



STORAGE RESEARCH INFRASTRUCTURE ECO-SYSTEM

RI Information sheet 2022

Forschungszentrum Jülich GmbH, 52425 Jülich, Germany

Institute of Energy and Climate Research

IEK-1, Material Synthesis and Processing

Research Infrastructure: Enhanced-throughput Combinatorial Material
synthesis and Analysis Facility (CMAF)

Technology of Energy Storage: electrochemical energy storage

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Project Acronym	StoRIES
Call	H2020-LC-GD-2020
Grant Agreement No	101036910
Project Start Date	01-11-2021
Project End Date	31-10-2025
Duration	48 months



1. Photos



2. Geographical coordinates

50°, 54', 23" (N); 6°, 24', 14" (E)

3. Description of the research infrastructure for the webpage

The PVD facility allows a 2D combinatorial materials synthesis with up to four distinct educt sources and a subsequent rapid chemical (GD-OES)



and crystallographic (Raman) analysis based on autosampler technologies.

Synthesis of inorganic thin-film materials libraries with desired compositional and/or layer thickness gradients as well as chemical and structural investigation of the deposited libraries.

Services currently offered by the infrastructure: CMAF offers support in selection and preparation of sputter targets from required educt materials, library processing as well as analytics of the deposited thin-film libraries. It can be applied to inorganic (metallic, ceramic, cermet) material systems.

4. Availability of the research infrastructure

Not available on: Dec 23, 2022 to Jan 1, 2023; Feb 16, 2023 to Feb 22, 2023; Apr 7 to Apr 10, 2023, May; 1st, 2023; May 18 to May 19, 2023; Jun 8 to Jun 9, 2023; Oct 2 to Oct 3, 2023; Dec 23 to Jan 1, 2024

Site is in general unavailable on Saturday and Sunday.

5. Special considerations (confidentiality / NDA agreements, insurance requirement, special training, HSE training)

NDA agreement (depending on the project)

health insurance of the applicant with validity in Germany

short-term HSE and safety training on-site, depending on the requirements

6. Energy storage technology that can be analysed/studied by using the research infrastructure

- Electrochemical
- Chemical
- Thermal
- Mechanical
- Superconducting Magnetic
- Cross-cutting (Specifically: ...)

7. Key words for the webpage

inorganic materials, 2D combinatorial synthesis, thin film physical vapor deposition, Raman spectrometry

8. TRL level (if applicable):

- 1-3
- 4-6
- Above

