

Workshop

Responsible Research and Innovation in Synthetic Biology

23rd - 25th June 2014, Schader-Forum, Goethestr. 2, Darmstadt

Responsible research and innovation (RRI) has increasingly gained relevance in EU policy (such as in the European Commission's Science-in-Society programme and the Horizon 2020 strategy). The RRI concept aims to better align science and innovation to societal needs and ethical acceptability through an inclusive and deliberative process of stakeholder involvement and public engagement. Stakeholders should become co-responsible by constructive input to regulatory frameworks and innovation processes (e.g. defining societal desirable products).

In the workshop we aim to bring together various actors, including people from academic research, industry, civil society and politics to discuss in an experimental format questions concerning prerequisites for Responsible Research and Innovation (RRI). Four workshop sessions will highlight different issues or aspects linked to RRI and explore their relations and relevance for synthetic biology. The aim of this workshop is to contribute to developing critical questions or standards that should be considered in research and innovation processes in synthetic biology, or when discussing their results.

Monday, June 23rd, 2014, Schader-Forum

6.00 pm

Registration

Public Panel – Schering Session “Science & Society”

6.30 pm

Engineering Life? Responsible Research and the Limits of Design

Regardless of whether it will “engineer life”, Synthetic Biology applies design principles where evolution used to reign. What is required for responsible research and innovation in the field of Synthetic Biology? In order to answer this question, several perspectives must be brought together – those of governance, science policy, ethical deliberation, and those of research, its practice and economic prospects.

Welcome Address

Alexander Gemeinhardt, M.A., Chairman of the Board, Schader-Stiftung

Speakers

Dr. Dr. René von Schomberg, European Commission, Directorate General for Research, Brussels (in personal capacity)

Dr. James Philp, Organisation for Economic Co-operation and Development (OECD), Directorate for Science, Technology and Industry, Paris

Commentators

Dr. Stephen van Dien, Genomatica Inc., Director of Technology Development, San Diego, CA, USA

Wolf-Michael Catenhusen, Deputy Chairman, German Ethics Council, Berlin

8.30 pm

Get Together

Realised with kind support from



Tuesday, June 24th, 2014, Schader-Forum

1. Workshop Session

9.30 am

Value sensitive design

Implicit and explicit values, such as sustainability, or privacy and safety (by design), have increasingly gained relevance in both research policies (e.g. related to nanotechnology) and in certain technology sectors (e.g. chemicals; energy; information and communications technology). Key questions in this session will address how and at which stage approaches for value-sensitive design could play a role in synthetic biology developments.

12.00 am

Lunch

Workshop - Responsible Research and Innovation in Synthetic Biology

<u>1.30 pm</u>	2. Workshop Session Conditions for Co-Responsibility – Rights and Privileges, Commitments and Obligations Research and development in (potential) key technologies can be shaped by various societal actors. These range from investors, public or private research, the legislature, to certification bodies for sustainable production of goods. Major questions to be discussed here will be related to appropriate institutional models for constructive stakeholder participation and input in the innovation process in synthetic biology.
<u>3.30 pm</u>	Coffee
<u>4.00 pm</u>	3. Workshop Session Responsible Representation – Knowledge and Ignorance, Limits of Control This session should shed light on potential issues for RRI derived from self-portrayal of the synthetic biology field or its portrayal from the outside. Such issues may arise from under- or overstating tensions between notions of construction and design on the one hand, and limits of knowledge and control, emergent properties and evolutionary change of living systems, on the other hand. Questions will address how and by whom synthetic biology is represented and presented. And how this determines what we learn about the field; the mindsets, notions and research ascribed to it (or its actors); or what researchers in the field do actually know – and what achievements they may, or may not, provide in the future.
<u>6.00 pm</u>	End of first day
<u>Evening</u>	Joint Dinner
Wednesday, June 25th, 2014, Schader-Forum	
<u>09.30 pm</u>	4. Workshop Session Monitoring, Observation and Regulation – Collective Experimentation and Social Learning This session aims to discuss and explore possibilities for translating knowledge and uncertainty into responsible decision making and governance processes. Points of departure will be existing governance structures and societal analysis by the social sciences that may represent collective or 'real' experimentation on emerging technologies. Questions here will relate to strategies for dealing with unknown and unpredictable technological developments, benefits and risks. A further focus will be on political conditions that may encourage experimental playing fields on which new governance schemes can develop. Ideally, these should be able to foster new opportunities and responsibly govern potential transformations linked to synthetic biology and possibly other emerging technologies.
<u>12.00 am</u>	Resumee – Conclusion and discussion of follow-up activities
<u>1.00 pm</u>	Lunch
<u>1.30 pm</u>	End of workshop

Rather than featuring a sequence of talks or presentations, the workshop will stage roundtable discussions on four topics. Each of the four topics will start with a brief presentation of an example or potential 'prototypic' model case related to RRI (by workshop participants or the organizers) as well as a set of questions and theses.

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Arriving by public transport

To reach the Schader-Forum from the central station, please take tram 3 towards Lichtenbergschule to Goethestraße. The ride takes 15 minutes.

Arriving by car

Please note that the Schader-Forum does not offer private parking. There is only a limited amount of parking space nearby. Directions and a location plan are available at: <http://www.schader-stiftung.de/service/anfahrt/>

Place of conference

Schader-Forum
Goethestr. 2
64285 Darmstadt

Workshop organizers

Dr. Harald König, Karlsruhe Institute of Technology, Institute for Technology Assessment and Systems Analysis
h.koenig@kit.edu

Dr. Sabine Ammon and Prof. Dr. Alfred Nordmann, Technische Universität Darmstadt, Institut für Philosophie
ammon@phil.tu-darmstadt.de, nordmann@phil.tu-darmstadt.de

Dr. Tobias Robischon, Schader-Stiftung, robischon@schader-stiftung.de

Schader-Stiftung

Goethestr. 2, 64285 Darmstadt
Phone: 06151/1759-0, Email: kontakt@schader-stiftung.de
www.schader-stiftung.de/Synbio