



***Expert Workshop: Protection of Health and the Environment
Workstream Sustainable Building and Living, Focus on Plastics***

Graz, Austria, September 13th, 2019

The International Sustainable Chemistry Collaborative Centre (ISC₃) is organising a series of international expert workshops within its workstream Sustainable Building and Living with the focus on Plastics.

The workshop in Graz is devoted to the topic Protection of Health and the Environment. It is taking place during the Conference Sustainable Built & Environment SBE19 on September 13th, 2019. It will bring together diverse stakeholders from universities, industry, NGOs, international organisations and politics.

The participants will discuss how to drive the construction products and especially plastics towards sustainability in sense of SDGs looking at the health issues and environmental problems. The round table will have a look at the most relevant innovations in the field of plastics and its alternatives in building.

The ISC₃ will present the preliminary study on plastics in construction, which was conducted last year within the workstream. The key questions for the workshop concentrate on:

- What properties and special features of plastic products contribute to sustainability?
- Where do plastic materials provide benefits for affordable housing in times of rapid urbanisation without compromising health and the environment?
- For which plastics construction materials and additives substitution is required for health and environmental reasons?
- What are alternative solutions for plastic products?
- How can construction plastics be reused and/or recycled at the end of their lifecycle?
- What plastics are subject for concerns regarding waste and emissions throughout the life-cycle?
- For which applications plastic materials & additives are superior to other construction materials, why?
- What is the cost/benefit relation for the use of plastics?
- How can the environmental performance of the building materials be evaluated over their life cycle?
- How does waste and waste water from the construction phase impact local environment?
- What are the main criteria to assess sustainability of construction and buildings?
- Are there any Green Building assessment systems like LEED or BREEAM that consider affordability?

The results of the workshop with stakeholders will give input to the corresponding topics in the report to be drafted by an experts' board and presented at the Sustainable Chemistry Week in Spring 2020.

As a new and independent organization, the ISC₃ aims to accelerate the global breakthrough of sustainable chemistry by promoting innovation, assessing processes and products and stimulating the international debate on the future of chemistry.



- Objectives**
- To identify and examine the innovative fields in building products with focus on plastics.
 - To identify the substances of concern, the required substitution and the health and environmental issues such as indoor emission and toxic waste
 - To collect expert feedback on the crucial questions in workstream shaping the input for the final report and setting agenda for policy makers and industry.
- Participants** Stakeholders from academia, industry, NGOs, international organisations and politics international participants from global companies and institutions relevant to the subject:
- Chemistry and materials manufacturers: polymer and construction chemical producers
 - Construction engineers, architects, building craft
 - Facility Managers
 - Housing Associations
 - Recycling and waste sector
 - Ministries (Construction, Environment) and subsequent agencies
 - NGOs (Consumer Protection)
 - International Organisation
 - Academics (relevant researchers and scientists)
- Date/Time** September 13th, 2019, 9:30 am – 1:00 pm
- Venue** Graz University of Technology, Rechbauerstraße 12, 8010 Graz, (Room tbc.)
<https://www.tugraz.at/en/events/sbe19/venue-and-accommodation/>

Contact and further information

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Agenda

Friday, September 13th 9:30 am – 1:00 pm

Welcome and Introduction

- 09:30 Registration & Welcome
- 09:40 Introduction of ISC₃ – C. Cinquemani, Director Science & Innovation, ISC₃
- 09:50 Workstream Plastics in Sustainable Building & Living, O. Ditkovskiy, Workstream Manager, ISC₃
- 10:00 Preliminary Study Plastics in Construction, Prof. Dr H. Friege, Leuphana University
- 10:10 Introductory round for participants

Session 1: Presentations by the guest Speakers

- 10:30 Overview of the LEVELS framework, J. Lindblom Ph.D., DG Environment, EU Commission (TBC)
- 10:40 Application of Building Physics for Climate Change Mitigation, Prof. Jan Tywoniak, Deputy Head of Department Building Structures, Czech Technical University (TBC)
- 10:50 Plastics & Environment, D. Russo, CEO, Think Beyond Plastic (TBC)
- 11:00 Plastics in Building, R. Baunemann, Ph.D., Head of Plastics Europe (TBC) / H. Schratt Head of Plastic Europe Austria (TBC)

11:10 Networking Coffee Break

Session 2: Round Table Discussion on Key Questions in Workstream

- 11:30 Discussion on the key questions, moderated by ISC₃ (Ditkovskiy, Friege)
 - Health Issues connected to Polymer Products in Building & Living (e.g. indoor emissions)
 - Environmental issues (plastic waste)
 - Alternative solutions for Plastics in construction / Substitution
 - Lifecycle of the buildings, Recycling, Reuse of plastic materials
 - Properties of plastic products contributing to Sustainability
 - Evaluation of performance and Sustainability of the buildings
 - Costs and benefits of plastic products
 - How to drive construction products towards Sustainability?

12:45 Short break for further exchange

- 12:45 Summarizing the discussion, ISC₃
- 13:00 End of the workshop