

Central European Research Infrastructure Consortium

Open for Industry

Energy

CERIC provides support in the development of novel materials with advanced properties to be applied to the newest systems, such as the latest fuel cells, solar cells and batteries.

- Catalysts, batteries, fuel and solar cells
- electrochemical systems, semiconductors, superconmductors and topological insulators
- Oi









Catalysts, batteries, fuel and solar cells

CERIC realizes in-depth studies down to nanometre size of new materials, applied to systems for renewable energy such as solar cells. Surface, interface and electronic properties and behaviour of catalysts, batteries and fuel cells can be defined even during operation and support can be provided for probing new catalysts at atomic level. Non-destructive tests can be also performed.

Electrochemical systems, semiconductors, superconductors and topological insulators

Studies of chemical and electronic properties and structure of materials such as semiconductors. high-temperature superconductors, topological insulators, low-dimensional materials and related devices can be carried out. Electrochemical systems can also be studied in operando. CERIC Partner Facilities offer analyses, down to nanoscale, of the surface behaviour, in-surface interactions and interface phenomena of electrochemical systems and semiconductors under realistic conditions.

Oil

CERIC can also focus on the analysis of components (e.g., absorbers) during an oil press process. High-quality data of oil samples for the petrochemical industry are also offered.