

# Sustainable Chemistry and Climate Crisis

The climate crisis is one of the most pressing challenges of our time. Without additional efforts to reduce Greenhouse Gas emissions (GHG), global warming is likely to exceed 2° C by the end of the 21st century (UNEP 2022). The chemical industry is not only a fundamental cornerstone of modern life and global and national economies as more than 90% of manufacturing depend on chemical industry products. According to the Intergovernmental Panel on Climate Change (IPCC) sixth assessment report (IPCC 2022), the chemical industry also accounts for roughly 7.4 % of global Greenhouse Gas emissions and 10 % of the world's final energy demand (ICCA 2018). At the same time, the chemical industry is a source of climate-friendly solutions with innovations and materials that are crucial for the rollout of future-oriented low-carbon technologies for example in energy and mobility systems.

In this summer school chances and challenges for the transformation of the chemical industry and related value chains will be elaborated with a focus on sustainable chemistry, low-emission processes and products.

## Questions raised in this respect will be:

- What are the latest low-carbon technologies?
- What is the potential of such technologies?
- What other sustainable concepts are there in the chemical industry?
- What are the recommended tools and guidances in this respect?
- What can the different stakeholders contribute?



## Contact:

ISC3 International Sustainable  
Chemistry Collaborative Centre  
Research & Education Hub  
Leuphana University Lüneburg & CAPCI Team

## Implemented by:

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# We transform chemistry

## SUMMER SCHOOL ON SUSTAINABLE CHEMISTRY

Implemented by:

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

Supported by:

  
**LEUPHANA**  
UNIVERSITÄT LÜNEBURG

## VENUE

**Leuphana University  
Universitätsallee 1,  
21335 Lüneburg**

The Summer School on Sustainable Chemistry for Sustainable Development is jointly organised by the Research and Education Hub of the ISC3, the chair for sustainable chemistry and physical resources at the Institute of Sustainable Chemistry of Leuphana University Lüneburg and CAPCI, the Climate Action Programme for the Chemical Industry at the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

[www.isc3.org](http://www.isc3.org)  
[www.leuphana.de/en/institutes/insc](http://www.leuphana.de/en/institutes/insc)  
[www.giz.de](http://www.giz.de)

### REGISTRATION

Please register via the link on our website:  
[www.leuphana.de/summer-school-s3c](http://www.leuphana.de/summer-school-s3c)

### ACCOMMODATION

A list of hotels is available on our website. Please make sure to book your accommodation as soon as possible!

### COSTS

No registration fee!

### TRAVEL GRANTS

Participants from Africa, Asia, Middle-East, Middle- and South America, Ukraine are eligible for a restricted number of travel grants. Details are outlined on our website.

## AGENDA

**10.7.2023 – 11.7.2023**

Part 1: General Concepts and Approaches of Sustainable Chemistry

**12.7.2023**

Part 2: Sustainable Chemistry and Climate Change Lectures and topic-related workshops

**13.7.2023**

Excursion to a company in a topic-related business field to gain insights into up-to-date approaches and challenges to tackle the climate crisis

**14.7.2023**

Poster presentations / discussion of findings in workshops, wrap-up and administrative issues

✓ Sustainable Chemistry and Climate Crisis

✓ Sustainability concepts

✓ Low-carbon technologies

✓ Potentials in the chemical industry

✓ Stakeholder contribution

