



Nanosciences, Nanotechnologies, Materials and New Production Technologies Deployment in Latin American Countries

Addressing societal challenges:



Water | Energy | Health

www.nmp-dela.eu

Newsletter No.4 Spring 2015

Welcome to the fourth NMP-DeLA
Project Newsletter.

NMP-DeLA brings together an international and geographically diverse, ten-partner consortium from the European Union and Latin America to facilitate the deployment of advanced and enabling technologies in areas of major societal challenge in Latin America.

In this fourth newsletter, you can find out more about the forthcoming activities and how you can get involved.

Forthcoming activities include the workshop on nanotechnology for water and energy in Curitiba, Brazil, 28-29 May and presentations at EU-SPRI in Helsinki, Finland 10-12 June 2015.

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Open calls for proposals

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- **Register now for the Nano for Water and Energy Expert Workshop: 28-29 May 2015, University of Parana, Curitiba, Brazil by sending an e-mail to Noela Invernizzi: noela.invernizzi@gmail.com**
- **Submit your news and events to: Postbus@Malsch.demon.nl**

Do you have news for the community?

Tell us about research developments and opportunities, project news and updates, new collaborations, opinions, publications, events, etc.

Submit your news and events here:

Postbus@Malsch.demon.nl



The NMP-DeLA partners are currently engaged in planning and organising the key activities for the stakeholder community for 2015.

Expert Workshop

On 28-29 May 2015, the Latin American Network for Nanotechnology and Society RELANS is organising an expert workshop on Nanotechnology for Water and Energy, including training in Horizon 2020 proposal writing and match making, offered by REDINN. The programme and invitation are included in this newsletter and will be published on the website www.nmp-dela.eu soon.

Dissemination of results

The roadmaps on nanotechnology, materials and production technologies for health, water and energy will be presented at the EU-SPRI conference on 10-12 June 2015 in Helsinki , Finland <http://euspri-helsinki2015.org/>. You are welcome to meet us there.

Call for webinar proposals

Would you like to present your expertise and research interests on nanotechnology for health, water and energy to international colleagues and discuss cooperation opportunities from behind your own desk? E-mail us the topic you want to present and a list of contacts you would like to be invited and we can set up a webinar for you. Contact: postbus@malsch.demon.nl

Dates: 28-29 May 2015

Workshop venue: the Historic Building of the University of Parana in Curitiba, Brazil at Praça Santos Andrade:
<http://www.ufpr.br/portalufpr/>

Registration: XXX

Registration is free of charge, but participants must cover their own travel and subsistence costs.

Hotel information:
The hotel DAN INN is next to the workshop venue:
<http://www.hoteldaninncuritiba.com.br/>

Other hotels next to the workshop:
Mabu
<http://www.hoteismabu.com.br/hoteis/curitiba-business/Centro Europeu>
<http://www.hotelcentroeuropetourist.com.br/>
IBis Budget
<http://www.ibis.com/pt-br/hotel-5519-ibis-budget-curitiba-centro/index.shtml>

Transport:

There is an executive bus from- to the airport which is cheap and convenient and will leave you very close to the hotels. You can buy tickets outside the main lobby of the airport, groundfloor, or in the bus. R\$ 12. It runs every 15-20 min.
<http://www.aeroportoexecutivo.com.br/>

There is also public transportation. You will see a glass tube station outside the airport and it will leave you exactly in front of the Dan Inn Hotel at Praça do Círculo Militar. R\$ 3,30.

Taxis from the airport to downtown cost about R\$ 80.

Check the weather, because Curitiba can contain the four seasons in a single day.

NMP-DeLA workshop Nano for Water and Energy, Curitiba, Brazil

Day 1	May 28, 2015
9.00 – 9.20	<p><i>Welcome to participants</i></p> <p><i>Dr. Edilson Silveira</i>, Vice Chancellor for Research and Graduate Programs, Federal University of Paraná.</p> <p><i>Dra. Graciela Inez Bolzon de Muniz</i>, Nanotechnology Central Laboratory (LCNano), Universidade Federal do Paraná</p> <p><i>Dra. Noela Invernizzi</i>. Latin American Network Nanotechnology and Society (RELANS), Public Policy Graduate Program, Universidade Federal do Paraná.</p>
9.20 – 9.50	<p>NMP-DeLA Project Goals – <i>Liceth Rebolledo</i>- Project Manager, ASCAMM Technology Center, Barcelona</p> <p>Mapping of Nanotechnology Research applied to Energy and Water in Latin America – NMP – DeLA Project - <i>Dr. Guillermo Foladori</i>, ReLANS, Universidad Autonoma de Zacatecas, México.</p>
9:50 -10.10	Responsible research and innovation – <i>Mg. Ilse Marschalek</i> - Zentrum für Soziale Innovation (ZSI), Austria
10.10 -10.30	Coffee Break
10.30 -11.00	Brazilian Nanotechnology Initiative – <i>Dr. Alfredo de Souza Mendes</i> . Coordination for Micro and Nano Technologies. Ministry of Science, Technology and Innovation, Brazil.
11.00 -12.00	<p>Nanotechnology applied to Energy in Europe</p> <p>Dr Bertran Fillon, Laboratory for Innovation in New Energy Technologies and Nanomaterials, CEA, France</p> <p>Prof Dr Wim Sinke, Energy Research Center and Science University of Amsterdam , The Netherlands</p> <p>Prof Dr Luis Carlos Pérez Martínez, Aarhus University, Denmark</p>
12.00 -14 .00	Lunch
14.00 -15.30	<p>Nanotechnology applied to Energy in Latin America – round table</p> <p>Solar cells and devices: nanomaterials research for renewable energy – <i>Dra. Lucimara Stolz Roman</i>, Universidade Federal do Paraná, Brazil.</p> <p>Nanomaterials for Energy Applications - <i>Dr. Ricardo Faccio</i>, Universidad de la República, Uruguay.</p> <p>Células solares e fotogeração de hidrogênio por dissociação da água baseados em semicondutores nanotubulares impregnados com sensibilizadores inorgânicos (quantum dots) - <i>Dr. Pedro Migoski da Silva</i>, Pontifícia Universidade Católica do Rio Grande do Sul, Brazil.</p> <p>Molding P3HT conjugated polymer in fibers by solvent-annealing-induced nanowetting in porous template, <i>Dra. Andreia Gerniski Macedo</i>, Universidade Tecnológica Federal do Paraná, Brasil.</p> <p>Title – <i>Dr. Pedro Prieto</i>, Universidad Nacional de Colombia (to be confirmed)</p>
15.30 -16.30	Opportunities for cooperation Moderator: <i>Liceth Rebolledo</i> (ASCAMM, Spain), <i>Ivana Resnichenko</i> (MIEM, Uruguay)
16.30 -16:45	Coffee break & more opportunities for cooperation
16:45-17:45	Focus groups: Innovation roadmap Moderator: <i>Martina Lindorfer</i> ZSI, Austria
19.30	Dinner

NMP-DeLA workshop Nano for Water and Energy, Curitiba, Brazil

Day 2	May 29, 2015
9.00 -12.00	Horizon 2020- Funding opportunities for Nanotechnology cooperative projects Nicola Tucci (Redinn, Italy) Piero Venturi , Representative of the EU Delegation for Science and Technology in Brazil
12.00 -14.00	Lunch
14.00 -15.00	Nanotechnology applied to Water in Europe Prof Dr Damiá Barceló, Catalan Institute for Water Research, Spain To be confirmed
15.00 -16.00	Nanotechnology applied to Water in Latin America - round table I Nanoparticles for the Adsorption and Photodegradation of Contaminants - <i>Dr. Daniel Martire</i> - Universidad Nacional de La Plata, Argentina Nanocomposites for Removal of Soluble Pollutants and Treatment of Water - <i>Dr. Koiti Araki</i> , Universidade de São Paulo, Brazil. Nanomaterials for solar water decontamination – <i>Dr. Juan Martin Rodríguez</i> , Universidad Nacional de Ingeniería, Perú. Removal of contaminants such as heavy metals from aqueous media by the use of synthetic and natural polymers and based nanocomposites using membrane filtration techniques and batch processes – <i>Dr. Bernabé Rivas Quiroz</i> , Universidad de Concepción, Chile.
16.00- 16.15	Coffee break & opportunities for cooperation
16.15 -17.15	Nanotechnology applied to Water in Latin America - round table II Nanomaterials for catalytic processes applied to water treatment - Dr. Eduardo Miró - Universidad Nacional del Litoral, Argentina Nanobubbles: generation, properties and potential applications on water/ wastewater treatment. <i>Dr. Jorge Rubio, MsC Ramiro Gonçalves Etchepare, Msc. André Camargo</i> , Universidade Federal do Rio Grande do Sul, Brazil. The problem of Mercury contamination in Colombia, challenges from nanotechnology for measurement and remediation - <i>Dr. Edgar González</i> , Pontificia Universidad Javeriana, Colombia. Nanomaterials and drinking water treatment technologies: opportunities and challenges - Dra. Ma. Teresa Alarcón Herrera, Centro de Investigación en Materiales Avanzados, México
17.15 -18.00	Opportunities for cooperation Moderators: - Ineke Malsch (MTV, Netherlands) & Jose Ramallo Lopez (MCTIP, Argentina)
18.00	Wrap up
19.30	Dinner

LinkedIn Group

Besides the NMP-DeLA website, you are welcome to join the NMP-DeLA LinkedIn group: <https://www.linkedin.com/groups/Latin-America-Advanced-Materials-Deployment-7447999/about>

This will give you the opportunity to share news and information about relevant calls for proposals with other NMP-DeLA Community of Interest members.

YouTube Channel

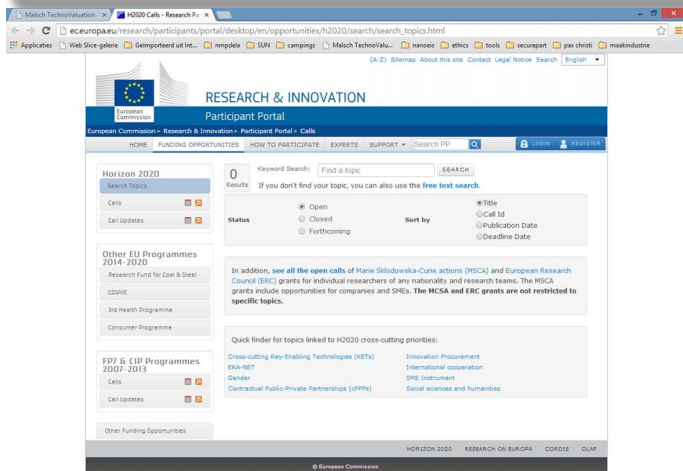
View videos of NMP-DeLA events posted on YouTube:

<https://www.youtube.com/channel/UCvQ1pKTu7haRGbe3qI-QKYA>

The screenshot shows the YouTube channel page for NMP-DeLA. The channel banner features the NMP-DeLA logo and the text: "Nanosciences, Nanotechnologies, Materials and New Production Technologies Deployment in Latin American Countries". The channel has 11 subscribers. The video grid displays the following content:

Video Title	Duration	Views	Time Ago
NMP DeLA Summer School - The Movie	4:12	158 weergaven	8 maanden geleden
Valeria Zannoni, Argentina & Natalia Oddone, Uruguay	1:07	51 weergaven	8 maanden geleden
Monica Vargas, Colombia	0:48	28 weergaven	8 maanden geleden
Catalina Solis, Costa Rica	0:41	21 weergaven	8 maanden geleden
Vitor Milicchio, Brazil	1:30	46 weergaven	8 maanden geleden
Richard Anthony	0:34	32 weergaven	8 maanden geleden
Maria Jose Morilla	0:45	47 weergaven	8 maanden geleden
Helvecio Rocha	0:41	34 weergaven	8 maanden geleden
Alvaro Duarte	0:34	29 weergaven	8 maanden geleden
Eder Romero	0:40	29 weergaven	8 maanden geleden
Ricardo Alvarado	0:10	24 weergaven	8 maanden geleden
Adriana Chaurra	0:46	21 weergaven	8 maanden geleden

Open Calls for Proposals and new report



The European Union Horizon 2020 programme includes several open and forthcoming calls that are suitable for international cooperation with Latin America in the field of Nano, Materials and Production Technologies. These calls can be retrieved by clicking the link “International cooperation” here: http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/search/search_topics.htm

Other open call

The M-ERA.NET Call 2015 opened at 3 February 2015. 34 funding agencies from 22 European countries as well as Brazil Sao Paulo participate in this joint call, with a total available public funding of around 25 million Euro. Deadline for Pre-Proposal submission is 9 June 2015, 12:00 noon Brussels time! Applicants should contact their respective national / regional funding organisation for details.

Funding is offered to innovative projects focusing on:
Integrated Computational Materials Engineering
New Surfaces and Coatings
High performance synthetic and biobased composites
Materials for Sustainable and Affordable Low Carbon Energy Technologies
Tailoring of bioactive material surfaces for health applications
Materials for Additive Manufacturing
Info: <https://www.m-era.net/article/joint-call-2015>

Knowledge and Technology Transfer in Materials Science and Engineering

In a recent report, the Materials Science and Engineering Expert Committee (MatSEEC) of the European Science Foundation (ESF) recommend some measures to overcome the European gap between excellent science and industrial uptake by establishing European Technology Research and Validation Platforms and creating an ‘Open-Access-Open-Innovation’ European Technology Research and Validation Infrastructure Initiative. (MatSEEC, 2015) Such a model could also be expanded to Latin America. Download the report from the website: www.esf.org/matseec



The National Directorate of International Relations of the Ministry of Science, Technology and Productive Innovation of Argentina organized the second Regional Seminar of the Nanopymes platform: "Exchange of experiences and areas of collaboration in nanotechnology applied to health between Latin America and the European Union".

During the meeting were conducted several sessions aimed at formalizing the proposal for the creation of a Regional Platform of technology and innovation in nanomedicine to coordinate an exchange of experiences and areas of collaboration in this field between Latin America and the European Union.

The objectives of work focused on generating a space of encounter for the creation of appropriate conditions for the development of nanomedicine in the region, establishing joint priorities to strategic decision-making involving the development and updating of a regional agenda.

Topics related to best practices, consistent regulatory frameworks and coordinated efforts on the road towards a systemic approach to linking spaces of negotiation and public policy were shared throughout the day.

During the opening, Gonzalo rock Schwartz, Coordinator of the Nanopymes project of the national direction of international relations of the Ministry of science, technology and productive innovation commented: "this activity is carried out within the framework of the celebrations for the tenth anniversary of Argentina Liaison Office and the European Union in science, technology and innovation.

The promotion of innovation in the productive sector is a key element which underpins the Argentine scientific policy. This aims to improve the competitiveness of the private sector, promoting the incorporation of added value to the production. "Some facts that have been key to the development of nanotechnology at national level have been: the implementation of sectoral Argentine funds, Foundation Argentina of nanotechnology, the creation of the Brazilian Argentine Center of nanosciences and nanotechnologies and what today calls us also platform Nanopymes, the program of strengthening the competitiveness of SMEs and job creation in the Argentina".

Rock Schwartz said "this meeting is a continuation of the first seminar organized in October, and formalizes the intention of creating a regional platform for the development of nanomedicine in the region, based on a common agenda that integrates all of the actors."

Participants were Luis Pedro Pereira Mateus, added cooperation section, delegation of the European Union in Argentina; Héctor Pralong, Business Area Coordinator, Directorate of international relations of the Ministry of science, technology and productive innovation; Joxean Fernandez, expert technical support international project Nanopymes and Daniel Lupi, President Foundation Argentina of nanotechnology.

Also present were Luiz Henrique Mourão do Canto Pereira, General Coordinator of health and biotechnology, Ministry of science, technology and innovation, Brazil;

Lídice Gutierrez, Office of science adviser, Republic of Cuba and Jesús González, Consejo Nacional de Ciencia y Tecnología (CONACYT), Mexico.

About the Nanopymes platform

The Nanopymes platform in the field of the National Directorate of international relations of the Ministry of science, technology and productive innovation arises from the international cooperation between Argentina and the European Union seeking to promote job creation as a result of the incorporation of innovation and technological application from nanotechnology oriented SMEs so that improve the competitiveness of the economy and generate more qualified work and wages.

The Nanopymes platform is a project jointly funded and has a total budget of 19.600.000 euros. The program has awarded grants to 18 innovation projects related to the micro- and nanotechnology with an amount of 2 million 229 thousand 700 euros with the aim of joint laboratories. The National Directorate of International Affairs of the Ministry, through this program, seeks to support and improve the mechanism of Government for the transfer of technology to existing SMEs and the creation of new companies based on technologies such as micro and nanotechnology, in this case defined for 4 strategic sectors: health, electronics, agro-food and metalworking.

EU report on NMP in European regions

The European Commission recently published the report: "Analysis of Smart Specialisation Strategies in Nanotechnologies, Advanced Manufacturing and Process Technologies".

This document presents a summary of the final report of the study "Analysis of Smart

Specialisation Strategies in Nanotechnologies, Advanced Manufacturing and Process Technologies".

This study has been undertaken on behalf of DG Research and Innovation, Key Enabling

Technologies Directorate. The principal aim of the study was to identify and map priorities,

declared strategies, emerging trends, instruments envisaged, estimated funding volumes and

modalities regarding the Key Enabling Technologies (KETs). The study focuses in particular on the

nanotechnologies, advanced materials and advanced manufacturing and process technologies KETs

and how they are reflected in the Research and Innovation Smart Specialisation Strategies (RIS3)

prepared at either the national or regional level. The study provides a snapshot of the situation

during late spring/early summer of 2014.

Download the report here:

http://ec.europa.eu/research/industrial_technologies/pdf/analysis_of_RIS3_in_NMP.pdf

Call for partners

Recently, we published an article (Benech JC, Benech N, Zambrana AI, Rauschert I, Bervejillo V, Oddone N, Damián JP. (2014). Diabetes increases stiffness of live cardiomyocytes measured by atomic force microscopy nanoindentation. *Am J Physiol Cell Physiol.* 2014 Nov 15; 307(10):C910-9. doi: 10.1152/ajpcell.00192.2013. Epub), in which we provide new evidences that live isolated diabetic cardiomyocytes nanomechanical properties are affected by diabetes. Isolated live diabetic cardiomyocytes showed to be stiffer than normal cardiomyocytes. This article was the topic of an Editorial Focus by *Am J Physiol Cell Physiol*. Actually we are testing different kind of drugs evaluating its ability in reverse affected nano-mechanical properties of the diabetic cardiomyocyte. Persons who are interested in stablish a possible new collaboration or possible new research project, please contact:

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