

## SPEAKERS OF THE CONFERENCE

### Keynotes

- **Health Technology Assessment of Human Germline Gene Editing**  
*Peter Sykora (University of Sts. Cyril and Methodius)*
- **Human-Centered Design of AI-driven systems – From Substitution to Co-Adaptation**  
*Claudia Müller-Birn (Freie Universität Berlin)*
- **The Master and Slave Redemption – Thinking Technology from a Social Justice Perspective**  
*Gaston Meskens (SCK•CEN and University of Ghent)*

### Session A1: Augmented Realities, Spatial Perception and Societal Impacts

- **The Digital, Affects and Space: Methodological Advances in Researching the Relation of Augmented Realities, Spatial Perception and Societal Impacts**  
*Tabea Bork-Hüffer (University of Innsbruck), Niklas Gudowsky (Institute of Technology Assessment), Katja Kaufmann (Alpen-Adria-University Klagenfurt), Martin Rutzinger (IGF-ÖAW)*
- **Extending reality. On the impact of augmented reality in the Netherlands**  
*Dhoya Snijders, Serf Doesborgh, Rinie van Est (Rathenau Institute)*

### Session A2: Our digital colleague. Tracing the transformation of science and research by AI and big data

*Stephan Lingner and Jan C. Schmidt (EA European Academy of Technology and Innovation Assessment)*  
*Bernhard G. Humm (Darmstadt University of Applied Sciences)*  
*Michael Nentwich (Institute of Technology Assessment)*  
*Jan-Hendrik Passoth (Munich Center for Technology in Society)*  
*Sarah Spiekermann-Hoff (Wirtschaftsuniversität Wien)*

### Session A3: Artificial Intelligence and the Future of Work and Education

- **Setting the scene on case study of modelling the impact of AI on the labor market in Czechia**  
*Michal Pazour, Martin Fařun (Technology Centre of the Czech Academy of Sciences)*
- **Pros and Cons of AI in Education and Research – Learnings from a TA study on AI**  
*Clemens Mader (Technology and Society Laboratory)*
- **Another level of talent? Digital literacy for construction industry – Upskilling and deskillling in human-machine interaction**  
*Kathrin Braun, Cordula Kropp, Ann-Kathrin Wortmeier (University of Stuttgart)*

### Session A4: Dual-use in a Digital World

- **Towards a cyberspace without conflict**  
*Jurriën Hamer (Rathenau Institute)*
- **Dual-use by design? How ungoverned digital identification practices affect individual agency**  
*Stefan Strauß (Institute of Technology Assessment)*
- **Dual-use of 5G technology**  
*Urszula Soler (The John Paull II Catholic University of Lublin), Mariusz Busiło (The Polish Chamber of Information Technology and Telecommunications)*

### Session B1: Limits to ... Predictive Power” – Policy Advice in the Age of Computational Modelling

- **The socio-political narratives of computer models: Insights from the modelling of trade policies, energy systems and the risks of nanotechnologies**  
*Anja Bauer (Alpen-Adria-University Klagenfurt), Leo Capari, Daniela Fuchs, Titus Udrea (ITA)*
- **Ambivalences of legibilization. Computational social science and its effects on policy advice**  
*Florian Eyert (Weizenbaum Institute for the Networked Society)*
- **The AMS Algorithm in Austria: Locating Biases via a Mathematical Framework**  
*Paola Lopez (University of Vienna)*

- **Algorithmic profiling of job seekers in Austria: how to make austerity politics effective**  
*Doris Allhutter, Astrid Mager (Austrian Academy of Sciences), Florian Cech, Fabian Fischer (TU Wien), Gabriel Grill (University of Michigan)*

#### Session B2: e-SIDES: Responsible data-driven innovation: Today and tomorrow

*Michael Friedewald, Daniel Bachlechner (Fraunhofer ISI)*  
*Tjerk Timan (TNO/Big Data Value Association)*  
*Stephan Strauß (Institute for Technology Assessment)*  
*Bart Custers (University of Leiden, Center for Law and Digital Technologies)*  
*Rigo Wenning (World Wide Web Consortium – W3C)*  
*Alexandra Ebert (Mostly AI)*

#### Session B3: New Methods for TA - Computational Content Analysis: Experiences, Potentials and Challenges

- **Using Automated Text Analysis Methods to Uncover Socio-Political Narratives within Computer Modelling and Simulations**  
*Titus Udrea, Daniela Fuchs, Leo Capari (Institute of Technology Assessment), Anja Bauer (Alpen-Adria-University Klagenfurt)*
- **A Policy Research Method Case Study: Generating and Extracting Evidence-based Policy Inferences from a large EC Framework Programme Project**  
*Tanja Sinozica (Institute of Technology Assessment), Mete Basar Baypinarb (Istanbul Technical University), Edward Bergmanc (WU Vienna University of Economics and Business), Miklos Hornyakd, Ferenc Kruslicze and Attila Vargaf (University of Pecs)*
- **Merge your data! – Mixing methods of digital content, discourse, and network analysis**  
*Nils Matzner (Alpen-Adria-University Klagenfurt)*

#### Session D1: Industry 4.0 in the light of Demographic Change

- **Different perspectives on an ageing society: Demographic versus economic dependency in the light of industry 4.0. Innovation and Grand Challenges**  
*Ulrike Bechtold (Institute of Technology Assessment), Martin Fieder and Harald Wilfing (Vienna University)*
- **Demographic change and Industrial Societies 4.0**  
*Claus Seibt (Transformations and Futures Research)*
- **AAL and Industry 4.0 Policies in Austria**  
*Ingo Hegny, Kerstin Zimmermann (Austrian Federal Ministry of Transport, Innovation and Technology)*
- **Technology for lifelong learning**  
*Marianne Barland (Norwegian Board of Technology)*

#### Session D2: Platform Work – Technology Assessment and Organizational Options

- Linda Nierling (Institute of Technology Assessment and Systems Analysis)*
- **Contract Prototypes for the Platform “Crowd” Work – The Case of Serbia**  
*Branka Andjelkovic, Maja Kovac, Tanja Jakobi (Public Policy Research Centre)*
  - **Crowdwork and Its Implications for Employment Relations: Flexibility and Labour Market Inclusivity**  
*Csaba Makó, Miklós Illéssy (Hungarian Academy of Sciences), Máté Vörös (University of Pécs)*
  - **Labour conflicts in platform labour: between online-irrelevant and offline-effective?**  
*Philip Schörpf (FORBA), Benjamin Herr (University of Vienna)*

#### Session D3: Is Automated Driving a new opportunity for sustainable mobility or just "same same but different"?

*Torsten Fleischer and Jens Schippl (Institute of Technology Assessment and Systems Analysis)*

#### Session E1: Governing Energy Policy – value driven or smart choices?

*Peta Ashworth (University of Queensland)*

- **Governing the Internet of Energy. On handling the societal, ethical and political impact of a digitalized energy system**  
*Romy Dekker, Rinie van Est (Rathenau Instituut)*
- **Energy scenario modelling and media coverage in the light of German nuclear policy: Reflecting evidenced-based or value-based policy approaches?**  
*Dirk Scheer (Institute of Technology Assessment and Systems Analysis)*
- **Estimation and use of altruistic benefits of GHG emission reduction for low carbon technology evaluation**  
*Kenshi Itaoka (Kyushu University)*
- **Moving towards sustainable energy communities: An Investigation of the Irish Landscape and its transition to an energy conscious society**  
*Wendy Rowan (University College Cork)*
- **Application of multi-criteria decision-making approach for sustainability assessment of chosen photovoltaic modules**  
*Magdalena Krysiak and Aldona Kluczek (Warsaw University of Technology)*

### Session E2: Amplified sociotechnical problems in integrated infrastructures

- **Amplified sociotechnical problems in integrated infrastructures**  
*Christian Büscher (KIT, Karlsruhe)*
- **Sector coupling in an experimental setting: Empirical evidence from an Austrian demo project**  
*Michael Ornetzeder (ITA, Vienna)*
- **Challenges of system analyses for SC**  
*Bert Droste-Franke (EA European Academy)*
- **Futuring sector coupling: conceptualizing pathways by scientific disciplines**  
*Dirk Scheer, Lisa Nabitz (KIT, Karlsruhe)*

### Session E3: Societal Implications of the Energy System

- Linda Nierling (Institute of Technology Assessment and Systems Analysis)*
- **Cyber-Physical Systems and Climate-Change Agenda: Issues and Linkages for Consideration**  
*Jiri Dusik (Integra Consulting Ltd.)*
  - **Societal Acceptance of Emerging Energy Technologies in the Context of the Energy Transition**  
*Marcel Weil, Manuel Baumann, Jens F. Peters, Martina Haase, Christine Rösch, Jens Buchgeister (Karlsruhe Institute of Technology), Christina Wulf, Petra Zapp (Research Center Jülich), Tobias Junne, Tobias Naegler (German Aerospace Center), Philip Emmerich (Technical University Berlin)*

### Session H1: Genome editing in human reproduction: Society, Ethics and Governance

- Mara Almeida (Centre for Philosophy of Science of the University of Lisbon)*
- **Accelerating and braking factors for the development of gene editing in the human germline. A view from technology assessment**  
*Ingrid Schneider (University of Hamburg)*
  - **Value meets CRISPR: from value regimes of actions-in-context to TA diplomacy**  
*Karen Kastenhofer (Institute of Technology Assessment)*
  - **A national dialogue on human genome editing**  
*Jeroen Gouman, Sophie van Baalen, and Petra Verhoef (Rathenau Instituut)*

### Session H2: The Change of Health Technologies – Citizens' Engagement in Their Own Health Situation

- **Closing the Loop: Patient Engagement in Artificial Pancreas Systems**  
*Christopher Coenen (Institute of Technology Assessment and Systems Analysis)*
- **Developing a health-related understanding of lifestyle direct-to-consumer genetic testing by users**  
*Wiebke Sick (Institute of Medical Sociology, University Hospital Center Hamburg-Eppendorf)*
- **Evaluation of different stakeholders-values and their weight in AI-based technologies development, constructions and usage-embedment**

*Arne Sonar and Karsten Weber (Ostbayerische Technische Hochschule Regensburg)*

### Session H3: Assessing similarities and gaps in aging and disabilities: Towards better Assistive Technologies

- **The value of technologies: Setting Ageing and Assistive technologies in comparison**  
*Linda Nierling and Bettina-Johanna Krings (Institute of Technology Assessment and Systems Analysis)*
- **Accessibility of assistive technologies as a factor in the successful realization of the labor potential of persons with disabilities: Russia's experience**  
*Yulia Nenakhova (Russian Academy of Sciences)*
- **Improving access to arm and leg prosthesis in Germany – perspectives from HTA and RRI**  
*Martina Baumann and Maria Maia (Institute of Technology Assessment and Systems Analysis)*
- **Assessments of Assistive Technologies: From how to where (and so what?)**  
*Erik Thorstensen (OsloMet)*
- **Responsible innovation and technology assessment in social welfare organizations**  
*Birte Schiffhauer (Fachhochschule Bielefeld)*

### Session P1: Value-driven Technologies: Role concepts in Technology Assessment and Responsible Innovation

- **Roles of technology assessment for assessing value-laden technologies**  
*Armin Grunwald (Institute of Technology Assessment and Systems Analysis)*
- **Responsible Innovation: Allocation and re-allocation of roles for innovation actors**  
*Rene von Schomberg (European Commission)*
- **Value-driven technology assessment – then, now and in the future**  
*Helge Torgersen (Institute of Technology Assessment)*
- **Organizing for transitions in the research system; understanding the drivers for RRI**  
*Ellen-Marie Forsberg (Ostfold Research) and Christian Wittrock (Oslo Metropolitan University)*

### Session P2: How to serve parliament as a TA institute

*Ira van Keulen (Rathenau Instituut)*

- **Towards a Transatlantic Network for Technological Assessment: Comparing Legislative Advising and Policy Impacts in Europe and the United States**  
*Adrien Abecassis, Bernhard Fischer-Appelt and Jack Loveridge (Harvard University Weatherhead Center for International Affairs)*
- **Controversy or Policy? The TA-SWISS Approach**  
*Elisabeth Ehrensperger and Christina Tobler (TA-SWISS)*
- **A co-designed research agenda for legislative science advice**  
*Chris Tyler, Alessandro Allegra (University College London) and Karen Akerlof (George Mason University)*
- **A technology radar for Norwegian MPs**  
*Marianne Barland (Norwegian Board of Technology)*
- **Increasing agility and flexibility in parliamentary TA: Reflections on two terms as part of the TAB**  
*Tobias Jetzke and Stephan Richter (VDI/VDE Innovation + Technik GmbH)*

### Session P3: Value-driven innovation approaches: theory and practice

*Roos de Jong and Linda Kool (Rathenau Instituut)*

*Christine Milchram (TU Delft)*

*Marlou Bijlsma (NEN)*

*Zoya Damianova (ARC Fund)*

### Session T1: International TA Perspectives

- **Science and technology for the people? On the framing of innovation in policy discourses in India & EU**  
*Anwasha Chakraborty (Chalmers University of Technology)*
- **TA Experiences in South Korea**  
*Moonjung Choi (Korea Institute of S&T Evaluation and Planning)*

- **Technology assessment in forestry sector under climate change**  
*Constanze Scherz, Somidh Saha (Institute of Technology Assessment and Systems Analysis)*
- **Urban decentralized water, sanitation and hygiene interventions in technology assessment**  
*Sarah Ward (University of the West of England)*
- **Comparison of Ecosystem Services from Mixed and Monospecific Forests in Southwest Germany: A Survey on Public Perception**  
*Iulia Almeida, Christine Rösch and Somidh Saha (Institute of Technology Assessment and Systems Analysis)*

#### Session T2: Food Waste Reduction – Possible Solutions

- **Power of visions on digitalisation for food security from farm to grocery and landfill**  
*Mahshid Sotoudeh, Steffen Bettin, Niklas Gudowsky (Institute for Technology Assessment)*
- **Food Waste Reduction in Public Catering**  
*Tomáš Rátinger, Lenka Hebáková and Iva Vančurová (Technology Centre of the Czech Academy of Sciences)*
- **Food waste reduction in canteens and quick service restaurants**  
*Petr Brož and Blanka Menzelová (Compass Group CZ)*
- **Zachraň jídlo – Dealing with the Issue of Food Waste in the NGO Sector**  
*Barbora Kebová (Zachraň jídlo)*

#### Session T3: Value-driven Technologies: Methods, Limits, and Prospects for Governing Innovations

- Gabriel Bianchi, Miroslav Popper and Tomáš Michalek (Slovak Academy of Sciences)*
- **Attitudes to progressive gene therapies in Slovakia in the light of the ethical dimensions of human enhancement**  
*Gabriel Bianchi (Slovak Academy of Sciences)*
  - **Governing genome editing – dealing with »wicked« problems**  
*Alexander Lang and Erich Griessler (Institute for Advanced Studies)*
  - **Quality assurance in 24h-caregiving at home by means of digital support**  
*Haslinger-Baumann Elisabeth, Werner Franz, Hauser Carina and Daia Andrea (University of Applied Science)*
  - **Co-Creation of Co-design**  
*Patrick Deniz Hos (University of Stuttgart)*
  - **Expectations and concerns of the ‘Care Robot for Senior’**  
*Jiyoung Suh (Science & Policy Institute)*
  - **Technology and me: Evolved or regressive attitude?**  
*Wendy Rowan, Stephen McCarthy and Ciara Fitzgerald (University College Cork)*

#### Session U1: TA and Ethics for Value-driven Technologies: Educational Aspects

- Jan Kaźmierczak (Silesian University of Technology), Elena A. Gavrilina and Alexandra A. Kazakova (Bauman Moscow State Technical University)*
- **On the Need of Ethics in General and Ethics of Technology in Particular: Reflections of an Ethics Teacher**  
*Joanna Sośnicka (Lodz University of Technology)*
  - **Human dignity in the context of value technologies of the educational process**  
*G.G. Kolomiets, I.V. Kolesnikova and Ya.V. Parusimova (Orenburg State University)*
  - **Men, women, technology, and teaching**  
*Renate Dürr (Karlsruhe Institute of Technology)*
  - **Readiness to New Technologies as Innovative tools of Education process**  
*Ekaterina N. Yadova (Moscow Business School)*
  - **Ethical evaluation of technology in the classroom – three methods that are practice-oriented and proven in practice**  
*Karsten Weber (OTH Regensburg)*

- **About Educational Needs of Technology Assessment**  
*Bartłomiej Gładysz (Warsaw University of Technology) and Jan Kaźmierczak (Silesian University of Technology)*
- **Technological History as a Tool for the Development of Competence in Judging Current Technologies**  
*Kurt Möser (Karlsruhe Institute of Technology)*
- **Relevance of the interdisciplinary course on Technology Assessment for energy universities**  
*Nina Malinovskaya and Pavel Malinovskii (National Research University)*
- **Technical education in Russia: A request for TA and Value-oriented Approaches**  
*Andrey Andreev (Moscow Power Engineering Institute)*
- **Teaching the teachers for value-driven technologies. How can TA lectures support future engineers to design technical innovations dealing with societal challenges?**  
*Mahshid Sotoudeh, Walter Peissl, André Gzásó, Michael Ornetzeder and Doris Allhutter (Institute of Technology Assessment)*

### Poster Session

- **Between Euphoria and Skepticism – Perspectives of Social Work on Decision Support Systems**  
*Diana Schneider (FH Bielefeld University of Applied Sciences)*
- **ELSI in the interdisciplinary field: A discussion on how to form a common ELSI framework among different experts - on the subject of information technology and life science**  
*Tatsuhiko Kamisato (Chiba University) and Mitsuaki Hosono (Gifu University)*
- **Developing a health-related understanding of lifestyle direct-to-consumer genetic testing by users**  
*Wiebke Sick (Institute of Medical Sociology, University Hospital Center Hamburg-Eppendorf)*
- **Participatory Methods in Fostering Responsible Research and Innovation: The Case of Nanotechnology**  
*Łukasz Nazarko (Białystok University of Technology)*
- **Trust in Technology – Measurement Perspective**  
*Joanna Ejdys (Białystok University of Technology)*
- **Technology assessment using the Multi-Attribute Decision-Making Method**  
*Katarzyna Halicka (Białystok University of Technology)*
- **Technology Assessment as Support in the Decision-Making Process for Modernizing Critical Communication Technologies Used by Public Safety Agencies in Brazil**  
*Débora Vanessa Campos Freire and Ana Clara Cândido (Federal University of Santa Catarina)*
- **Evolution of Technology: A Case Study of Outer Space Applications**  
*Pratik Patil (Vienna University of Economics and Business)*
- **Empowering neuroethical discourse with participatory methods**  
*Ludwig Weh (Humboldt University Berlin) and Christopher Coenen (Institute for Technology Assessment and Systems Analysis)*
- **Treatment of missing values in binary classification problems: the strategy matters**  
*Esther Denecke, Michel Lang, Jörg Rahnenführer (TU Dortmund University)*