

European Network of Materials Research Centres (ENMat)

A new opportunity for biomaterials science

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History of ENMat

After a preparatory meeting in Rome, Italy on 30/11/2004 and a first meeting with possible members in Ghent, Belgium on 11/04/2005, a number of materials research centres from different European countries decided to start up a European Network of Materials Research Centres (ENMat). The inauguration meeting took place on 4th September 2005 in Prague, Czech Republic and on 22nd May 2006 a second meeting was organized in Faenza, Italy, hosted by Prof. A. Ravaglioli from ISTECCNR. At the 10th CCT Annual Seminar and Meeting, Prof. Dr. Paul Kiekens, first president of ENMat, gives a presentation about ENMat for the first time to introduce it to a wider public.

Mission and objectives of the European Network of Materials Research Centres

The mission of ENMat was agreed upon by all founding members and can be stated as follows :

- 1) To encourage and strengthen the creation of knowledge, dissemination of results and beneficial use in materials science & technology.
- 2) To be the leading network for materials based innovations for students, researchers, engineers and industry in Europe.

This mission has been expressed into the following nine objectives :

- To create a responsive, flexible, innovative, agile and adaptive network of leading European Materials Research Centres.
- To facilitate co-operation in interdisciplinary research, development and training amongst members - from fundamental research to innovative application.
- To encourage student and staff mobility and networking amongst members and invited or co-operating partners.
- To promote the activities and achievements of the members on a European and global stage.

- To facilitate partnerships amongst members and temporary partners with materials related industries.
- To invigorate Science, Engineering and Technology (SET) outreach through the Network.
- To identify challenges and opportunities in SET and best practice.
- To identify the needs of industry, in particular SMEs, in Europe and implement targeted co-operation by seeking high added value for clients/partners/sponsors.
- To respect the highest ethical recommendations to promote Sustainable Development and to overcome barriers hindering creativity.

Activities of the European Network of Materials Research Centres

To reach the objectives several activities are planned, such as :

- Make a survey of the expertise/competences and the research infrastructure of the members in order to facilitate the development of joint research projects.
- Organise exploratory meetings to develop a joint strategy for research projects to be submitted to the EC.
- Establish working groups concerning different research topics to prepare joint projects, publish joint publications on research results, etc.
- Organise a wide variety of materials-related events (summer schools, PhD courses, thematic seminars, technical meetings, workshops, ...) and co-operate in other activities with appropriate research groups, organisations and European and national Government and Regional funding bodies.
- Stimulate the development or the establishment of a joint European Master in Materials Science and Engineering.
- Create a dedicated website for the EU Network with links to all partner websites to include a.o. :
 - Information on all member institutes
 - Publication of joint projects
 - Publication of articles concerning recent research topics
 - Newsletter
 - Announcements for conferences, seminars, ... in the domain of Materials Science.
 - Technology offers/requests.
- Production and distribution of promotion materials for the EU Network of Materials Research Centres.

Criteria for membership of ENMat

ENMat is open to all multidisciplinary research centres in materials sciences in Western and Eastern Europe, which cover different topics of materials. Candidate members have to meet the following criteria :

- Multidisciplinary research centre in materials science (local network) : academic or research centre or industrial network who deals with materials in a broader sense.
- Having high Quality & Competences in materials science
- Being active in Research & Development. They need to represent broad research activities in materials.
- Play a role in materials Education (of students and/or industry)
- Being active in Technology transfer
- Be prepared to participate in Joint Projects (also with industry)
- Limitation of the number of members per country to maximum 3.

Materials covered by ENMat members

The list of materials covered by the ENMat founding members includes :

- Metals and metal alloys
- (Bio)polymers
- Textiles
- Composites
- Ceramic materials
- Cement-based materials
- Magnetic materials
- Microporous and mesoporous materials
- Catalysts
- Sensors
- Carbon nanotubes
- Nanomaterials
- Biomaterials
- Biodegradable materials
- (Molecular) electronics
- Semiconductors
- Coatings
- Thin films and interfaces
- Biofilms
- Chemicals
- Wood and wood-based materials
- (Non-linear) optical materials
- Intelligent fluids
- Shape memory alloys

Structure of the European Network of Materials Research Centres

For the first period of two years Prof. Dr. Paul KIEKENS, CMSE/UGent, Belgium, has been elected as President of ENMat and Dipl.-Ing. Wolfgang FAUL, Centre of Excellence New Materials, Germany has been elected as Vice –president of ENMat.

The ENMat secretariat is run by :

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In the near future more information can be found on the ENMat website : <http://www.ENMat.eu>

Further the ENMat secretariat can be contacted for more information and candidacy for membership.

