

IECO DAYS

Welcome to our SCIENCE DAY!

Prof. Andreas Braun, Institute of Regional Science, KIT

October 2021









IECO Days 2021

Program short overview

5-6 October, 10-12 hrs Chile / 15-17 hrs DE

DAY	ACTIVITIES OF THE DAY
	I. Inauguration and Welcome by Prof. Thomas Hirth, Vice-President for Innovation and International Affairs of KIT.
Tue 05. October	I. Berrillel and the
INNOVATION DAY!	 I. Parallel sessions: Start-up block: share&learn activities with Start-Ups from Germany and Chile "Green Hydrogen Technologies": keynote speech, presentations of IECO Universities and roundtable discussion with distinguished guests.
	I. General session with the latest news and information about IECO activities.
	II. Parallel Topic Sessions:
Wed 06. October	T1 – Sustainable Usage of Water and Energy in an Urban Context
SCIENCE DAY!	T2 – Sustainable Material and Energy Transformation of Biomass * T3 – Eco-Industrial Utilization of Resources from the Subsurface
	T4 – Urban Eco-Industrial Development in South-America * T5 – Sustainable Land Use * Private sessions, for Topic Teams only.

Full program description with the names of all our guests under:

https://ieco-institute.com/events.html











GENERAL SESSION "IECO HIGHLIGHTS"



- I. Express-introduction to IECO (for all newcomers)
- II. IECO Edited Volume
- **III.** Lectures series
- **IV. IECO Summer School**
- V. Alumni Seminar (KIT-IECO)
- VI. Further highlights











Express-introduction to IECO for newcomers



IECO



WHAT IS IT?

The virtual **Institute of Eco-Industrial Development -** IECO, facilitates the **creation and structuring of** multidisciplinary and transnational networks. As an institute composed by members of four universities, its objective is to carry out joint **research**, **teaching and innovation** on topics of **industrial ecology and industrial sustainability**.

The **implementing universities** are:

- Karlsruhe Institute of Technology
- University of Chile
- Austral University of Chile
- University of Concepción



Partners: SOFOFA Hub, IUSLatam, Fraunhofer Chile, KIT Alumni Club Chile

Cooperation with strategic stakeholders such as: DAAD, ANID, CORFO, ProChile, CAMCHAL, German and Chilean embassies as well as actors from private sector.

IECO is based on a long history of cooperation between KIT and its Chilean partners (Chile is a strategic partner country of KIT) and draws on the expertise of more than 30 individual research institutions with funds from the Federal Ministry of Education and Research (BMBF).









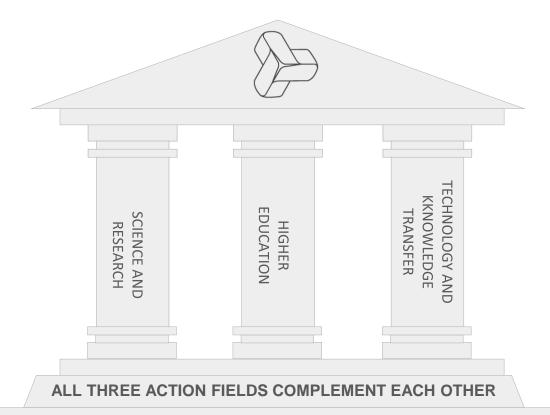


IECO

Three action fields

The aim is to create and support multidisciplinary and transnational networks for the collaboration on Eco-Industrial development topics in three fields of action:

- SCIENCE AND RESEARCH: publications, research projects, individual research proposals and major joint applications.
- HIGHER EDUCATION: postgraduate joint lectures, co-tutelles, student's exchange, joint academic offers.
- TECHNOLOGY AND KNOWLEDGE TRANSFER: collaboration with the industry, innovation platform for entrepreneurship.



N. I. FOUR IMPLEMENTING PARTNERS SURPORTING THE ACTION FIELDS

ALL FOUR IMPLEMENTING PARTNERS SUPPORTING THE ACTION FIELDS











IECO

Thematic areas

The implementing partners have defined **five thematic areas (topics)**, each led by a team of **German-Chilean topic spokesperson**, and strive to generate **joint projects under IECO's thematic umbrella** in the action fields of **research**, **teaching and innovation**



Topic 1: Sustainable use of water and energy in urban areas

Dr. W. Poganietz (KIT) & Dr. C. Sepulveda (UACh)



Topic 2: Sustainable material and energy use of biomass

Prof. F. Schultmann (KIT) & Dr. A. Berg (UdeC)



Topic 3: Eco-industrial use of subsoil resources

Prof. E. Schill (KIT) & Prof. D. Morata (UCH)



Topic 4: Urban ecoindustrial development in South America

Prof. R. Vallebuona (KIT) & Dr. L. Agurto (UACh)



Topic 5: Land use and industrial sustainability Prof. A. Braun (KIT) &

Dr. Daniela Manuschevich (UCH)

Details about the Topis Spokespersons and about the main focus of the work on each topic in the IECO Website: https://ieco-institute.com/topics.html











IECO Coordination Team

Supporting the network and joint actions

Coordinators at each university

KIT

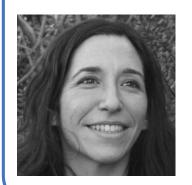


Dr. Gabriela Espinosa

UACh



Dr. Lorenzo Reyes



Andrea Pino

UdeC



Dr. Alex Berg



Dr. Alejandra Stehr

UChile



Dr. Luis Vargas

International Affairs (KIT)



Irma Mantilla



Pascale Kohler













IECO Edited Volume



Eco-Industrial Development as an industrial strategy – Contributions from a German-Chilean Research Cooperation

Editors: Braun, A., Espinosa, G., [*Topic Spokespersons*], Hirth, T.

General book structure

Part A: Introductory concepts of Eco-Industrial Development

Part B-F: IECO Topics I-V

Chapter X.1.: Introductory Text

• Chapter X.2 bis X.4: Case studies from Germany and Chile

• Chapter X.5: Summary and Future Perspectives

Part G: General Summary

Author teams from all IECO universities and a total of 40 contributions

Book presents insights of our research and collaboration agenda within the topics and is a resource for joint teaching

Publication aimed in winter 2021-2022, to be placed in Springer's "Green Energy and Technology" series











International lecture series

WINTER SEMESTER 2021-2022

The KIT Institute of Regional Science, in collaboration with CuKnow and IECO, holds an international (virtual) lecture series in winter semester 2021/22:

Critical Perspectives and Contending Concepts of Sustainability

International experts will discuss and deconstruct the concept of sustainability, and present alternative perspectives to work towards a more comprehensive understanding of sustainability and sustainable development.

The virtual lecture series is open to all interested (advanced) students, PhD students, postdocs and researchers.

More details:

https://www.ifr.kit.edu/lecture series sustainability.php











IECO Summer School 2021 (2022!)

Financially supported by DAAD

1 week Summer School in Chile (Valdivia, hosted by UACh):

- ☐ Lectures on all IECO Topics
- ☐ Entrepreneurship elements linked to Eco-Industrial findings
- ☐ Excursions to relevant project sites
- ☐ Hands-on sessions
- Cultural events

Open to advanced graduate students of the IECO Universities (Master and PhD)

- Due to COVID it had to be canceled in the originally planed format for November 2021.
- We are working on a **reduced hybrid/virtual format** in 2021: expect news in the coming weeks.
- Re-application to DAAD to realize full format in 2022: expect news soon!











KIT Alumni Seminar in collaboration with IECO

To be planned for end of 2021

Originally planned to be held in Santiago de Chile as a 3-day seminar

Travel restrictions in Chile are still in place.

- → A virtual event will be planned with the Alumni Club Chile for the end of this year
- → KIT experts and KIT Alumni will share and discuss current projects/activities

News will be posted on IECO website. Stay tuned!

https://ieco-institute.com/news.html











Further highlights

- International Excellence Grant: To support our strategic cooperation. A Chilean researcher from the UCh received this grant for a 3-month stay at KIT and collaborate in IECO topics.
- **Research stays** of students from the UdeC and UACh thanks to IECO facilitation for the Baden-Württemberg Foundation Scholarships
- EXPONOR Chile 2022: Germany as guest country with IECO in the Task Force for German portrayal together with further selected organisations
- Actions and highlights from within the Topics: Right after this general session in the TOPIC sessions
- Intensified collaboration with **IECO Partners** to be expected in 2022: Fraunhofer Chile, SOFOFA Hub, IUSLatam, KIT alumni Club Chile.

Register to our IECO Newsletter to stay informed and contact the coordination teams with your ideas and enquiries.













Join the community and shape IECO with us!

www.ieco-institute.com







