

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

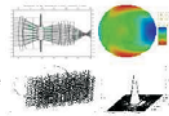
NEMO will set up 6 durable service and technology centres and make them accessible to academic research institutes, SMEs, and large companies. This way NEMO targets to embed a variety of novel micro-optical functionalities in a myriad of products and to enhance the competitiveness of European companies.



Centre for Modelling and Design

Norbert Lindlein

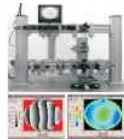
nlindlei@optik.uni-erlangen.de



Centre for Measurement and Instrumentation

Malgorzata Kujawska

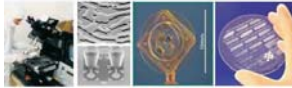
m.kujawska@mchtr.pw.edu.pl



Centre for Prototyping, Mastering and Replication

Jürgen Mohr

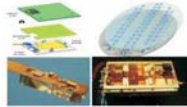
Juergen.Mohr@imt.fzk.de



Centre for Packaging and Integration

Pentti Karioja

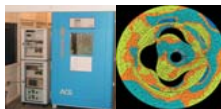
pentti.karioja@vtt.fi



Centre for Reliability

Francis Berghmans

fberghma@sckcen.be



Centre for Standardisation

Tomasz Kossek

tkossek@iti.waw.pl

NEMO works with Industry through its Industrial User Club

NEMO aims at

- Facilitating and stimulating access for industry to its network facilities
- 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 your business
- Orienting scientific progress towards your industrial needs

Take your Advantage - get in touch with NEMO !



Industrial User Club (IUC)

Holger Moritz

Holger.Moritz@imt.fzk.de

NEMO provides in-dept information on micro-optics

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

- fabrication technologies
- materials
- modelling tools
- characterisation
- reliability
- standards
- instrumentation
- available expertise
- patent portfolio's
- roadmaps on micro-optics
- market surveys
- job opportunities
- potential for e-consulting



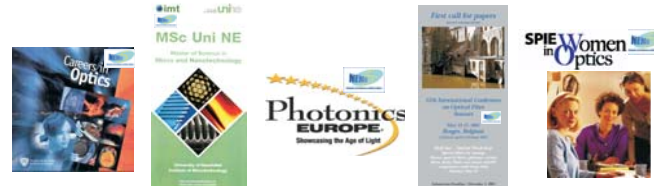
Knowledge Management Centre (KMC)

Nathalie Debaes

ndebaes@tona.vub.ac.be

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



Education Training Conferences Topical Meetings Gender issues

NEMO tackles Long-Term Research Topics in Micro-optics

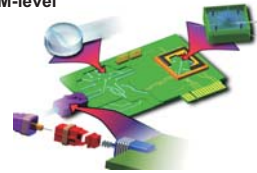
NEMO will use the service and technology centres to support the network's six long-term application-oriented research topics on micro-optics. These long-term research topics aim at widening the scope of present-day European research and at introducing novel concepts and components, thus creating new 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

Peter Van Daele

peter.vandaele@intec.UGent.be



Micro-optic Structures for Sensing Applications

Brian Culshaw

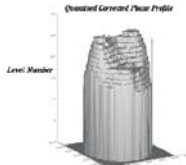
b.culshaw@eee.strath.ac.uk



Non-Conventional Micro-optical Elements

Mo Taghizadeh

M.Taghizadeh@hw.ac.uk



Platforms for Optical MEMS

Hakan Urey

hurey@ku.edu.tr



Sub-Wavelength Structured Optical Surfaces

Philippe Lalanne

philippe.lalanne@iota.u-psud.fr



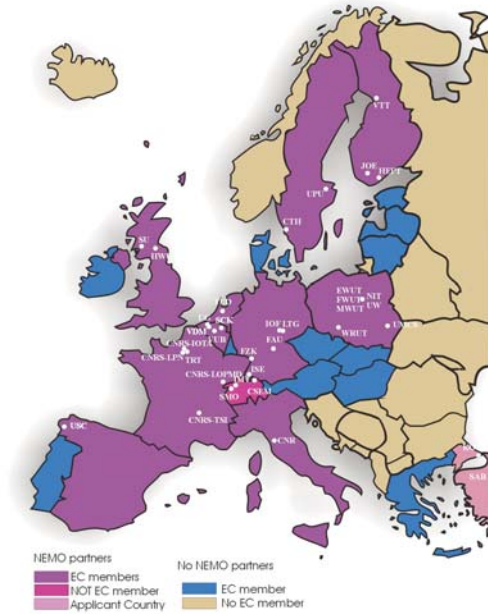
Infra-Red Micro-Optics

Fredrik Nikolajeff

fredrik.nikolajeff@angstrom.uu.se



The European Dimension of the NEMO Network



NEMO's Co-ordination Team

Co-ordinator



Hugo Thienpont
hthienpo@vub.ac.be



Malgorzata Kujawska
m.kujawska@mchtr.pw.edu.pl

Vice - Co-ordinators



Jürgen Mohr
Juergen.Mohr@imt.fzk.de

NEMO's Project Support Team

Nathalie Debaes and Bernadette Callebaut
Ndebaes@tona.vub.ac.be Bcallebaut@tona.vub.ac.be

Vrije Universiteit Brussel
Department TONA/TW
Pleinlaan 2
B-1050 Brussels
BELGIUM

Tel : +32(0)2. 629.18.14 or +32(0)2.629.35.68

The NEMO Partners

VUB- Vrije Universiteit Brussel
FZK- Forschungszentrum Karlsruhe
WUT- Politechnika Warszawska
FAU- Friedrich-Alexander-University Erlangen-Nürnberg
VTT- Technical Research Centre of Finland
SCK- 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
CTH- Chalmers Tekniska Högskola AB
JOE- University of Joensuu
HEPT- Heptagon Oy
IOF- Fraunhofer-Institut for Applied Optics and precision Engineering.
ISE- Fraunhofer-Institut für Solare Energieysteme
LTG- LightTrans GmbH
IMT- Université de Neuchâtel
CSEM- Centre Suisse d'Electronique et de Microtechnique
SMO- SUSS MicroOptics SA
WRUT- Wroclaw University of Technology
UMCS- Maria Curie-Sklodowska University
TUD- Technische Universiteit Delft
SU- University of Strathclyde
SAB- Sabanci University



Network of Excellence on Micro-Optics

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 key-role 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