



Joint Workshop

4TU.Energy & 4TU.High-Tech Materials

on

Energy materials, technologies, and sustainable recycling strategies

De Witte Vosch (Utrecht), Tuesday 13 May 2025

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Aim of the workshop

This joint workshop is targeted to early stage researchers to meet and find their common ground on energy materials and sustainable recycling strategies; it is the opportunity to get together to share knowledge and explore collaborations. If it is successful in content and in organization, follow-ups workshop on other topics or joint efforts on funding proposals can be expected.

Materials for Electrochemical Applications & Electrochemistry, Fuel Cells, Electrolysers, CO₂ Capture & Conversion

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Scientific Committee

Ruud Kortlever (TUD) Francesco Maresca (RUG) Mina Shahi (UT) Amir Mahmoudi (UT) Akbar Asadi Tashvigh (WUR) Diletta Giuntini (TU/e) Davoud Javari (UT) Maja Rücker (TU/e)

Organisation

Reina Boerrigter – 4TU.HTM (TUD) Sha Lou – 4TU.Energy (TU/e)



TU/e EINDHOVEN UNIVERSITY OF TECHNOLOGY

UNIVERSITY OF TWENTE.



4TU.

4TU.Energy



| 9.30 | Walk-in and coffee | |
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| 10.00 - 10.10 | Welcome Arjan Mol (TU Delft, scientific director 4TU.HTM) and David Smeulders (TU Eindhoven, scientific director 4TU.Energy) | |
| 10.10 - 11.30 | Plenary session on Energy materials | |
| 10.10 - 10.15 | Introduction by the chair of this session (5)- <u>Diletta Giuntini</u> | |
| 10.15 - 10.45 (25+5) | Marta Costa Figueiredo (TU/e) - Material challenges in electrocatalysis – unravelling active sites | |
| 10.45 – 11.15 (25+5) | Harry Bitter (WUR) - Supported potassium carbonate and dual functional materials for direct air capture and conversion | |
| 11.15 - 11.30 | Panel discussion and move into parallel sessions | |
| 11.40 - 12.20 | <u>Chair: Francesco Maresca</u> Materials for Fuel Cells | <u>Chair: Amir Mahmoudi</u> Materials for CO ₂ capture |
| 11.40 - 12.00 12.00 - 12.20 | Vassilis Kyriakou (RUG) Aayan Banerjee (UT) | Louis de Smet (WUR) Talk (15+5) |
| 12.20 - 13.30 | Lunch + posters | |
| 13.30 - 14.30 | <u>Chair: Akbar Asadi Tashvigh</u> Plenary session on Sustainable Recycling Strategies | |
| (25+5) | Ian Gibson (UT) – Remanufacturing: a new challenge for AM | |
| (25+5) | Shoshan Abrahami (TUD) – Recycling Strategies for Energy Materials | |
| 14.30 - 15.00 | Poster / Pitch Session | |
| 15.00 - 15.30 | Break + posters | |
| 15.30 - 16.00 | <u>Chair: Davoud Jafari</u> Materials for Electrolysers | Chair: Ruud Kortlever CO ₂ Capture & Conversion processes |
| 15.30 - 15.50 15.50 - 16.10 16.10 - 16.30 | Marco Altomare (UT) Khatereh Roohi (TUD) Talk (15+5) | Jingxiu Xie (RUG) Elsa Best (15+5) Talk (15+5) |
| 16.30- 17.30 | Closure, drinks & bites | |
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