

Welcome to

Workshop Sustainable Materials: From Technologies to Policies

Day 1:

Keynote speeches, Seed project presentations & Discussions

Chair: Feng Gao, Linköping University

09:00-09:30 Registration & **Welcome Fika**

09:30-10:00 Welcome & Opening Remarks by Deputy Vice-chancellor Karin Axelsson
 Welcome from the organisers

10:00-10:40 Keynote Miho Yamauchi, Kyushu University (online). Incl 10min Q&A
Nanocatalysts for a low carbon society: upgrading chemicals through hydrogenation

10.45-12:00 Presentations from seed projects. Ca20 min/project incl Q&A

- *Thin Films for Energy: Conversion, Storage, Efficiency, and Sustainable Resource Circulation*, Cleber Marchiori, Karlstad University & Roman Selyanchyn, Kyushu University
- *BioC-Stora: Biomass-derived Carbon material for Energy Storage applications*, Leteng Lin, Linnaeus University
- *Physical and mechanical properties of 3D graphene with heteroatoms for sustainable energy storage and conversion*, Bo Yang, Uppsala University

12:15-13:15 **Lunch, University Club**

13:30-14.10 Keynote Olle Eriksson, Uppsala University
WISE a materials program for a sustainable future and how theory contributes to this mission (incl 10min Q&A)

14.10-14.50 Keynote Cecilia Wallmark, Luleå University of Technology
Hydrogen development in Sweden (incl 10min Q&A)

14:50-15:20 **Fika**

15.20-16:00 Keynote Fatehi Hesameddin, Lund University
Sustainable Production of Syngas Coupled with Carbon Dioxide and Nitrogen Management (incl 10min Q&A)

16:00-16:10 Wrap-up Day 1

16:20-16:50 Lab tour (by Feng Gao)

18:30 **Welcome Dinner** ([Picoteo, Address: Ågatan 39, central Linköping](#))

Day 2: Presentations, Discussions & Study visit

09:00–10:15 Chair: Masahiro Yoshizawa-Fujita, Sophia University

- *Advances in Cubic Silicon Carbide and Graphene for Solar-to-Fuel Conversion*, Jianwu Sun, Linköping University
- *Data-mining search for high-performance permanent magnets for green energy applications*, Alena Vishina, Uppsala University
- *Hydrogen and Ammonia Energy Development Current and Future Trends*, Fangqin Guo, Hiroshima University

Q&A

10:15–10:45 **Fika**

10:45–12:00 Chair: Xiaoyan Ji, Luleå University of Technology

- *Fabrication of nanostructured materials for the energy harvesting and sensing devices*, Shatrudhan Palsaniya, Umeå University
- *Next-generation materials for rechargeable batteries and biomass refinery*, Masahiro Yoshizawa-Fujita, Sophia University
- *Nanomaterials and Nanofabrication for Sensing Applications*, Zakaria Ziadi, Okinawa Institute of Science and Technology

Q&A

12:15–13:10 **Lunch, Studenthuset**

13:15–14:30 Visit to NSC [Visit to National Supercomputer Centre](#) (Galaxen building)

14:45–16:00 Chair: Roman Selyanchyn, Kyushu University

- *Mesoporous oxides for oxygen electrocatalysis*, Emma Björk, Linköping University
- *Artifical Intelligence and Sustainability Energy Transition*, Ranjula Bali Swain, Stockholm School of Economics
- *On Smart Grids for the many people -A Social-technical Collaboration*, Björn Johansson, Linköping University

Q&A

16:00–16:30 **Fika**

16:30–17:45 Chair: Mahmoud Mousavi, Uppsala University

- *Porous organic materials for CO₂ capture and conversion*, Chao Xu, Uppsala University
- *Development of gas separation membrane-based devices for direct air capture and subsequent utilization of carbon dioxide*, Roman Selyanchyn, Kyushu University
- *EU's Safe-and-sustainable by Design Framework for Advancing Materials Science and Innovation*, John Laurence Esguerra, Linköping University

Q&A

17:45–18:00 General discussion and wrap-up Day 2

Co-organised with Sophia University & MIRAI Global Challenge Team Materials for Energy conversion and Storage

Contact persons: Helena.balogh@liu.se , Feng.gao@liu.se



Day 3: All participants are warmly invited to join, contribute and co-shape the common paper

09:00–10:30 Common paper

Chair: Leteng Lin, Linnaeus University

Part 1: Paper Status, Ideas & Group Work

Opening Input

- Overview of initiatives, thoughts, and current progress on the paper

Collective Brainstorming

- Open debate on themes, missing elements, and new ideas

Group Discussions

- Breakout groups to explore key sections and priorities

Quick Recap

- Sharing highlights from each group

10:30–11:00 **Fika**

11:00–12:30 Common paper cont.

Part 2: Re-Group Work & Paper Structuring

Collaborative Restructuring Session

- Mind-mapping and reorganizing the structure of the paper

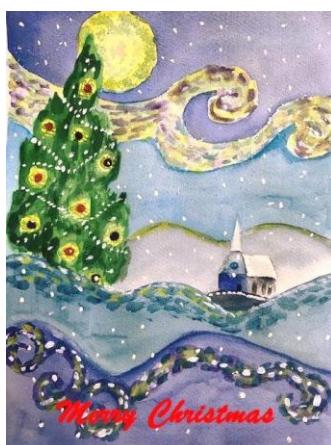
- Harmonizing perspectives across defined themes

Future Roles & Contributions

- Defining next steps

- Assigning responsibilities for writing, editing, and more practical issues

12:30–14:00 Farewell & **Lunch** (in conference facility, lunch-to-go possible)



Co-organised with Sophia University & MIRAI Global Challenge Team Materials for
 Energy conversion and Storage

Contact persons: Helena.balogh@liu.se, Feng.gao@liu.se

