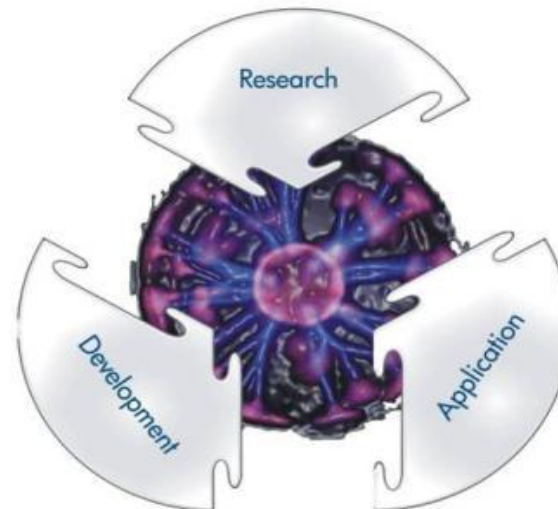


A Competence Network for Plasma Technology

BalticNet-PlasmaTec e.V.

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Plasma: The 4th state of matter



solid



liquid



gas



plasma



energie →



energie →

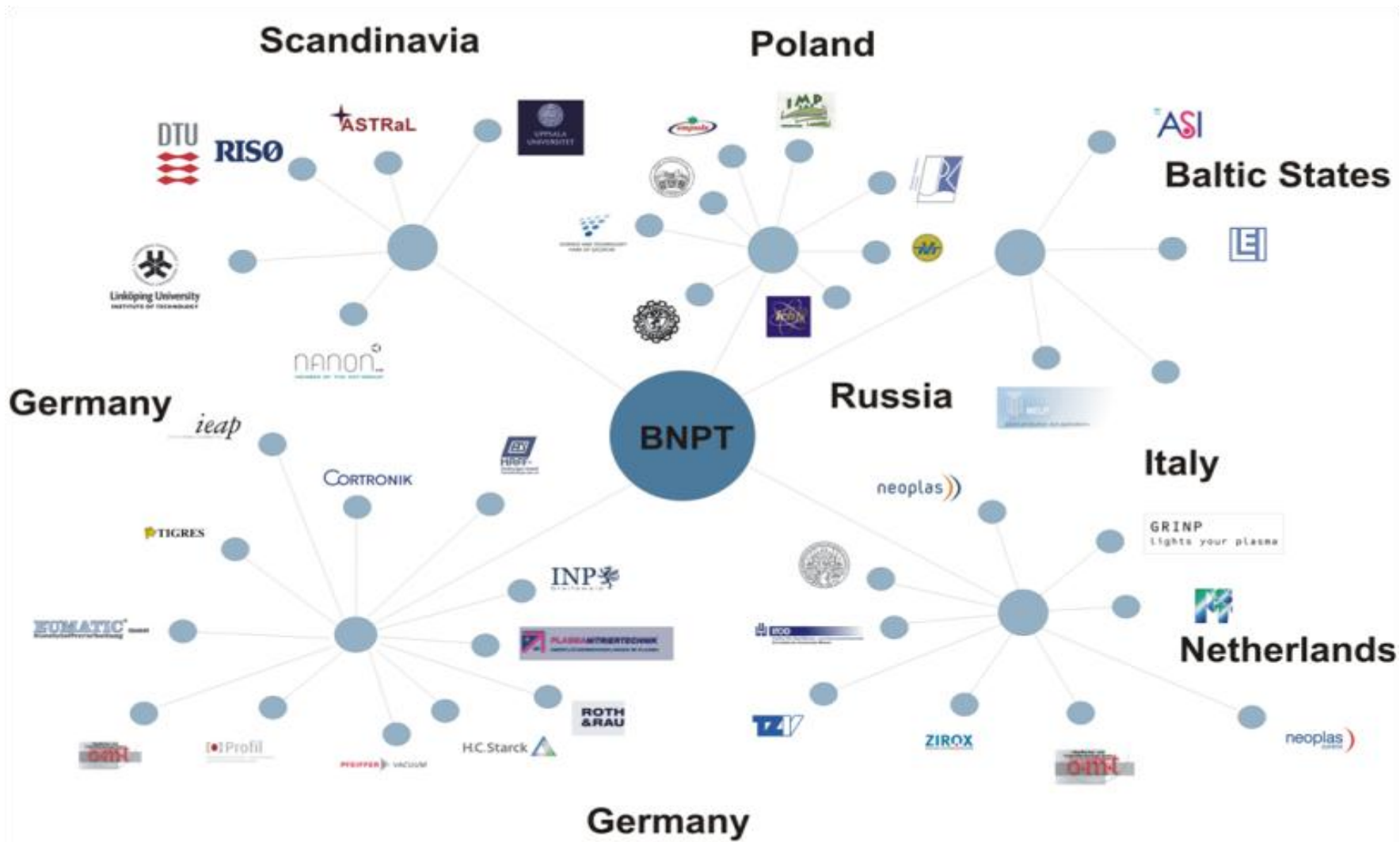


energie →



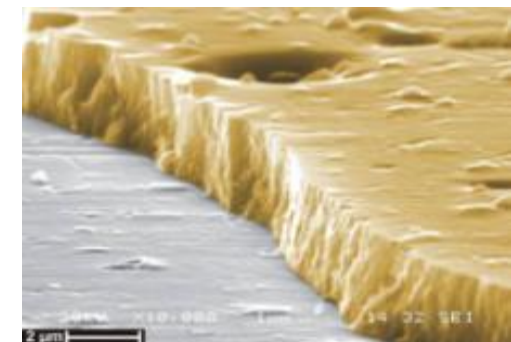
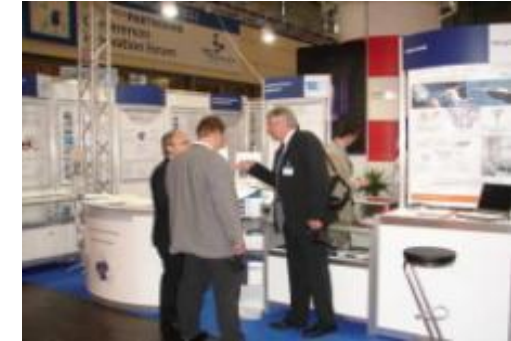
More than 99% of all known matter is in plasma state!





48 members from 10 countries

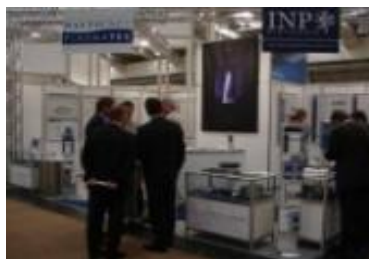
- Marketing
- Education
- Vacuum technology
- Plasma & Bio
- Plasma & Environment



Technology / Scientific Marketing

“Make plasma technology more visible”

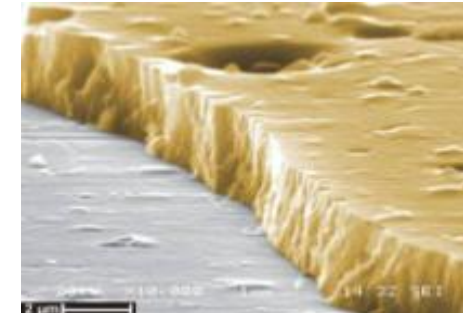
- Organisation of presentations and events
- Public relations for R&D results, services, products
- Acquisition of new partners for the network from industry and research
 - Presentation at Hannover fair, Biotechnica, Poleko, Achema, PSE, Analytica, MetEx India,...
 - Organisation of symposia, specific workshops



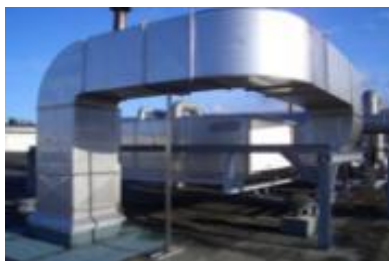
- Common international education
“**Make plasma understandable**”
 - Exchange of staff (on-the-job training)
 - Exchange of lectures
 - Organization of placements
 - IP summer school
 - scholar and teacher excursions
 - Erasmus exchange of students and teaching staff
 - workshops



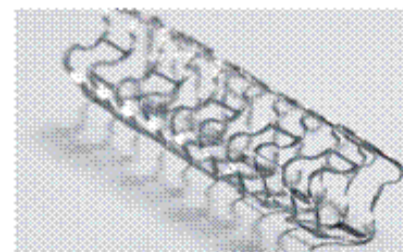
- Application of low pressure plasma technology
- **“Functional and protective coatings”**
- Surface modification
- Coatings
 - Tools for wood treatment
 - Pre-treatment of nano particles e.g. with metallic surfaces
 - Functional coatings based on TiO₂



- Application of plasma for environment protection
- **“Plasma technologies for a healthy environment”**
 - Innovations: exhaust and air cleaning procedures e.g. plasma filter for VOC destruction, ship diesel engine
 - Plasma for water cleaning
 - Substitution of wet chemical methods with plasma processes
 - Era-Net Martec Plasma-based catalytic treatment of exhaust emissions of marine diesel engines PBCT
 - “PlasTEP - Plasma based technologies for environment protection in BSR” (Interreg IVb)



- Combination of plasma technology with life science
- **“Plasma technologies for a healthier life”**
- plasma medicine
- material gentle germ reduction,
- disinfection up to sterilisation,
 - absorbable layers
 - coating of implants
 - sterilisation of plastic surfaces (e.g. catheters, bottles)
 - research on plasma influence on cells and tissue



BalticNet-PlasmaTec – benefits for TUK

Foundation an Institute of Mechantronic, Nanotechnology and Vacumm Technique on TUK Koszalin. The Institute is a main beneficiary of the effects of the realization of the *BalticNetPlasmaTec* project.

Renovation of laboratories and technical installation.

Purchase and start-up of a unique technological device used for deposition of carbon coatings on tools.

Elaboration and implementation in industrial conditions the technology of deposition of the anti-wear coatings for woodworking tools (by INTERREG IIIA EU program). The project was awarded with “Westpomerania Nobel Prize 2007”.

The experience and technological systems allow us to realize big project “Hybrid technologies for woodworking tools modification” The aim of the project is continuity the works realized previously by the network *BalticNetPlasmaTec*.



BalticNet-PlasmaTec – executive board

Chairman of the board

Prof. Dr. Klaus-Dieter Weltmann

Deputy chairman of the board

Will Herlaar

Deputy chairman of the board

Dr. Marcin Holub

Treasurer

Dipl.-Ing., Dipl.-Wirt.-Ing. Mario Kokowsky





BalticNet – PlasmaTec

Cross-Border Network in Plasmatechnology

Mario KOKOWSKY
Bogdan WARCHOLINSKI
Piotr MYSLINSKI