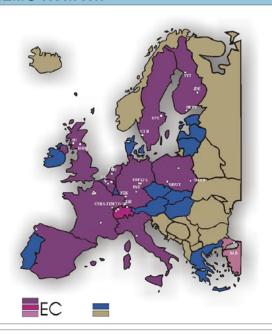
The European Dimension of the **NEMO Network**



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The NEMO partners

VUB Vrije Universiteit Brussel **FZK** Forschungszentrum Karlsruhe WUT Politechnika Warszawska FAU Friedrich-Alexander-University

Erlangen-Nümberg

Technical Research Centre of Finland VTT SCKCEN Belgian Nuclear Research Centre

NIT National Institute of Telecommunications UG Universiteit Gent

CNR Istituto di Fisica Applicata "Nello

Carrara"

HWU Heriot-Watt University KOC Koc Universitesi

CNRS Centre National de la Recherche

Scientifique

UPU Uppsala Universitet UW Warsaw University

USC Universidade de Santiago de

Compostela

TRT Thales Research & Technology CTH Chalmers Tekniska Högskola AB

JOE University of Joensuu

HEPT Heptagon Oy

IOF Fraunhofer Institute for Applied Optics

and precision Engineering

ISE Fraunhofer Institute for Solar Energy

Systems

LTG Light Trans GmbH

IMT Université de Neuchâtel

CSEM Centre Suisse d'Electronique et de

Microtechnique

SMO SUUS MicroOptics SA

WRUT Wroclaw University of Technology **UMCS** Maria Curie Sklodowska University TUD Technische Universiteit Delft

SU University of Stracthclyde

SAB Sabanci University



What is Micro-Optics ?

Micro-optics is a generic technology that allows the manipulation of light and the management of photons with "micron"- and "sub-micron"-scale structures and components. Micro-optics is therefore the corner-stone enabling technology to interface the macroscopic world we live in with the microscopic world of opto- and nano-electronic data processing circuits. It is recognized as the key-link between photonics and nano-electronics. the two dominant information technologies in tomorrow's society.

What is NEMO?

In its 2nd call under Framework 6 the EC supported the Network of Excellence on Micro-Optics "NEMO" initiative with 6.4 Million €.

NEMO is running since 1 September 2004 and aims at providing Europe with a complete Micro-Optics food-chain by setting up durable service and technology centres and long-term research centres.

NEMO will be the networking platform of 30 European partners for the next 4 years and beyond. Each of the 30 institutes involved in NEMO is a keyrole player in micro-optics.

NEMO's main objective is to structure and integrate the expertise and core-competences of its partners while strengthening their R&D activities in the emerging field of micro-optics.

WWW.MICRO-OPTICS.ORG

NEMO provides Europe with a technology food-chain for Micro-Optics

NEMO will set up 6 durable service and technology centres and make them accessible to academic research institutes. SMEs. and large companies. This way NEMO targets to embed a variety of novel micro-optical functionalities in a myriad of products and to enhance the competitiveness of European companies.



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NEMO works with Industry through its Industrial User Club

NEMO aims at

- Facilitating and stimulating access for industry to its network
- Continuously triggering and fostering R&D oriented projects with industry and research institutes
- Providing access to the Network Competences via its databases
- Promoting capabilities of its service centres
- Providing training activities for scientists and engineers
- Creating awareness and using its potential for advertising vour business
- Orienting scientific progress towards your industrial needs

Take your Advantage - get in touch with NEMO!



Industrial User Club (IUC)

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NEMO provides in-dept information on micro-optics

Through its Knowledge Management Centre NEMO gives you access to databases on

- patent portfolio's

- market survevs

- job opportunities

- roadmaps on micro-optics

- potential for e-consulting

- fabrication technologies
- materials
- modelling tools
- characterisation
- reliability
- standards
- instrumentation
- available expertise



Knowledge Management Centre (KMC)

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NEMO's creates awareness on Micro-optics

NEMO supports initiatives that create general awareness of the important role micro-optics plays in enhancing the quality of life













NEMO tackles Long-Term Research Topics in Micro-optics

NEMO will use the service and technology centres to support the network's six long-term application-oriented research topics on micro-optics. These long-term research topics aim at widening the scope of present-day European research and at introducing novel concepts and components, thus creating new photonic functionalities applicable in virtually any region of the optical spectrum and beyond. With its long-term research NEMO is targeting a wealth of novel optical and photonic applications to increase the quality of daily life and to give European industry a leading edge.



Micro-Optics for PCB- and MCM-level Interconnects

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Micro-optic Structures for Sensing Applications

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Non-Conventional Micro-optical Elements

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Platforms for Optical MEMS

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Sub-Wavelength Structured **Optical Surfaces**

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Infra-Red Micro-Optics

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Conferences Topical Meetings Gender issues