

Organisation & Support

The ITI HiFunMat summer schools are open to all students and researchers interested in cross-disciplinary subjects that treat current societal challenges. With this in mind, and following on from the 2022 (energy) and 2023 (health) summer schools, the 2024 HiFunMat summer school will be dedicated to the cross-disciplinary theme «the environment».

This summer school is supported by the University of Strasbourg Initiative of Excellence, and partner institutions. Their support underlines the formidable links between ITI HiFunMat and its partners, the strong collaborations, and the strength of the alsacian site in Material science.

Funded under the **Excellence Initiative** program &



General & contact information

- iti-hifunmat.unistra.fr
- 1st - 4th of July 2024
- Collège Doctorale Européen
46 Boulevard de la Victoire
67000 Strasbourg France
- Gala dinner - Kammerzell
16 Place de la Cathédrale
- WIFI network Osiris

Scientific organisation
Valérie Caps | Institut de chimie et procédés pour l'énergie, l'environnement et la santé
Quentin Raffy | Institut pluridisciplinaire Hubert Curien
Emmanuel Oheix | Institut de Science des Matériaux de Mulhouse

Project Manager
Melodie Galerne | ITI HiFunMat
melodie.galerne@unistra.fr

Hierarchical and functional materials for health, environment and energy | HiFunMat

The interdisciplinary thematic institutes of the University of Strasbourg & CNRS & Inserm

Summer school Materials for the environment and the society

Preservation of the environment is crucial, as it is becoming increasingly clear that it determines the future of our societies and survival on Earth. The 2024 summer school will offer an overview of developments in materials science and research on this theme. From analysis systems for measuring water and air pollution to ecological restoration, hydrogeological studies, chemical, physico-chemical, photochemical and biological methods of depollution, recycling and recovery of pollutants, materials are omnipresent, at different scales.

The program has been designed to reflect the diversity of techniques developed by scientists to analyse, preserve and repair the environment and eco-systems, and to understand the degree of mastery, progress and scope of these different techniques. It includes seminars aimed at anchoring these technical developments in a broader societal reflection on sustainable development.



© USGS from Unsplash

01 July

Socio-economical aspects of the environment

08h30	Registration
08h45	Welcome & Introduction
09h00	From sustainable development towards sustainable ecological transitions Julien Delord Unistra
10h00	Droit et transition écologique Marie-Pierre Camproux Duffrene SAGE
11h00	<i>Coffee break / Poster session</i>
11h30	Economie comportementale : comment impulser le changement ? Anne Rozan ENGEES
12h30	<i>Lunch / Poster session</i>
13h30	Circularity & challenges of eco-design Valérie Massardier INSA Lyon
14h30	<i>Coffee break / Poster session</i>
15h00	Life cycle analyses Arthur Laporte APESA Toulouse
16h00	Interdisciplinary workshop 1
17h30	Being a scientist today Public conference by Jérôme Santolini CEA

02 July

Materials Environmental Analysis & Remediation

08h30	Daily sign-in participants
08h45	Introduction to today's theme
09h00	Ecological engineering for urban waters sustainable management / Case studies in Strasbourg Adrien Wanko ICube
10h00	A citizen science project : the impact of urban pollution on plants B. Lebeau & L. Gondet IS2M & IPHC
11h00	<i>Coffee break / Poster session</i>
11h30	Transformation, impacts and remediation: the challenges of micropollutants in soil and water Gwenaël Imfeld ITES FERED
12h30	<i>Lunch / Poster session</i>
13h30	How to apply LCA in an anthropized watershed: engineered TiO ₂ Nps in the Thur valley Gaetana Quaranta IPHC
14h30	Air pollution control: capture of fine particles Charlotte Pham SICAT SAS
15h30	<i>Coffee break / Poster session</i>
16h00	Materials for air and water remediation: zeolites & clays A. Simon-Masseron & J. Brendlé IS2M
17h00	Interdisciplinary workshop 2

03 July

Recycling & Recovery

08h30	Daily sign-in participants
08h45	Introduction to today's theme
09h00	Biobased Polymers for a greener future Luc Averous ICPEES
10h00	Valorisation énergétique de la biomasse Barbara Ernst IPHC
11h00	<i>Coffee break / Poster session</i>
11h30	CO ₂ chemistry for climate. A transition, really? Alessandra Quadrelli IRCELYON
12h30	<i>Lunch / Poster session</i>
13h30	Strategic heavy metals recovery Maria Boltoeva IPHC
14h30	Indoor air quality Stéphane Le Calvé ICPEES
15h30	<i>Coffee break / Poster session</i>
16h00	Interdisciplinary workshop 3

04 July

Healing the Environment

08h30	Daily sign-in participants
08h45	Introduction to today's theme
09h00	Ecological restoration: better equipment for better practices Isabelle Combroux LIVE
10h00	Transformation des territoires : vers la sobriété et la neutralité carbone Closing conference by Nadège Blond LIVE
11h00	<i>Coffee break / Poster session</i>
11h30	Student synthesis on the interdisciplinary workshops

20h00 Gala dinner - Kammerzell