

Registration fee before July 31th, 2026:

- 200 € per person for regular attendants
- 150 € per person for Ph.D. candidates and other students

Registration fee after July 31th, 2026:

- 250 € per person for regular attendants
- 200 € per person for Ph.D. candidates and other students

Deadline for the submission of abstracts for posters:

- July 31th, 2026.

Contact and Registration:

IR-EMPOWER@cae-zero carbon.de



After receiving your registration, we will send you a confirmation together with the invoice. The registration fee is non-negotiable and payable upon receipt of the invoice.

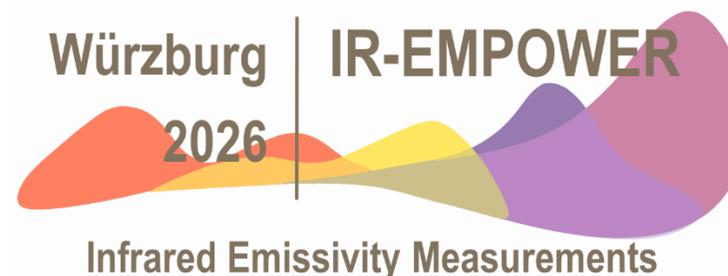
For cancellations before August 31th, 2026, we do not charge any cancellation fees, whereas after that date, the full registration fees will be due, even if you do not attend.

Sponsors:



IR-EMPOWER Workshop on Infrared Emissivity Measurements

September 28th and 29th 2026



A place to discuss infrared emissivity measurement in depth, including

- measurement techniques and protocols
- intercomparisons and databases
- modelling and simulations
- thermophysical metrology and applications

Location: Center for Applied Energy Research (CAE)

Magdalene-Schoch-Str. 3, 97074 Würzburg, Germany

Scientific Committee:

- | | |
|--------------------------|--------------------------|
| • Konstantinos Boboridis | JRC (Karlsruhe, Germany) |
| • Tomáš Králík | ISI (Brno, Czechia) |
| • Gabriel A. López | UPV/EHU (Bilbao, Spain) |
| • Jochen Manara | CAE (Würzburg, Germany) |
| • Christian Monte | PTB (Berlin, Germany) |
| • Benoît Rousseau | LTEn (Nantes, France) |
| • Olivier Rozenbaum | CEMHTI (Orleans, France) |
| • Elisa Sani | INO (Florence, Italy) |
| • Audrey Saum-Glaude | PROMES (Odeillo, France) |
| • Richard Zhang | UNT (Denton, USA) |

Program for the IR-EMPOWER 2026 Workshop: 1st Day

Monday, September 28th 2026

| <i>Time</i> | <i>Title</i> | <i>Speaker</i> | <i>Institute City (Country)</i> | <i>Duration</i> |
|------------------|---|------------------------------------|--|-----------------|
| 08:00 | Registration | | | 45 min |
| 08:45 | Opening of the Workshop | | | 15 min |
| Session 1 | | | | 100 min |
| 09:00 | Plenary 1: New Upgrades on the Emissivity Measurement Setup at UPV/EHU | Iñigo González de Arrieta | UPV/EHU Leioa (Spain) | 50 min |
| 09:50 | The New Hemispherical Enclosure for Emissivity Measurements at PTB | Albert Adibekyan | PTB Berlin (Germany) | 25 min |
| 10:15 | Measurement of Directional Spectral Emissivity at LNE | Guillaume Failleau | LNE Trappes (France) | 25 min |
| 10:40 | Coffee Break | | | 30 min |
| Session 2 | | | | 100 min |
| 11:10 | High Temperature Emissivity Measurements of Oxide-Based Refractory Ceramics: From the Solid State to the Liquid State | Leire del Campo, Olivier Rozenbaum | CEMHTI-CNRS Orleans (France) | 25 min |
| 11:35 | Benefits and Limitations of Multi-Wavelength Pyrometry | Konstantinos Boboridis | European Commission, JRC Karlsruhe (Germany) | 25 min |
| 12:00 | Room Temperature Direct Emissivity Measurements of Spacecraft Thermal Materials | Richard Zhang | UNT Denton (USA) | 25 min |
| 12:25 | Effect of Contaminants on the Thermal Absorptivity at Low Temperatures | Tomas Kralik | CAS Brno (Czechia) | 25 min |
| 12:50 | Lunch | | | 60 min |

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Monday, September 28th 2026

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|---|---|-----------------|-------------------------------------|-----------------|
| Session 3 | | | | 100 min |
| 13:50 | Determination of Emissivity as Basis for Non-Contact Temperature Measurements in 3D-Metal-Printing | Jürgen Hartmann | THWS Schweinfurt (Germany) | 25 min |
| 14:15 | Multi- and Hyperspectral Temperature Measurement in the Additive Manufacturing of Metals | Tina Walter | BAM Berlin (Germany) | 25 min |
| 14:40 | Emissivity Measurement and its Application in Thermodiagnosics of Additive Manufacturing of Plastics and metals | Zdenek Vesely | ZCU Pilsen (Czechia) | 25 min |
| 15:05 | Ready-to-Use Emissivity Measurement Solutions for Energy and Materials Research | Karolina Haupa | Bruker Ettlingen (Germany) | 25 min |
| 15:30 | Coffee Break | | | 30 min |
| Session 4: Lab Tour and Poster Session | | | | 100 min |
| 16:00 | Lab Tour | | | 50 min |
| 16:50 | Poster Session | | | 50 min |
| 17:40 | End of 1 st Day Technical Program | | | |
| 20:00 | Workshop Dinner | | | |

Program for the IR-EMPOWER 2026 Workshop: 2nd Day

Tuesday, September 29th 2026

| <i>Time</i> | <i>Title</i> | <i>Speaker</i> | <i>Institute City (Country)</i> | <i>Duration</i> |
|---|---|------------------|-------------------------------------|-----------------|
| 08:30 | Registration | | | 30 min |
| 09:00 | Start of 2 nd Day | | | - |
| Session 5 | | | | 100 min |
| Plenary 2: Characterisation and Multi-Scale Modelling of the Spectral Emissivity of Silicon Carbide-Based Architected Ceramics for the Carbon-Free Production of Energy | | | | |
| 09:00 | | Benoit Rousseau | LTeN-CNRS Nantes (France) | 50 min |
| 09:50 | Modelling of Emissivity and Radiative Transfer in Semi-Transparent Materials | Jochen Manara | CAE Würzburg (Germany) | 25 min |
| 10:15 | Comparison of Emittance Results from Different Labs | Elisa Sani | INO-CNR Florence (Italy) | 25 min |
| 10:40 | Coffee Break | | | 30 min |
| Session 6 | | | | 100 min |
| 11:10 | Emissivity Measurements of Construction Materials with Portable Equipment | Pablo Alonso | CSIC Madrid (Spain) | 25 min |
| 11:35 | Pulse Heating Technique for Measuring the Emissivity at Temperatures up to 3000 °C | Stephan Vidi | CAE Würzburg (Germany) | 25 min |
| 12:00 | Directional-Hemispherical Reflectance Measurements up to 200 µm | Elena Kononogova | PTB Berlin (Germany) | 25 min |
| 12:25 | Direct and indirect measurement of spectral emissivity and emittance from room temperature to 4000 °C | Hunter Schonfeld | UVA Charlottesville (USA) | 25 min |
| 12:50 | Lunch | | | 60 min |

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Tuesday, September 29th 2026

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|------------------------------|--|---------------------|-------------------------------------|-----------------|
| Session 7 | | | | 100 min |
| 13:50 | Catalogue of Thermo-Optical Properties of Construction Materials | Gloria Pérez | CSIC Madrid (Spain) | 25 min |
| 14:15 | EKHI: the Open Database of Optical and Radiative Data | Jon Gabirondo-López | UPV/EHU Leioa (Spain) | 25 min |
| 14:40 | Poster Session | | | 50 min |
| 15:30 | Coffee Break | | | 30 min |
| Session 8: Discussion | | | | 60 min |
| 16:00 | Round Table & Young Speaker Award | | | 60 min |
| 17:00 | Closing | | | 15 min |
| 17:15 | End of Workshop | | | |