

**Program of the 10<sup>th</sup> S3C Summer School on  
Sustainable Chemistry for Sustainable Development  
08.07.2024 – 12.07.2024, Leuphana University, Lüneburg**

**MONDAY, 8 JULY      PART1: CONCEPTS OF SUSTAINABLE CHEMISTRY**

**8:30am – 9:00am                      Registration (Location: Lecture Hall 5 Leuphana University)**

**9:00am – 9:20am                      Welcome by the Hosting Institutions**

**9:20am – 9:30am                      Prof. Dr. Klaus Kümmerer, ISC3 R&EH / Leuphana University, Lüneburg, Germany**

**9:30am – 9:40am                      Associate Prof. Dr. Emma Strömberg, Swedish Environmental Research Institute, Sweden**

**9:30am – 9:40am                      Dr. Thomas Wanner, ISC3, Germany**

**9:40am – 11:00am                    Sustainable Chemistry in a Nutshell**

Prof. Dr. Klaus Kümmerer, ISC3 R&EH / Leuphana University, Lüneburg, Germany

**11:00am – 11:30am                  Coffee Break**

**11:30am – 12:30pm                  Introductory round – expectations and experiences**

**12:30pm – 2:00pm                  Campus tour + Lunch Break**

**2:00pm – 3:00pm**

**Sustainable Chemistry of Renewable Resources for a Safer and Healthier Present and Future**

Prof. Dr. Dr. Vânia Zuin Zeidler Leuphana University, Lüneburg, Germany

**3:00pm – 4:00pm**

**Envisioning Regenerative Futures: A Systems Approach to Guide Transformations towards Sustainable Chemistry**

Dr. Dr. Johannes Halbe, University of Osnabrück, Germany

**4:00pm – 4:20pm**

**Coffee Break**

**4:20pm – 4:50pm**

**Education in sustainable chemistry study programmes**

Rebecca Holtmann, ISC3 R&EH / Leuphana University, Lüneburg, Germany

**4:50pm – 5:00pm**

**Feedback Round and Organizational Matters, Links and Lessons Learned**

**6:00pm**

**Welcome Dinner**

Mälzer Brau- und Tafelhaus, Heiligengeiststr. 43

**TUESDAY, 9 JULY      PART 2: Safe-and-Sustainable-by-Design**

<b>9:00am – 9:10am</b>	<b>Introduction to 2<sup>nd</sup> day</b> Prof. Dr. Klaus Kümmerer, ISC3 R&EH / Leuphana University, Lüneburg, Germany
<b>9:10am – 10:10am</b>	<b>European Chemicals Strategy for Sustainability – Safe-and-Sustainable-by-Design (SSbD)</b> Associate Prof. Dr. Emma Strömberg, IRISS / Swedish Environmental Research Institute, Sweden
<b>10:10am – 11:10am</b>	<b>Introduction to Benign by Design</b> Prof. Dr. Klaus Kümmerer, ISC3 R&EH / Leuphana University, Lüneburg, Germany
<b>11:10am – 11:30am</b>	<b>Coffee Break</b>
<b>11:30am – 12:30pm</b>	<b>Towards a Circular Economy: Understanding and Quantifying Raw Material Cycles on Regional and Global Scale</b> Dr. Antonia Loibl, Competence Center Sustainability and Infrastructure Systems, Fraunhofer Institute for Systems and Innovation Research ISI, Germany
<b>12:30pm – 1:30pm</b>	<b>Lunch Break</b>
<b>1:30pm – 2:00pm</b>	<b>How can we apply the SSbD framework by JRC to the pharma sector?</b> Neele Puhlmann, Leuphana University, Lüneburg, Germany
<b>2:00pm - 2:30pm</b>	<b>Challenges of implementation SSbD in the nanomedical field</b> Dr. Johanna Scheper, BioNanoNet Forschungsgesellschaft mbH, Austria
<b>2:30pm – 3:00pm</b>	<b>Coffee Break</b>
<b>3:00pm – 4:00pm</b>	<b>Screening level approach to support companies in making safe and sustainable by design decisions at the early stages of innovation</b> Dr. Lisa Pizzol, GreenDecision srl, Italy
<b>4.00pm – 5.00pm</b>	<b>Networking Session</b>
<b>5:00pm – 5:10pm</b>	<b>Organizational Matters</b>
<b>5:15pm</b>	<i>Group picture (meeting point Lecture Hall 5)</i>

**WEDNESDAY, 10 JULY**

**PART 2: Safe-and-Sustainable-by-Design**

**9:00am – 9:10am**

**Introduction to 3<sup>rd</sup> day**

Associate Prof. Dr. Emma Strömberg, Swedish Environmental Research Institute, Sweden

**9:10am – 10:10am**

**Value chain perspective: Does the SSbD framework support innovation?**

Anne Chloe Devic, SSbD Consulting Europe for CEFIC

**10:10am – 11:10am**

**Integration of tools for Risk Assessment and Life Cycle Assessment in the context of SSbD**

Dr. Tomas Rydberg, PARC / Swedish Environmental Research Institute, Sweden

**11:10am – 11:30am**

**Coffee break**

**11:30am – 12:30pm**

**Sustainability Simulation of Novel Lubricants following SSbD Principles**

Dr. Jonas Hoffmann, GreenDelta, Germany

**12:30pm – 1:30pm**

**Lunch Break**

**1:30pm – 4:00pm**

**Workshop I**

**SSbD in practice in your company!**

Anne Chloé Devic, IRISS / SSbD Consulting in collaboration with Cefic and Cris Rocca, IRISS / University of Birmingham, United Kingdom

**Workshop II**

**SSbD Roadmap for the Battery Innovation Landscape**

Dr. Lya G. Soeteman-Hernandez, IRISS / National Institute for Public Health and the Environment (RIVM), Netherlands and Dr. Christina Apel, IRISS / Leuphana University, Germany

**Workshop III**

**SSbD toolbox: Practical case examples and exercises of SSbD**

Dr. Tomas Rydberg, PARC / Swedish Environmental Research Institute, Sweden and Associate Prof. Dr. Emma Strömberg, Swedish Environmental Research Institute, Sweden

**4:15pm – 5:15pm**

**Plenary: Reporting and Discussion of Main Findings from the Workshops**

Participants, Prof. Dr. Klaus Kümmerer, ISC3 R&EH / Leuphana University, Lüneburg, Germany, Associate Prof. Dr. Emma Strömberg, Swedish Environmental Research Institute, Sweden

**5:15pm – 5:30pm**

**Organizational Matters**

**THURSDAY, 11 JULY**

**PART 2: Excursion**

**Excursion to: International Flavors & Fragrances Inc. (IFF) Industrial Park Walsrode**

**7:45am**

**Departure from Lüneburg, Universitätsallee 1, in front of the central building (be on time)**

**9:30am**

**Arrival, Welcome and Introduction to the site**

Dr. Roland Adden/Dr. Martin Lohrie

**10:30am**

**Lecture 1: Using renewable feedstock to create functional materials**

Dr. Sebastian Foertsch, R&D Manager Rheology and Autoclave Lab

**Lecture 2: Enabling the formulation of pharmaceuticals**

Dr. Carsten Huettermann, Senior Lead Application Scientist Pharma

**12:30pm – 1:30pm**

**Lunchbreak in the canteen**

**1:30pm – 3:30pm**

**Guided Tour of Lab or Production**

**3:30pm**

**End of excursion and return to Lüneburg**

**FRIDAY, 12 JULY**

**PART 2: Safe-and-Sustainable-by-Design**

**9:00am – 11:00am**

**Poster session**

Participants, moderation Prof. Dr. Klaus Kümmerer and Team, ISC3 R&EH / Leuphana University, Lüneburg, Germany

**11:00am – 11:15am**

**Coffee Break**

**11:15am – 12:45pm**

**Lessons Learned and My Take Home Message**

Participants, moderation Prof. Dr. Klaus Kümmerer and Team, ISC3 R&EH / Leuphana University, Lüneburg, Germany

**12:45pm – 1:00pm**

**Wrap up, Concluding Remarks and Farewell**

Prof. Dr. Klaus Kümmerer and Team, ISC3 R&EH / Leuphana University, Lüneburg, Germany

**1:00pm**

**End of Summer School & Departure of Participants**