TECHNOLOGY WATCH

DECEMBER 2005

WP 15: Technology Transfer

Contents:

FP6. EUROPEAN RESEARCH PROGRAMMES AND FUNDING OPORTUNITIES
NEW CALLS

PRIORITY	CALL	CLOSING DATE	BUDGET (million)	INSTRUMENT	
Sustainable, development, global change and ecosystems	FP6-2005-TREN-4	22 December 2005	€ 161	STREP, IP, CA, SSA	Periodic call in the area of "Sustainable energy systems" and 'Sustainable surface transport' http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=224
	FP6-2005-Energy-4	10 January 2006	€ 20	STREP, IP, CA, SSA	Sustainable energy systems; Fuel cells and applications; Energy carriers: Hydrogen, electricity; Renewable energy technologies: PV, biomass; Capture and sequestration of CO_2 associated with cleaner fossil fuel plants. http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=236#
	FP6-2002-Transport-2	31 March 2006	€ 5	SSA	Developing environmentally friendly and competitive transport systems and means of transport; Making rail and maritime transport safer, more effective and more competitive. http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=21#
Research and Innovation	FP6-2005-INNOV-9-Strand-1	05 January 2006	€ 11,5	CA, SSA	Support to innovation policy learning and development: Fostering coordination of national and sub-national innovation programmes. http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=237#
	FP6-2005- INNOV-9-Strand-2	05 January 2006	€ 11,5	CA	Support to innovation policy learning and development: Fostering coordination of national and sub-national innovation programmes. http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=238#
	FP6-2005-INNOV-9-Strand-3	05 January 2006	€ 2,5	SSA	Support to innovation policy learning and development: Fostering coordination of national and sub-national innovation programmes. http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=239#
	FP6-2005-INNOV-9-Strand-4	05 January 2006	€ 1,75	SSA	Support to innovation policy learning and development: Identification, analysis and monitoring of business clusters in Europe. http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=240#
	FP6-2005-INNOV-9-Strand-5	05 January 2006	€ 2	SSA	Support to innovation policy learning and development: Global Review

					of Innovation Intelligence and Policy Studies (GRIPS). http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=241#
Human resources and mobility	FP6-2005-MOBILITY-7	18 January 2006	€ 22	Marie-Curie **Incoming** Intern. Fellowship	http://fp6.cordis.lu/fp6/call_details.cfm?CALL_ID=229
	FP6-2005-MOBILITY-6	18 January 2006	€ 22	Marie-Curie **Outgoing** Intern. Fellowship	http://fp6.cordis.lu/fp6/call_details_cfm?CALL_ID=228
	FP6-2005-MOBILITY-5	19 January 2006	€ 70	Marie-Curie **Intra-European** Fellowship	http://fp6.cordis.lu/fp6/call_details_cfm?CALL_ID=195
	FP6-2005-MOBILITY-8	25 January 2006	€ 45	Marie-Curie **Excellence Grants**	http://fp6.cordis.lu/fp6/call_details_cfm?CALL_ID=231
	FP6-2005-MOBILITY-10	25 January 2006	€ 10	Marie-Curie **Chairs**	http://fp6.cordis.lu/fp6/call_details_cfm?CALL_ID=232
	FP6-2005-MOBILITY-3	25 January 2006	€ 47	Marie-Curie Host Fellowships	http://fp6.cordis.lu/fp6/call_details_cfm?CALL_ID=227
	FP6-2005-MOBILITY-9	15 February 2006	€ 0,25	Marie-Curie Excellence Awards 2006	http://fp6.cordis.lu/fp6/call_details_cfm?CALL_ID=230
	FP6-2005-MOBILITY-12	Open call with closing dates on 19 April 2006 and 19 July 2006.	€ 10	Marie-Curie International Reintegration Grants	Researchers who under the legibility rules described elsewhere in this document would have been eligible to submit a proposal under this action between 19 July 2006 and 31 December 2006 are eligible to apply for the July 2006 closure date. http://fp6.cordis.lu/fp6/call_details.cfm?CALL_ID=165
	FP6-2005-MOBILITY-11	Open call with closing dates on 19 April 2006 and 19 July 2006.	€10	Marie-Curie European Reintegration Grants	Researchers who under the legibility rules described elsewhere in this document would have been eligible to submit a proposal under this action between 19 July 2006 and 31 December 2006 are eligible to apply for the July 2006 closure date. http://fp6.cordis.lu/fp6/call_details.cfm?CALL_ID=164
Food quality and safety	FP6-2005-FOOD-4-A	08 February 2006	€ 83	STREP, NoE	Epidemiology of food related diseases: Impact of food on health, traceability processes all along the production chain; Methods of analysis, detection and control; Safer and environmentally friendly production and healthier foodstuffs; environmental health risks; Total food chain. http://fp6.cordis.lu/food/call_details.cfm?CALL_ID=215#
	FP6-2005-FOOD-4C	08 February 2006	€ 8	SSA	Promoting SME participation - Stimulating international cooperation. Dissemination/exploitation of research. http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FoodDetailsCallPage&call_id=217

'Euratom Research and Training programme on nuclear energy'	Euratom - 2005-6 - EFTS	31 January 2006	€ 8	RTN	Controlled thermonuclear fusion. http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=247#
Science and society	FP6-2005-Science-and-society-19	30 March 2006	€ 3,5	CA, SSA	Civil Society Organizations; Co-productions; European dimension of Science weeks. http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=264#
	FP6-2005-Science-and-society-20	30 March 2006	€ 1	CA, SSA	Science Shops http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=263#
	FP6-2005-Science-and-society-16	31 January 2006	€ 5	CA, SSA	School science teaching practice; Boys' and girls' perceptions of science; Performance indicators and priority setting. http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=249#
New and emerging science and Technology-Pathfinder	FP6-2005-NEST-Path	15 February 2006	€ 50	STREP, CA, SSA	Tackling complexity in science; Synthetic biology; Measuring the impossible; Cultural dynamics; What it means to be humans (only CA and SSA) http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.NESTDetailsCallPage&call_id=258#
Information society technologies	FP6-2005-IST-41	20 December 2005	€ 52,5	IP, NoE	Networked Audio Visual Systems and Home Platforms http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=260#
Aeronautics and space	FP6-2002-Aero-2	30 March 2006	€ 7	SSA	Strengthening competitiveness; Improving environmental impact with regard to emissions and noise; Improving aircraft safety and security; Increasing operational capacity and safety of the air transport system. http://fp6.cordis.lu/index.cfm?fuseaction=UserSite.FP6DetailsCallPage&call_id=8#

FP7. EUROPEAN TECHNOLOGY PLATFORMS

In essence, a **Technology Platform (TP)** is a mechanism to bring together all interested stakeholders to develop a **long-term vision** to address a specific challenge, create a coherent, dynamic strategy to achieve that vision and steer the implementation of an action plan to deliver agreed programmes of activities and optimise the benefits for all parties.

Here you can find information about the TP most related to the NoE Nanofun Poly.

1	ENIAC. The European Technology Platform for Nanoelectronics
2	The European NANOMEDICINE Technology Platform Nanobiotechnologies for Medical Applications*
3	Technology Platform on Sustainable Chemistry
4	Innovative Medicines for Europe
5	MANUFUTURE: Platform of Future Manufacturing Technologies
6	EuMat- European Technology Platform for Advanced Engineering Materials and Technologies

ENIAC. The European Technology Platform for Nanoelectronics

To strengthen the competitiveness of the European electronics industry by further developing the high-tech know-how required to master own technology solutions in strategic areas and to stay in the race with the US and Asia.

The principle mission of ENIAC is to:

- Provide a strategic research agenda for the nanoelectronics sector, with respect to R&D;
- Set out strategies and roadmaps to achieve this vision through the Strategic Research Agenda and other associated documents;
- Stimulate increased and more effective and coherent public and private investment in R&D in the nanoelectronics sector;
- Contribute to improving convergence between EC, national, regional and private R&D actions on nanoelectronics within the European Research Area Framework;
- Enhance networking and clustering of the R&D capacity in Europe;
- Promote European commitment to RTD thus ensuring Europe as an attractive location for researchers;
- Interact with other policies and actors at all levels that influence the competitiveness of the sector such as education and training, competition, IPR, finance and investment, etc.

New

✓ ENIAC Workshop - "Nanoelectronics Technologies 2020: a European Strategic Research Agenda (SRA)"

16 September 2005, at ESSDERC in Grenoble.
ESSDERC announcement
Preliminary agenda
ESSDERC web site

✓ The first meeting of the ENIAC forum of Stakeholders was held in Barcelona on the 23th of November. Afterwards the Strategic Research Agenda was published.

ftp://ftp.cordis.lu/pub/ist/docs/eniac/strategic_research_agenda_full.pdf

Web-site: http://www.cordis.lu/ist/eniac
Technology Platform contact: Mr. Livio Baldi, STMicroelectronics
Commission services contacts: Mr. Heico Frima, DG Research
Mr. Michel Hordies, DG Information Society
Vision document: Vision 2020 Nanoelectronics at the centre of change
http://ftp.cordis.lu/ist/docs/eniac/nanoelectronics_vision2020.pdf
http://ftp.cordis.lu/pub/nanotechnology/docs/e-vision-2020.pdf

The European NANOMEDICINE Technology Platform Nanobiotechnologies for Medical Applications

PROPOSAL STAGE
Europe has a strong position in the very young area of nano-biotechnologies for medical applications which is at the moment similar to the position of the US.
Nano-biotechnolgy for medical applications is such a young discipline that only a limited number of large industries are representing this sector in Europe, covering mainly drug delivery.

Policy objectives:
To establish a clear strategy vision in the area.
To alleviate fragmentation in nano-medical research.
To mobilise additional public and private investment.
To identify priority areas.
To strengthen innovation in nano-biotechnologies for medical use.
To enhance international co-operation.

Key priorities:

- Nanotechnology based diagnostics including imaging
- Targeted drug delivery and release
- Regenerative medicine

Web site: http://www.cordis.lu/nanotechnology/nanomedicine.htm
Technology Platform contacts: Dr. Ottilia Saxl, ottilia@nano.org.uk; Prof. David Williams, dfw@liverpool.ac.uk; Prof. Costas Kiparissides, cypress@alexandros@cperi.forth.gr; Dr. Patrick Boisseau, Patrick.boisseau@cea.fr;

Commission services contact: Uta Faure, DG Research (uta.faure@cec.eu.int)

Technology Platform on Sustainable Chemistry SUSCHEM

To foster the development of innovative chemistry and technologies that contribute to sustainability and ongoing competitiveness of the European chemical industry, through:
- the development of leading-edge advances in environmentally respectful, energy efficient, resource efficient
processes and product technologies in three main technology innovation areas:
* Industrial (white) biotechnology
* Materials technology
* Reaction and process design
- research activities that address key aspects of health-safety-environment impacts
- actions that may allow identifying and addressing major barriers to innovation.

SusChem is mapping out a research route for European chemistry. This will provide new cutting-edge solutions that continue delivery of chemistry's essential benefits in areas from energy and healthcare to construction and clothing whilst being socially and environmentally sustainable, supporting competitiveness and contributing the innovative heart to an expanding knowledge-based economy.

Draft SRA
Three separate documents for the individual technology sections comprising SusChem (Materials Technology materials@suschem.org , Industrial Biotechnology biotech@suschem.org and Reaction & Process Design rpd@suschem.org) are now available for download and comment. A formalised questionnaire has been developed for each section that can be downloaded from the SusChem website.

The Strategic Research Agenda will be finalised by the end of 2005. The first complete draft SRA (appox. 7 MB) incl. the appendix are available since 22 November 2005. The SRA has been

endorsed by more than 150 stakeholders from all over Europe participating in the 3rd SusChem stakeholder meeting in London, 25 November 2005. The final version of the SRA will be published in December 2005.

Web-site: www.cefic.es (a dedicated website will be launched shortly)
Technology Platform contact: Mr. Frank Agterberg (agt@cefic.be ; tel: +32 26767387)
Commission services contact: Mr. Andrea Tilche, DG Research (andrea.tilche@cec.eu.int ; tel: + 32 22996342)
Vision document: "European Technology Platform for SUSTAINABLE CHEMISTRY: the vision for 2020 and beyond" (will be available from the website). A consultation process will continue, while also widening the stakeholder base involved, with the aim of producing a final vision document in early 2005)

Innovative Medicines for Europe

The overall objective of the platform is to remove bottlenecks hampering the efficiency of the development of new medicines, and where research is the key to resolve current obstacles for the European pharma/biotechnology industry to become world leaders.

- More efficacious medicines,
- Less severe and reduced adverse drug reactions,
- Reduced treatment periods for patients,
- Lower number of medicines' withdrawals from market (and reduced attrition rate in clinical stages),
- Shorter drug development times (faster availability to patients)
- Overall reduced healthcare costs (higher cost-effectiveness).

The Technology Platform for innovative medicines has outlined a draft strategic research agenda that aims to address current bottlenecks in the biomedical research and development (R&D) process and accelerate the development of safe and effective new medicines. Four key bottlenecks in the biomedical R&D process were identified, and the strategic research agenda was structured in such as way as to address them. The four key pillars of the agenda therefore aim at improving: the predictivity of safety evaluation, the predictivity of efficacy evaluation, knowledge management, and education and training. Thus, the research agenda encompasses the whole path from discovery of a new drug target to the validation and approval of the final compound.

The SRA foresees the creation of a separate legal entity financed equally by the Commission and the biopharmaceutical industry.

The SRA presents only the initial thoughts of the Innovative Medicines Initiative on the organisation of such an entity. It states that the organisation should be not-for-profit, and should be charged with managing stakeholder participation and other operational aspects of the initiative. It concludes that for an initial period of seven years, annual funding of 440 million euro would be needed in order for the new entity to implement the recommendations contained within the SRA.

Web-site: http://europa.eu.int/comm/research/fp6/p1/innovative-medicines/index_en.html

Technology Platform contact: Karen Strandgaard-European Federation of Pharmaceutical Industries an Associations (EFPIA); Karenstrandgaard@efpia.org
Commission services contact: Bernd RAINER, EC DG Research, F5
Irene NORSTEDT, EC DG Research, F1
rtd-innovative-medicines@cec.eu.int
Vision document: "Creating biomedical R&D leadership to benefit patients and society"
http://europa.eu.int/research/fp6/p1/innovative-medicines/pdf/vision_en.pdf

MANUFUTURE: Platform of Future Manufacturing Technologies

European traditional manufacturing industry is faced today with many challenges to remain competitive in an increasingly complex environment. The speed of innovation, pushed by the consolidation of the Information and Communication Technologies, and the rapid uptake of new technologies, such as nanotechnology, is counterbalanced by the growing cost of high level research and the disparities in framework and employment conditions between different regions of the world.

The Strategic Research Agenda - SRA (IN PREPARATION)

MANU*FUTURE* Strategic Research Agenda will provide an overall road map that will inform stakeholders, encourage debate and lead to a consensus view on the way ahead. The baseline of the SRA is a multiperspective approach based on:

- Creating an integrated knowledge-sharing community, with strong links between academia and industry;
- Building a world-class R&D infrastructure;

- Adopting new business models, organisational concepts and working methods;
- Establishing a favourable economic and regulatory climate to encourage research investment and entrepreneurialism;
- Restructuring education and training to reflect the lifelong learning needs of tomorrow's 'knowledge workers'; and
- Increasing public awareness of the value of science, the rewarding career opportunities.

New
MANU*FUTURE* Conference 2005
Rolls Royce in Derby (UK), 6th & 7th December 2005

Web-site: http://www.manufuture.org
http://europa.eu.int/comm/research/industrial_technologies/manufuture/home_en.html

Technology Platform contact: Prof. Heinrich Flegel, Daimler Chrysler, Chairman of the MANUFUTURE HLG, Heinrich.Flegel@DaimlerChrysler.com; Prof. Francesco Jovane, Director, ITIA-CNR, f.jovane@itia.cnr.it
Commission services contact: Christos Tokamanis, Head of Unit, DG Research G2 industrial Technologies, Christos.Tokamanis@cec.eu.int
Mr. Andrea Gentili, Andrea.gentili@cec.eu.int
Vision document: " Manufuture-assuring the future of manufacturing in Europe, A vision for 2020"

EuMaT-European technology Platform for Advanced Engineering Materials and Technologies

Construction has great potential for productivity increases particularly in relation to process improvement, re-engineering and better use of ICT. This can be enabled through the development and application of appropriate manufacturing and information technologies. Education and training of the large number of construction professionals and operatives to ensure efficient and effective dissemination of innovations is a key factor for our future.

More recent technology platform under development.
The term "Advanced Engineering Materials & Technologies" (AEMT) refers in EuMaT to multifunctional materials for macro-applications and

- functional engineering materials with gradient properties
- engineering materials for challenging application conditions, including high-temperature and light-weight
- multi-material (hybrid) systems, and
- nanomaterials in engineering components/applications/systems,

as applied/used in engineering (and, e.g., coupled with "conventional" structural materials like steel, aluminium, titanium, metallic alloys, composites, polymers, advanced ceramics, coatings, adhesives, concrete, ...) and/or used to enhance the engineering products, systems and processes in areas like energy, gas 6 oil, chemical, space, transportation, electronics, environment, health, ...
The overall performance targets EuMaT and materials and technologies which EuMaT envisages for 2020 are to:

- Help to reduce life-cycle costs of process equipment and infrastructure by 30% and energy consumption by 30%
- Increase productivity of assets by reducing downtime by 25%
- Capture existing knowledge and effectively train a future workforce and develop capacity to respond to new challenges
- Protect the environment by containing processes, preventing unacceptable leakage and emissions and striving to select materials with decreased environmental impacts (e.g. by recycling 95% of metallic and 70% on average of other advanced engineering materials at the end of their useful life)
- Provide a safe operating environment through zero on-the-job injuries and a secure plant.

In order to assure the breakthrough in the area, EuMaT will also tackle the horizontal and life-cycle issues such as like

- Multi-scale modelling and simulation
- Testing, inspection, monitoring, characterization, including standardization and qualification of materials
- Prediction of in-service behaviour/characteristics and failure criteria
- Risk and impacts of new materials
- Training and education issues

Web-site: www.eumat.org
Technology Platform contact: Dr. A. Jovanovic; secretary: Ms. R. Kokejl
roswitha.kokejl@mpa.uni-stuttgart.de
Industrial representatives: U. Eisele, BOSCH; M. Renner, MAYER Technology
Commission services contact: Ms. Susanne Becker, DG Research
Vision document: ---

UPCOMING NANOEVENTS

- December 2005
- January 2006
- February 2006
- March 2006

DECEMBER 2005

04-07 December 2005 : Queensland Bioscience Precinct, University of Queensland, Brisbane, Australia

BioNano 2005

06-07 December 2005 : The Society of Chemical Industry, London

The application of nanotechnology to industrial products is increasing rapidly. In order to meet the growing demands of industry for expertise in this area, many academic institutions are providing education and training courses.

This conference will bring together key users and providers across the globe, to share experiences and discuss industry needs.

See more >>

06-07 December 2005 : Manchester, England, UK
2 Day International Conference - Fluorine and Silicone in Coatings

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07-10 December 2005 : Singapore
12th International Conference on Biomedical Engineering (ICBME)

08-10 December 2005 : Singapore
Singapore International Chemical Conference (SICC-4)

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09 December 2005 : National Physical Laboratory (NPL), Teddington, Middlesex, UK
MNT Measurement Club Meeting - 'The Measurement and Characterisation of Medical Biosensors'

14-16 December 2005 : Rome, Italy
First European Fuel Cell Technology and Applications Conference

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15-20 December 2005 : Honolulu, Hawaii
Pacifichem 2005

17-21 December 2005 : Singapore
3rd Asia Pacific Bioinformatics Conference

JANUARY 2006

10-13 January 2006 : Meritus Mandarin Hotel, Singapore
NanoSingapore 2006: IEEE Conference on Emerging Technology - Nanoelectronics

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11-13 January 2006 : Tokyo, Japan
Ninth International Symposium on Contemporary Photonics Technology

18 January 2006 : The Royal Society, London

Novel Delivery Techniques for Industrial Scents and Flavours

The flavour and fragrance industries are worth many billions of dollars and are vital to the appeal and success of many products in industries ranging from foods to household products to fashion. Critical to these industries is the control and delivery of scents and flavours. Nanoscience and nanotechnology are having profound implications in this area, with some important technologies being derived from research into drug delivery.

This conference is specially tailored to the needs of the flavour and fragrance industry, and is also aimed at consumer product manufacturers across a range of applications.

See more >>

Register Now >>

Followed by:
3rd Annual Albert Franks Memorial Lecture
'Tales of the Unexpected: Smart Holograms in Crime, Sport and Medicine'

Holograms are not just a clever technique for enabling us to print or see 3-D images; there is new generation of holograms that also behave as miniaturised analytical tools.

See more >>

Register Now >>

18-20 January 2006 : Tokyo, Japan
FOE 2006 - Fiber Optics Expo

18-21 January 2006 : Centre for Micro and Nano Systems, Chinese University of Hong Kong, Zhuhai, China
IEEE-NEMS 2006

24-27 January 2006 : Hotel Taikanso, Matsushima/Sendai, Japan
6th International Conference on Reactive Plasmas

FEBRUARY 2006

13-16 February 2006 : Sheikh Maktoum and Sheikh Rashid Halls, Dubai International Exhibition Centre, Dubai
ArabLab the Expo 2006

16-17 February 2006 : Logenhaus, Berlin
Nanomed 2006
5th International Workshop on Biomedical Applications of Nanotechnology

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17-18 February 2006 : SAS Nagar Punjab, India
NIPER-NANO-2006 Nanotechnology in Advanced Drug Delivery

21-26 February 2006 : Singapore
Asian Aerospace

22-24 February 2006 : Cannes, France
IPTEC - International Conference and Marketplace for Technology Transfer Professional

MARCH 2006

14-15 March 2006 : Hotel Pan Pacific, Kuala Lumpur, Malaysia
ICMN '06 International Conference on MEMS and Nanotechnology

16-18 March 2006 : Guangzhou City Guangdong DongDao Exhibition Centre, Guangzhou, China
3rd China Guangzhou Glass Fiber Composite Material Expo

16-18 March 2006 : New Delhi, India
ICONSAT 2006 International Conference on NanoScience and Technology

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21-23 March 2006 : Shanghai New International Expo Center, Shanghai, China
World of Photonics China Trade Show

27-29 March 2006 : Mumbai, India
Nano-Economic Congress (WNEC) India

29-31 March 2006 : Hsinchu, Taiwan
ISMNT-2 The second International Symposium on Micro & Nano Technology