

Program

Sunday 11th June

13:00 area opens for setting up posters and exhibits

14:00 Physics and Lasershow

15:30 Physics and Lasershow

17:00 Physics and Lasershow

18:00 – Opening Get-together

We invite you to a Welcome Reception in the exhibition area.

PLACE: GASQUESALEN

Welcome talks by Mats Helmfrid (Mayor of the City of Lund)
Anna Jähnke (Regional Council), and Annika Olsson (Dean of Engineering Faculty).



Monday 12th June

8:30 - 9:10 Welcome talks

Erik Renström, Vice-Chancellor of Lund University

Stefan Bengtsson, President at Chalmers University of Technology

Darja Isaksson, Director General of Vinnova

Mats Persson, The Swedish Minister of Education



9:10 - 10:15 High level panel debate: "Materials for a sustainable future"

ROOM: KÅRHUSET, AULA (3RD FLOOR)

MODERATOR:

Heiner Linke, Deputy dean (prorektor) at Faculty of Engineering, LTH and Professor of Solid State Physics

PANELISTS:

Joanna Drake, Deputy Director-General of the DG for Research and Innovation

Sara Mazur, Director Strategic Research, Knut and Alice Wallenberg Foundation

Tom Erixon, President and CEO of Alfa Laval

Heike Riel, IBM Fellow, Department Head Science & Technology, IBM Research Europe









Tom Erixon

Joanna Drake

Heike Riel

Heiner Linke

10:15 - 10:45 Coffee break

PLACE: GASQUESALEN



10:45 – 12:45 Parallel Sessions

Green Energy – materials for harvesting KÅRHUSETS LECTURE HALL	Graphene and 2D materials V-HOUSE, LECTURE HALL A	Safe and Sustainable by Design KÅRHUSET, AULA (3RD FLOOR)
CHAIR: Peter Dröll (European commission, DG RTD) SPEAKERS: Eicke Weber, ISES and European Solar Manufacturing Council ESMC; Unlimited fusion power from the Sun: The market and technology perspective of Photovoltaics. Jonas Groten, Joanneum Research Austria. Energy harvesting materials for autonomous sensor systems in remote area applications Antonio Rinaldi, ENEA, Italy; From NEXTOWER to SISAL-SLAG: advanced materials solutions for next generation CSP tower systems and CO² looping Roberto Gómez, University of Alicante, Spain; Novel photoelectrochemical devices based on earthabundant advanced materials to produce solar hydrogen	CHAIR: Jari Kinaret, Chalmers SPEAKERS: Mamoun Taher, Graphmatech; Talk title TBC Inge Asselberghs, IMEC, Belgium; Enabling a European ecosystem for 2D materials processing: update on the 2D-experimental pilot line Stijn Goossens, Qurv, ES; Enabling a world of enhanced perception Antonio Agresti, Univ. Rome Tor Vergata, IT; Perovskite-based photovoltaic and 2D materials: fostering an innovative PV technology in an industrially relevant environment.	CHAIR: Sofie Norager, European Commission SPEAKERS: Irantzu Garmendia Aguirre, JRC; Introduction to the SSbD framework Lya Hernandez, RIVM, the Dutch National Institute for Public Health and the Environment; Safe and Sustainable by Design (SSbD): State of the art and lessons learned in design thinking Alexander Pogány, Austrian BMK; Nanosafety also with SSbD Marcel Meeus, EMIRI; SSbD framework for Batteries Stefan Spirk (Ecolyte), Andreas Falk (BNN), both SusChem Austria. SSbD assessment framework application to development of an ecofriendly electrolyte for redox flow batteries

12:45 - 13:30 Lunch

PLACE: GASQUESALEN



13:30 – 14:25 Plenary: Advanced materials from academia to industry – cooperation and strategies

ROOM: KÅRHUSET, AULA (3RD FLOOR)

CHAIR: LANDON MERTZ, CEO Cerion Nanomaterials

SPEAKERS:

Linnea Selegård, SAAB Dynamics

Talk title: Advanced materials for Aerospace – The power of long-term industry- academy collaborations and its outcomes.

Anna Jöborn, CEO of MISTRA

Talk title: The importance of long-term commitments for creating a safe and sustainable Europe.

Peter Dröll, EC, DG RTD

Talk title: The coordinated plan on advanced materials.







Linnea Selegård

Peter Dröll





Landon Mertz

Anna Jöborn



14:30 - 16:00 Parallel Sessions

Green Energy - Advanced materials for storage

Semiconductors and materials for future chips

AMI2030

KÅRHUSETS LECTURE HALL

V-HOUSE, LECTURE HALL A

KÅRHUSET, AULA (3RD FLOOR)

CHAIR:

Patrik Johansson, Chalmers

SPEAKERS

Kristina Edström, Department of Chemistry - Ångström Laboratory, Structural Chemistry, Uppsala, Sweden; *Materials Science at the Heart of European Battery Research*

Sami Haikala, Chief Development Officer, Northvolt. *Pioneer European R&D Campus for development of the greenest battery on Earth.*

Patrice Simon, Université Paul Sabatier, Toulouse, France. *Tracking ion fluxes in electrodes for energy storage applications.* CHAIR:

Lars-Erik Wernersson, Lund University

SPEAKERS

Fredrik Tillman, Ericsson, Sweden; The need for early technology exploration

Mikael Östling, KTH, Sweden European Chips Act and the Shortage of Talents

Mika Prunnila, VTT, Finland; Quantum Technologies is Novel Microelectronics WELCOME

Lars Montelius

SPEAKER

Philippe Jacques EMIRI; *Introductory presentation of AMI2030*

CHAIR/MODERATOR:

Steffi Friedrichs, AcumenIST, Brussels, BE

PANEL DEBATE

Peter Rucinski, Senior Director, Dassault Systèmes Solidworks

Jari Kinaret, Chalmers, Director Graphene Flagship

Peter Dröll, Director Prosperity, DG RTD, EC

Jaroslaw Piekarski, NCBR, NCP Poland Cluster 4

Philippe Jacques, EMIRI, Coordinator of AMI2030

Monique Groenewold, RIVM, OECD Working Party on Manufactured Nanomaterials

16:00 - 17:00 Poster Session and Exhibition and Coffee Break

ROOM: GASQUESALEN

Welcome to the poster and exhibition area!



Photo: K. Ruona



17:00 - 18:00 Parallel Sessions

Energy efficiency: materials for sustainable industries KÅRHUSETS LECTURE HALL	Semiconductors and materials for future chips V-HOUSE, LECTURE HALL A	How to enable the inclusion of citizens and societal actors in the shaping of Advanced Materials? KÅRHUSET, AULA (3 RD FLOOR)
CHAIR: Lars Samuelson, Lund University and SUSTech, China SPEAKERS Vanya Darakchieva, Professor at Solid State Physics, Lund; Next generation semiconductors for future sustainable electronics Andrea Niklas, Azterlan, Spain; High Performance Materials for extreme Energy Intensive Industry Process Environments. Matti Mäntysalo, TAU, FI; Fabrication of monolithic supercapacitors by screen printing.	CHAIR/MODERATOR Lars-Erik Wernersson, Lund University PANEL DEBATE: THE NEED FOR SEMICONDUCTOR INFRASTRUCTURE FROM A SME PERSPECTIVE Jonas Sundqvist, Co-founder and CEO of AlixLabs; Bo Hammarlund, CEO of UWBG Cutting Edge Technologies and Serial Entrepreneur. Johan Ekman, CEO of Kiselkarbid i Stockholm AB (Kisab); Jörg Hübner, Director of DTU Danchip, the National Center for Micro-and Nanofabrication in Denmark;	WELCOME Marco Falzetti, APRE & Eumat & NCP4Industry SPEAKER Andrea Porcari, Airi and SocKETs project, IT; Learning on societal engagement in technology innovation MODERATOR Sofie Norager, European Commission, BE; PANEL DEBATE Blanka Lenzowski, Airbus, DE Cissi Askwall, Public & Science, SE Kathrine Collin Hagan, Danish Board of Technology and SocKETs, DK Steffen Foss Hansen, Technical University of Denmark (DTU), DK Roland Brandenburg, FFG - Austrian Research Promotion and M-ERA.NET, AT



Monday 12 June, 19:00 Gala dinner in AF-Borgen

The historic castle AF-Borgen has been the students' home since 1851, right in the heart of Lund.

Address: AF-Borgen, Sandgatan 2, 223 50 Lund

Tuesday 13th June

9:00 - 10:15 Plenary talks

ROOM: KÅRHUSET, AULA (3RD FLOOR)

CHAIR:

Lars Samuelson, Lund University and SUSTech, China

SPEAKERS

Landon Mertz, CEO Cerion Nanomaterials, USA: *How do we compete going forward? Economic, Defense, and Foreign Policy Implications in the Race for Supremacy of*

General Purpose Technologies

Marina Zanchi, Director HaDEA, Belgium: *Advanced materials and sustainable manufacturing in HaDEA-funded collaborative projects*

Jari Kinaret, Chalmers, Sweden. *Academy-industry collaborations: experiences from two case studies*

10:15 - 10:45 Coffee break

PLACE: GASQUESALEN



During the dinner, a folk-dance group will perform.



AF-Borgen in the heart of Lund.

Photo: Louise Larsson



Francesca Spyrakis, University of Turin; In

inhibitors to fight neuroinflammation and

silico design of novel NLRP3 allosteric

neurodegeneration

10:45 – 12:45 Parallel Sessions

Alexia Auffèves, CNRS MajuLab

Quantum energy initiative

Singapore

Germany

Peter Klein, Fraunhofer ITWM, Germany

Quantum technologies Advanced Materials European Infrastructures – From The Human Brain Project as an fundamental science to Europe's major role & Manufacturing enabler for neuro-derived industrial applications technologies KÅRHUSET, AULA (3RD FLOOR) KÅRHUSETS LECTURE HALL V-HOUSE, LECTURE HALL A V-HOUSE, LECTURE HALL B From Fundamental Research to CHAIR: CHAIR: CHAIR: Invention Anton Frisk Kockum, Chalmers. Victoria Petrova, HaDEA, Brussels Ausra Saudargiene, Neuroscience Institute, Lithuanian University of Health Sciences CHAIR/MODERATOR: **TALK SPEAKERS TALKS Part 1: Neurotech** Giorgo Rossi, University of Milan, Klaus Mølmer, Niels Bohr Institute, Marco Sebastiani, Univ. Roma3, Italy Italy SPFAKERS: University of Copenhagen. A Advanced characterisation in the Digital era; Andreas Rowald, Friedrich-Alexander historic perspective on quantum **SPEAKER** vision, opportunities, and challenges technology in Europe University Erlangen-Nürnberg, *Precision* **Bertrand Fillon, CEA, France**; Gerhard Goldbeck, EMMC ASBL, Belgium; Neurostimulation towards the Nanoscale: TALKS AND PANEL DEBATE ON Introductory speech The European Materials Modelling Council A Computational Perspective **QUANTUM LIFE SCIENCE:** (EMMC) and Roadmappina activities – links **PANELISTS** Maria Asplund, IMEC / Chalmers. Lene Oddershede, Novo Nordisk to Materials 2030 Roadmap and AMI2030 Engineering for biocompatibility and the Jörg Hübner, DTU, Denmark Foundation WG1 on Digitalisation vision of a seamless electrode-neuron Pieter Telleman, Utwente, Ann-Marie Wennberg, Sahlgrenska interface **PANEL DEBATE: Initiation of EMCC** Netherlands Johannes Swartling, Deep Light roadmapping activities Anna Hultin Stigenberg, MaxIV, Vision TALKS Part 2: Atomistic and molecular Costas Charitidis, NTUA, Athens; Sweden dynamics in the brain MODERATOR: **Ennio Capria, ESRF**; Gaelle Decroix, CEA, France SPEAKERS: Ebba Carbonnier, SweLife, Gerhard Goldbeck EMMC ASBL, Belgium; Thomas Swahn, MyFab, Sweden Adam Hospital, IRB Barcelona; Karolinska Institutet Magnus Fredriksson, Alfa Laval, Sweden Biomolecular simulations and **TALKS** Marco Sebastiani, Univ. Roma3, Italy; macromolecular flexibility databases in the Samuel Lara Avila, Chalmers. 2D-EBRAINS research infrastructure: exploring Georgios Konstantopoulos, NanoME-Tech, potential of quantum the dynamics of central nervous system Commons H2020 project, Greece; materials molecules. Natalia Konchakova, Helmholtz -Hereon,



12:45 - 13:45 Lunch

13:45 - 16:15: Parallel Sessions

Quantum technologies – Europe's major role KÅRHUSETS LECTURE HALL	Advanced Materials & Manufacturing V-HOUSE, LECTURE HALL A	European Infrastructures – Technology infrastructures KÅRHUSET, AULA (3 RD FLOOR)
CHAIR: Martin Leijnse, Lund University, SE. SPEAKERS: Tommaso Calarco, FZ Juelich, DE; Quantum technologies in Europe: from a Flagship to a fleet Robert Harrison, QuIC; Magnifying the impact of Europe's Quantum Industry on the Global Stage Elsi-Mari Borelli, Algorithmiq, FI; Quantum algorithms and use cases for Life Sciences Per Delsing, Chalmers, SE; WACQT 2018-2029 – a Swedish quantum computer ecosystem Göran Wendin, Chalmers, SE; Building a European HPC+QC ecosystem	CHAIR: Anders Mikkelsen Lund University, SE. SPEAKERS: Susanne Norgren, Sandvik, SE; Neutrons to rock drilling & machining – recycling and back Diego Coglitore, APRE & NCP4Industry, IT; NCP4Industry – the Horizon Europe Cluster 4 Industry National Contact point Network and the European Industrial R&I community Nazih Mechbal, PIMM - UMR CNRS, FR; A cognitive paradigm for manufacturing, health monitoring and recycling of hybrid aeronautical composite structures Steffi Friedrichs, AcumenIST, Brussels, BE; Shared Responsibilities & collaborative R&I Approaches – Ensuring safe & sustainable Products & Processes throughout complex Value-Chains Erik Khranovskyy, CEO Grafren, SE; Multifunctionality of materials as the way to sustainable and resilient future	From Inventions to Innovations and Different Innovation Models CHAIR/MODERATOR: Marcel Van de Voorde, IMEC, Belgium SPEAKER Giorgio Rossi, Univ. Milan, Italy; Introductory speech PANELISTS Tomáš Šikola, CEITEC, Czech Republic Branden Brough, NNCO, USA Christian May, Fraunhofer, Germany Sandrine Labigree, IPC, France Olivier Hasse, INAM, Germany Kamel Besbes, Tunis NanoCenter, Tunisia Adam Edström, RISE, Sweden Lena Killander, Vinnova, Sweden Mariam Debs, INL, Portugal Anna Stenstam, CR Competence, Sweden

16:15 Closing, coffee and final discussions

PLACE: GASQUESALEN