



# Organic Waste Treatment with Larvae of the Black Soldier Fly: A Win-Win-Win-Solution?

Wednesday 15 May
11:30 - 13:30
Plus Networking Opportunity
until 14:00

IFAT Fair
Conference Room B62
Munich, Germany

# Contact:

Anja Schwetje, German Environment Agency and ISWA WGCCWM Vice Chair, <a href="mailto:anja.schwetje@uba.de">anja.schwetje@uba.de</a>
Peter Simoes, ISWA WGCCWM Chair, <a href="mailto:p.simoes@harvestwaste.com">p.simoes@harvestwaste.com</a>
Aditi Ramola, ISWA WGCCWM Coordinator, <a href="mailto:aramola@iswa.org">aramola@iswa.org</a>





#### Session title:

Organic waste treatment with larvae of the Black Soldier Fly: A Win-Win-Win-Solution?

#### Session Links:

Organic waste treatment with larvae of the Black Soldier Fly: A Win-Win-Solution? | IFAT - Weltleitmesse für Umwelttechnologien

## Session brief / concept note:

Insect meets IFAT! Exchange of experience with internationally experienced experts on black soldier flies (larvae), which are successfully used in tropical climate zones for the production of insect protein, for the treatment of biowaste and for methane reduction and whose residues, called "frass", serve as a soil conditioner. Get inspired by the expertise of Eclose GmbH, **CARBON TURNAROUND**, Dr. Kölsch Geound Umwelttechnik GmbH or Eawag, with the participation of the PREVENT Waste Alliance, of ISWA, the Climate and Clean Air Coalition (CCAC) and the German Environment Agency.

### Target audience

Members of international delegations to IFAT, waste experts from public and private sector; NGOs; researchers; Social media, newsletters

#### **Format**

Presentations and a moderated panel discussion with questions from the audience and networking.

#### Agenda

### Welcome

by Aditi Ramola -ISWA and Anja Schwetje, German Environment Agency (UBA)

#### **Presentations**

- Introduction to the BSF management and technology by Stefan Diener, Eclose (20 min)
- Amplifying BSF through the PREVENT Waste Alliance by Martin Kerres, GIZ (5 min)
- BSF in Latin America: Progress and Prospects with a spotlight on Peru (7 min) by Herwig Ragossnig, CARBON TURNAROUND

# Moderated Panel Discussion and Q&A with Audience

- Christian Zurbrügg, EAWAG, Switzerland, on a CCAC-co-funded BSF Action in Sub-Sahara-Africa and challenges in implementation of BSF Technology
- Stefan Diener, Eclose, Switzerland, on a GIZ-co-funded BSF Action in Sub-Sahara-Africa
- Herwig Ragossnig, CARBON TURNAROUND, on a CCAC-co-funded BSF Action in Peru
- Daniela Peguero, EAWAG, on the SWIFT project (https://www.eawag.ch/en/department/sandec/projects/swift/)
- Lucy Kölsch, Master Student, Urban Ecosystem Sciences, Technical University Berlin on a smallscale BSF project in Sansibar/Tanzania

## Moderation:

Felix Römer, German Environment Agency (UBA)







# Speaker bios and photos



**Stefan Diener** *Founder and Co-Manager of Eclose GmbH* 

Stefan Diener holds an MSc in biology from ETH Zurich, specializing in ecology and entomology. His PhD at ETH Zurich focused on upcycling organic waste using Black

Soldier Fly (BSF), demonstrating his commitment to practical environmental solutions. With his extensive experience in R&D projects in low- and middle-income countries, Stefan is now founder and co-managing Director of Eclose, a spin-off from Eawag. Eclose provides global consulting, feasibility studies, and project supervision for BSF projects.

Martin Kerres
Advisor, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Martin works in circular economy and water and their linkage with climate change mitigation and adaptation for 15 years. He is an advisor on climate and organic waste of the GIZ programme Go Circular since 2022 and manages the PREVENT Waste Alliance Working Group on Organic Waste. Before joining GIZ in 2015, he was an Associate Programme Officer working on integrating climate risks into the operations of the Inter-American Development Bank (IDB) and advised the KfW development bank. He holds a Master of Science in IWRM from the Technical University of Cologne and Jordan University.

Lucy Kölsch Master Student, Urban Ecosystem Sciences, Technical University of Berlin

Lucy Kölsch, who has studied environmental engineering at the University of Rostock, is currently a master student in urban ecosystem sciences at the technical university of

Berlin focusing on urban agriculture and a working student in geotechnics and civil engineering at CDM Smith Leipzig. A small-scale project on Zanzibar dealing with the treatment of household waste using BSF-Larvae is part of her bachelor thesis. Her master thesis addresses the potential of compost from market waste as a part of substrates for urban gardening in Dar es Salaam, Tanzania.

**Dr. Daniela Peguero**Post-doctoral Researcher at the Swiss Federal Institute of Aquatic Science and Technology

Eawag

Dr. Daniela Peguero is a post-doctoral researcher at the Department Sanitation, Water and Solid Waste for Development, at the Swiss Federal Institute of Aquatic Science and Technology (Eawag). In 2023, she completed her Doctorate at ETH Zurich, where her research concentrated on enhancing the efficiency of black soldier fly larvae in processing fibrous biowastes. Her focus is on the improvement of sanitation and solid waste management through the use of black soldier fly larvae in low and middle income countries and she currently serves as associate editor for the Journal of Insects as Food and Feed.







Herwig A. Ragossnig founder and managing partner of CARBON TURNAROUND

Herwig A. Ragossnig is founder and managing partner of **CARBON TURNAROUND**, a specialized consulting engineering company in circular economy, decarbonization and sustainability transformation. Focus of his activities is organic waste management in

developing nations to contribute to efficient methane emission reduction by diverting organic waste from landfilling applying the BSF insect technology. Herwig has a 20-year-long professional track record in business - and project development in the sustainability, climate change and renewable energy sphere and is a MSc graduate in Renewable Energy Development from the Heriot-Watt University in Edinburgh, UK. He also holds a master's degree in Environmental System Sciences from the Karl-Franzens University of Graz, Austria and did study at the Center for Sustainability Management at the Leuphana University in Lüneburg, Germany.

# Christian Zurbrügg

Senior researcher and Group Leader; at the Department Sanitation, Water and Solid Waste for Development, at the Swiss Federal Institute of Aquatic Science and Technology (Eawag)

Christian Zurbrügg currently heads the Solid Waste Management research group as senior researcher and Group Leader; at the Department Sanitation, Water and Solid Waste for Development, at the Swiss Federal Institute of Aquatic Science and Technology (Eawag). Besides his position at Eawag, he is also adjunct professor at the Department of Energy and Technology, Swedish University of Agricultural Sciences (SLU) in Uppsala, Sweden. His current research interests lie in the interdisciplinary approach of upgrading infrastructure and services in urban areas of low and middle income countries - with a special focus on solid waste management and sanitation and particular interest in resource recovery options. He has led several international programs and projects, published many scientific articles and book chapters on appropriate technology and enabling environments in low income settings, and serves on many international committees, task forces and juries.

### Moderation:



**Felix Römer**Scientific Officer, Unit III2.4 Waste Technology, Waste Technology Transfer
German Environment Agency (UBA)

Dr. Felix Römer works as a Scientific and Policy Officer at the German Environment Agency in the areas of organic waste treatment, technology transfer, and critical

entities' resilience. He monitors alternative treatment methods such as home composting and black soldier fly cultivation. Further experiences include the reprocessing of mining wastes (PhD at Clausthal University of Technology) and project management in recycling plant engineering.