



European
Multifunctional
Materials Institute



EMMI: The Gateway to European Expertise in Functional Materials for:



ENERGY (e.g. photovoltaics, batteries, hydrogen, fuel cells)



ENVIRONMENT (sensors, membranes, catalysers)



INFORMATION TECHNOLOGY (photonics, memory storage, dielectrics)



HEALTH (bone implants, tissue engineering, drug delivery, imaging)

www.emmi-materials.eu

What is EMMI?

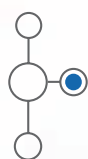


EMMI aims to promote Research and Higher Education in the field of Multifunctional Materials. EMMI specifically supports international collaborative projects and exchange of information, data and know-how.

EMMI focuses on multidisciplinary collaborations, taking advantage of the complementary know-how available among its members and partners.

The key objectives of EMMI are to:

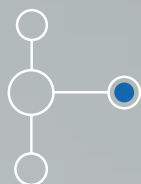
- Serve as a **European platform** for its members to **create and conduct projects** in the field of multifunctional materials science.
- Define a **legal framework for joint research projects** and **intellectual property** rights.
- Provide an infrastructure for **information exchange**, including internal and external communication tools, **databases** and organisation of conferences, **schools** and **meetings**.
- Develop long-term **collaboration with industry** partners, by offering an “adherent member” status, and providing the **services** mentioned above and others.



Fields of Research

Offering a complete chain for materials development, including materials design and modelling, synthesis and characterisation, EMMI's research topics include:

- | | |
|----------------------------------|---------------------------|
| • Electronics ceramics & hybrids | • Composites |
| • Photoactive materials | • Heterogeneous catalysis |
| • Sensors and actuators | • Photocatalysis |
| • Polymers | • Photovoltaics |
| • Coatings | • Metamaterials |
| • Ionic and mixed conductors | • Nanotechnology |
| • Biomaterials | • Etc. |



Projects and Activities

Current examples (see website for full list)



European Masters Degree Course



- Course in advanced multifunctional materials
- Two-year studies in 2 or 3 different countries
- Supported by ERASMUS MUNDUS

www.fame-master.com



METACHEM: Nanochemistry and self-assembly routes to metamaterials for visible light

- FP7 Collaborative Project 2009-13
- Coordinated by CRPP Bordeaux
- 8 academic and one industry partner

www.metachem-fp7.eu



International Doctoral School in Functional Materials

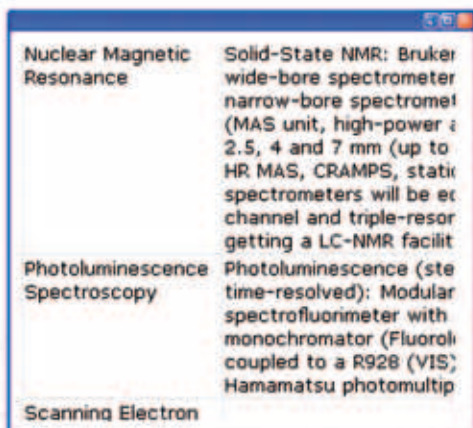


- 20 PhD projects per year in Energy, ICT, Health
- International co-supervision and industry partner for each PhD
- Annual training school
- Supported by ERASMUS MUNDUS

www.ids-funmat.org



EMMI Databases



Research Equipment database:

Specialised, often unique research equipment, software and know-how; 140 instruments and 10 simulation software packages at EMMI labs.



People and Skills database:

Over 200 materials researchers with contact data, research interests, specialised skills, key publications.



Membership



EMMI's full members are non-profit research organisations, but for commercial enterprises an adherent member status is available.

The services and benefits for members include:

- Access to a **large network of scientists** in functional materials research
- Participation in cutting-edge research **projects** with European top laboratories in materials research
- Access to **databases** for research personnel and equipment
- Invitation to **training** workshops and schools
- **Recruitment** opportunities through contact to highly qualified **students** from our European Master and Doctoral Programmes
- Strategic **reports** and white papers under preferential conditions



Current List of Full Members

(a detailed list of laboratories involved can be found at our website)

- | | |
|------------------------------------|--|
| • Université Bordeaux 1 | • Fraunhofer Gesellschaft (ISC Würzburg) |
| • Grenoble INP | • University Liverpool |
| • Université Liège | • University St Andrews |
| • Université Catholique Louvain | • Universidade de Aveiro |
| • INSA Lyon | • Instituto Superior Técnico Lisbon |
| • Technische Universität Darmstadt | |

EMMI has also signed Cooperation Agreements with the CNRS (France), the CSIC (Spain) and Augsburg University (Germany).

Adherent Industry Members

- | | |
|---------------------------|---------------------|
| • Bosch GmbH (DE) | • Schneider SA (FR) |
| • Merck KGaA (DE) | • Rescoll (FR) |
| • Solvay - Rhodia (BE/FR) | |

Contact and Further Information

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