





#### **COMPOLL Winter School 2023**

In light of the constantly increasing human population, a minimization of the impact of mankind's actions on the environment becomes a vital issue. The noise, air or water pollution as well as waste management have become one of the greatest global challenges that humans ever faced. The accomplishment of this task is particularly difficult considering the necessity of comprehensive cross-national cooperation of societies with their different development stages, language diversity, and cultural backgrounds as well as their local problems and beliefs.

In the Scope of the bilateral project "Combating Environmental Pollution through Internationalisation of Education" (COMPOLL) the Indian Institute of Technology Delhi (IIT Delhi) together with the Institute of Lightweight Engineering and Polymer Technology (ILK) of the TU Dresden invite interested graduates and PhD students to join the COMPOLL Winter School on Pollution, Life-Cycle Assesment and Recycling from November 27<sup>th</sup> to December 1<sup>st</sup>, 2023 in New Delhi, India.

## **Program**

The joint winter school of the IIT Delhi and the ILK - with further associate partners and guest from Dresden area - will address the following five **focus topics** in five days:

# (1) Noise pollution

Keynote speaker: **Prof. Dr. Ashish K Darpe** (Department of Mechanical Engineering, IIT Delhi)

Invited keynote speaker: **Prof. Dr.-Ing. habil. Ercan Altinsoy** (Chair of Acoustics and Haptics, TU Dresden)

# (2) Water pollution

Keynote speakers:

**Ass.Prof. Dr. Bahni Ray** (Department of Mechanical Engineering, IIT Delhi), **Dr. rer. nat. André Lindner** (School of Civil and Environmental Engineering, TU Dresden)



## (3) Air pollution

Keynote speaker: **Ass.Prof. Dr. Debabrata Dasgupta** (Department of Mechanical Engineering, IIT Delhi)

# (4) Life-Cycle Assessment (polymers, fiber-reinforced composites) Keynote speaker: **Prof. Dr.-Ing. habil. Maik Gude** (ILK, TU Dresden) Invited keynote speaker: **Prof. Dr. rer. nat. Kathrin Harre** (Chair of Technical Chemistry, Faculty of Agriculture/Environment/Chemistry, HTW Dresden)

## (5) Recycling (biomass, technical polymers)

Keynote Speaker: **Prof. Dr. Christina Dornack** (Institute of Waste Management and Circular Economy (IAK), TU Dresden)

The COMPOLL Winter School 2023 includes a combination of technical presentations from renowned experts on the topics, exciting practical workshops for using the acquired knowledge, and competitive group challenges for the participants to prove the gained abilities. The winter school will guide the participants through different aspects of the pollution, its causes, its effects on the human body, and suggest scientific-technical solutions for the reduction and management the problems.

At the end of the winter school, an extended awareness of pollution will be generated among the attendees. Besides that, the participants will learn how to address pollution and will be trained with state-of-the-art solutions approaches. Additionally, they will have the opportunity to reach out to the broad scientific network of the IIT Delhi. Successful attendees will be awarded with a **certificate of participation**.

The scientific program will be accompanied by many different leisure activities; social events such as a gala dinner or an ice-breaker event at the beginning of the winter school. A guided city tour through the vibrant mega metropolis New-Delhi and its cultural attractions, as well as a comprehensive Campus Tour at the IIT Delhi will complete the framework program.

# Call for participants

Open call for excellent graduates (advanced students) or phD students to participate in the COMPOLL Winter School 2023.

The global challenges of pollution: the noise, air and water pollution as well as waste management, need scientific, interdisciplinary and international approaches to combating and reducing the problems. Identifying the evident causes of pollution and its effects on the planet and consequently on the health and wealth of billions of people is a major key point to generating pollution awareness. Smart solutions that also incorporate the local dependencies in economic and social issues are therefore mandatory. Therefore, it is particularly important to involve young scientists in international networks such as COMPOLL early to develop long-term scientific cooperation and education programs across and between Europe and the Global South. Resource-neutral lightweight engineering and design with modern multi-functional materials strengthened by Life-cycle Assessment (LCA) methodology can promote key technologies and important solutions for the pollution and waste management issues.



#### Applicant profile and Application procedure

Are you an excellent advanced student (graduates<sup>1</sup>)/ PhD student of study programs/ fields of study or with scientific interests which show thematic intersections with the focus topics of the COMPOLL Winter School 2023? – Then, you are welcome to send your comprehensive application to ILK-International@tu-dresden.de by August 15<sup>th</sup>, 2023, including the following records:

- A letter describing your motivation to participate (max 500 words)
- A brief CV (max. 2 pages)
- Transcript of Records

#### Selection criteria and Selection procedure

The selection of the participants is based on the submitted application documents. Selection criteria will be the academic excellence, the motivation for participation and the English language skills. Following our equal-opportunity policy, we will - in case of equal academic qualification - give preference to applicants from less advantaged socio-economic backgrounds, minorities, and people with special needs. We expressly encourage female students to apply for the Winter School.

Applicants will be informed by **the end of September 2023** if they have been selected for participation and will receive a Letter of Confirmation.

# Funding for participants

Participants will be accommodated in the student guesthouse directly on the IITD campus on the costs of the project. In addition, participants from Dresden or Germany can be paid a travel allowance up to the amount of the travel flat-rate of € 1.050 from the COMPOLL funds upon submission of receipts for travel expenses (travel tickets, boarding passes, etc.) but also for additional travel expenses such as visa fees, expenses for vaccinations, excess baggage, baggage insurance, etc.

## Coordination and Contact at the ILK

Scientific Coordination: **Dipl.-Ing. Christian Düreth**, Expert Group Testing Methods and Material Models, +49 (0)351 463-37940, <a href="mailto:christian.duereth@tu-dresden.de">christian.duereth@tu-dresden.de</a>

Administrative Coordination: **Radka Tomečková**, International Office Advisor, +49 (0)351 463-37956, <u>ILK-international@tu-dresden.de</u>



<sup>&</sup>lt;sup>1</sup> Graduates include master's students or students in a postgraduate program who have already completed a bachelor's degree. For diploma students, the equivalence must be assessed individually - in the application process, applications from diploma students with at least a completed undergraduate degree (*Grundstudium*) will be considered.