation Centre, Hungary. She is a member of the Hungarian Society of Ecotoxicology. Her main research area in her PhD work is development of immunoanalytical methods for the detection of *Bacillus thuringiensis* endotoxins. Under supervision of Prof. András Székács she identified analytical difficulties and biological aspects of Cry toxin determination in GM plants by commercial enzyme-linked immunoassay (ELISA) systems, and she also applied these ELISA systems in environmental risk assessment (ERA) of Bt-plants including several investigations on the ERA of GM plants on non-target organisms. She has investigated cytotoxic effects of glyphosate-related agricultural organic micropollutants on five different human cell lines by various cytotoxicity assays, and is involved in ERA experiments on neonicotinoids.

PETER TINNEMANN

Works with the Institute for Social Medicine, Epidemiology and Health Economics, Charité Universitätsmedizin Berlin, where he has been coordinating the project division International Health Sciences since 2007. His main research areas include Social Medicine, Access to Health Care and Health in a Globalizing World. He studied Medicine at the Universities in Cologne and Hamburg, both Germany, holds a Masters degree in Public Health from Cambridge University, a Diploma in Tropical Medicine and Medical Parasitology from the Bernhard Nocht Institute and a MD doctorate from Hamburg University. Before his current position he worked as a Public Health Specialist for National Health Services in the UK. His professional career includes more than 10 years international working experience with various humanitarian aid organisations, ranging from practicing pediatrics in low-resource settings to being in charge and managing medical aid projects.

STELLA VECIANA-SCHULTHEISS

Is the founder of the Research Arts platform (www.research-arts.net) focusing on transdisciplinary research, development of science&art cooperation projects, and action research for a transformation towards a sustainable society. Since 2012, she works for the Civil Platform Forschungswende that advocates for civilian involvement in science, and is supported by the Federation of German Scientists. Besides, she teaches at Leuphana University Lüneburg, and works for different European projects as RRI Tools, PIPES and SOFT CONTROL.

ERNST ULRICH VON WEIZSÄCKER

Is an internationally renowned German scientist, politician and author, and has been an environmental pioneer for decades. Born in Switzerland, he studied Chemistry and Physics and received a PhD in Biology. Among other occupations, he was the founding president of the University of Kassel (Germany), founding president of the Wuppertal Institute for Climate, Environment, Energy (Germany), and Dean of the Bren School for Environmental Science and Management (California, USA). He served as a Member of the German Parliament for the Social Democratic Party from 1998 – 2005, where he was appointed chairman of the Environmental Committee. He received several awards (e.g. the Takeda Award (2001), the German Environmental Prize (2008) and the Federal Cross of Merit (2009)) and Honorary Degrees (Techn. University of Valparaiso, Chile; Soka University, Japan). He has authored several influential books on the environment, including *Factor Four: Doubling Wealth, Halving Resource Use* (1995), its followup *Factor Five* (2009) and *Limits to Privatization* (2005). Currently, he is Co-President of the Club of Rome and Co-Chair of the International Panel on Sustainable Resource Use.

PAUL WHALEY

Is Research Leader for the “Policy from Science” Project, an initiative originally established by non-government organisations with an interest in how science is evaluated by EU agencies as part of the risk assessment process. The project is now based at Lancaster University in the UK and concerned with the promotion and development of systematic review methods for chemical risk assessment. Paul is also Scientific Policy Advisor to the Cancer Prevention and Education Society (see www.policyfromscience.com).

LUCAS WIRL

Studied Sociology and Peace and Conflict Studies at Philipps-University Marburg, Germany. He is co-ordinator of ENSSER and Program Director of INES. Among others he is engaged in the German network "Universities for Peace - Yes to Civil Clause".

IVAN WOLFFERS

Is a Dutch physician, publicist and retired professor (Healthcare and Culture, VU University Amsterdam) who holds a PhD in medical anthropology. He is particularly interested in public health development and in the democratization of science, on which he has authored and issued numerous articles and books. For further information, please consult his website: www.ivanwolffers.nl

BRIAN WYNNE

Is Professor of Science Studies at CSEC and at the ESRC Centre for Economic and Social Aspects of Genomics (CESAGen) at the Department of Sociology at Lancaster University, U.K. . His education includes MA (Natural Sciences, Cambridge 1968), PhD (Materials Science, Cambridge 1971), MPhil (Sociology of Science, Edinburgh 1977). His work has covered technology and risk assessment, public risk perceptions, and public understanding of science, focusing on the relations between expert and lay knowledge and policy decision-making. He was an Inaugural Member of the Management Board and Scientific Committee of the European Environment Agency, (EEA), (1994-2000) and a Special Adviser to the House of Lords Science and Technology Select Committee Inquiry into Science and Society, (March 2000). He is also a member of the London Royal Society's Committee on Science in Society.
