



Agentschap NL  
Ministerie van Economische Zaken,  
Landbouw en Innovatie

# Kansen in KP7 NMP

Aansluitend op de HTSM  
Roadmap Nanotechnologie

11 juni 2012

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*» Als het gaat om duurzaamheid,  
innovatie en internationaal*



## Mogelijkheden in KP7 - Cooperation

- Groot programma met 10 verschillende thema's
- NMP, ICT, Health, Energy, Environment, KBBE, Transport, etc
- Top down programma
- Onderwerpen (topics) bepaald door Europese Commissie
- Input van:
  - EC beleid (bv. Raw Materials Initiative)
  - European technology Platforms (bv. Manufuture)
  - Lidstaten (in het Programma Commite)
  - Lobby groepen (bv. ERRIN)
- Vandaag zoeken wij naar de match tussen de HTSM roadmap en het Europese Kaderprogramma voor Onderzoek en Ontwikkeling (KP7)



## Application theme: Energy

### **ENERGY.2013.2.1.1 High efficiency c-Si photovoltaics modules**

Focus: scale up of concepts, targeted on high cell and module efficiency and high production throughput

### **NMP.2013.4.0-2 Innovative materials for efficient, stable and cheap organic photovoltaic cells**

Focus: Development of innovative materials that convincingly demonstrate the cost-effective mass-production of industrial modules



## Application theme: Health

### **HEALTH.2013.1.2-1 Development of imaging technologies for therapeutic interventions in rare diseases**

Focus: development of and/or proof of principle of new imaging technologies for therapeutic interventions in rare diseases. Two or more techniques, of which at least one should be molecular imaging, should be integrated

### **NMP.2013.2.2-1 Biomaterials for Advanced Therapies and Medical Devices in the neurological/neuromuscular or cardiovascular fields**

Focus: Development and/or validation of specific biomaterials for use in an Advanced Therapy Medicinal Products (products based on genes, cells and tissues)



## Application theme: Food

### **KBBE.2013.2.3-01 Development and industrial application of sensors for food processing operations**

Focus: development versatile and affordable sensors to be applied for the quantitative, real-time, on-line or in-line control of critical quality and performance attributes for raw and in-process materials during food processing



## Application theme: Water

### **NMP.2013.1.2-1 Nanotechnology based sensors for environmental monitoring**

Focus: exploitation of progress in nanosciences to deploy nanotechnology in affordable, mass-produced sensors and to integrate these in components and (portable) systems for mass market applications in environmental monitoring

### **OCEANS 2013.1 biosensors for real-time monitoring of biohazard and man-made chemical contaminants in the marine environment**

Focus: enabling the measurement of high impact and presently difficult to measure pollutants and other substances



## Enabling theme: Beyond Moore

### **NMP.2013.1.2-1 Nanotechnology based sensors for environmental monitoring**

Focus: exploitation of progress in nanosciences to deploy nanotechnology in affordable, mass-produced sensors and to integrate these in components and (portable) systems for mass market applications in environmental monitoring

### **Objective ICT-2013.3.1 Nanoelectronics**

#### ***a) Integration of advanced nanoelectronics devices and technologies (16nm and below)***

Innovative solutions to boost performance and functionality in More than Moore

#### ***b) Advanced nanoelectronics manufacturing processes***

More Moore IC Manufacturing: efficiency and productivity enhancement

#### ***c) Design, modelling and simulation for advanced nano-electronics technologies***



## Enabling theme: Nano materials

### **NMP.2013.1.1-2 Self-assembly of naturally occurring nanosystems**

Exploitation of the possibilities of biomass of plant origin for the development of new products from plant based nanosystems. After self assembly and functionalisation, these systems will present high value added properties e.g. for flexible organic electronics, smart papers and surfaces, nanocomposites, self-healing materials, etc.

### **NMP.2013.2.2-1 Biomaterials for Advanced Therapies and Medical Devices in the neurological/neuromuscular or cardiovascular fields**

Focus: Development and/or validation of specific biomaterials for use in an Advanced Therapy Medicinal Products (products based on genes, cells and tissues)





## Enabling theme: Bio-nano

### **Objective ICT-2013.3.3 Heterogeneous Integration and take up of Key Enabling Technologies for Components and Systems**

#### Target outcomes

- a) Integrating heterogeneous technologies, with a focus on:
  - i) Miniaturised smart systems
  - ii) Hybrid integration of organic electronics and micro/nano electronics
  - iii) Further development and validation in real settings of micro-nano-bio and bio-photonics systems addressing key societal challenges, in particular in the health (for early or fast diagnosis and monitoring or surgery) and the food sectors (quality and safety)



## Enabling theme: Nano-fabrication

### **FoF.NMP.2013-11 Manufacturing of highly miniaturised components**

- Enabling the processing of miniaturised components made of a wide range of components with different properties
- Integration of multiple material combinations and smart materials
- Merging top-down and bottom-up approaches
- Novel on-line monitoring



## Enabling theme: Sensors & Actuators

### **OCEAN 2013.2 Innovative multifunctional sensors for in-situ monitoring of marine environment and related maritime activities**

- 1/ Developing cost-effective sensors suitable for large-scale production
- 2/ Sensors should be compact, autonomous multifunctional integrated packages
- 3/ Addressing data flow issues
- 4/ Making the sensors fully interoperable with existing observing systems



## Call informatie

Health, Energy en NMP orientation papers

[ec.europa.eu/research/participants/portal/page/fp7\\_documentation](http://ec.europa.eu/research/participants/portal/page/fp7_documentation)

ICT draft werkprogramma via Agentschap NL

## Netwerkgelegenheden

NMP event 19-21 juni in Aarhus

[www.industrialtechnologies2012.eu](http://www.industrialtechnologies2012.eu)

ICT Proposers Day 26-27 september in Warschau

[ec.europa.eu/ictproposersday](http://ec.europa.eu/ictproposersday)

PPP Info Day 9-10 juli in Brussel

[ec.europa.eu/research/industrial\\_technologies/fp7-information-day-for-ppp-2012\\_en.html](http://ec.europa.eu/research/industrial_technologies/fp7-information-day-for-ppp-2012_en.html)



## Wat kunt u nu doen?

- Laat uw kaartje achter, voor een goede informatiestroom
- Vul het follow up formulier in:
  - Als u een idee heeft
  - Als u een adviseur wilt spreken
  - Als u contact zoekt met een organisatie
  - Als u meer algemene informatie wilt
  - Als u andere vragen of opmerkingen heeft
- Tijdens de Speeddate kunt u bij de tafel van uw sessie contact maken
- De stand van het Enterprise Europe Network biedt technology matchmakings en kan u helpen met het vinden van partners



## Contact

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