

## Publishable summary

### “NANOSCIENCES, NANOTECHNOLOGIES, MATERIALS AND NEW PRODUCTION TECHNOLOGIES DEPLOYMENT IN TECHNOLOGIES IN LATIN AMERICAN COUNTRIES”



The NMP-DeLA project brings together partners and experts from across Latin America and Europe to develop a series of activities between the two regions, to strengthen the local research and training potential, as means to achieve the goal of deployment of new, advanced and enabling technologies in areas of major social challenge in Latin America: water, energy and health.

#### **Project approach:**

**NMP-DeLA** is a support action funded by the EU under FP7 for two years from 1st September 2013. It aims to facilitate the deployment of advanced and enabling technologies in areas of major social challenge in Latin America through the following strategies:

- *Mapping, Strategy Development and Recommendations.*
- *EU-LAC Networking, Consultation Dialogue and Open Innovation Platform.*
- *Education, Training and Skills Provision.*
- *Communication and Dissemination.*

#### **Work Performed and main results achieved in the last 12 months of NMP-DeLA project:**

1. **Expert Workshops and Summer School:** An Expert Workshop and Summer School on Nano for Energy and Water, has been held in Mexico (10-13 November 2014). An Expert Workshop on Nano for Industry, has taken place in Chile (2-3 December 2014). An Expert Workshop on Nano for Energy and Water has been held in Brazil (28-29 May 2015). The presentations and discussions during these events have been used as background materials for the roadmaps and recommendations prepared during the project. The events also offered opportunities for brokerage and networking among the NMP-DeLA Community of Interest Members.

2. **Mapping of advance materials deployment for societal challenges:** While the bulk of the work on the mapping study had been performed during the first year, some corrections and updates were incorporated during the second year. The final version was published in May 2015. NMP-DeLA had provided a mapping of the status of research and development on nanotechnology in health, water and energy in LAC and cooperation with EU. The map synthesized bibliometric information on nano research selected topic in Latin

America, as well as qualitative information on policy initiatives, ongoing research projects and main research groups and institutions in six Latin American Countries. The map constitutes a valuable input for the identification of stakeholders and experts and to support the pooling of knowledge in the field. The information is also useful to support the identification of niches for international and regional cooperation.

**3. Road Maps on Nano for health, water and energy:** During the second year, the ongoing roadmaps on nanotechnology for health, water and energy have been gradually developed based on literature review, interviews, workshops, focus groups and key findings from the mapping study. In addition, the final roadmap and recommendations has been developed summarising general trends and recommendations as well as specific developments related to health, water and energy. Key findings for decision makers and stakeholders including policy makers, and research and industry have been summarised in a six page policy brief and six fact sheets of two pages each (available in NMP-DeLA webpage [www.nmpdelela.eu](http://www.nmpdelela.eu)).

**4. NMP-DELA platform:** During the second year, the number of registered members of the NMP-DeLA Community of Interest has increased to 420 organisations (August 2015). Of these organisations, 251 were active or interested in research related to water applications, 251 related to energy applications and 304 related to health applications.

They are from, in parenthesis the number for each country: Algeria (1) Argentina (30), Austria (7), Barbuda (4) Belarus (3), Belgium (5), Bolivia (1), Botswana (1), Brazil (14), Brunei (1), Bulgaria (1), Central African Republic (2), Chad (1), Chile (14), Colombia (37), Costa Rica (7), Croatia (1), Cuba (4), Czech Republic (1), Denmark (2), Dominican Republic (3), Ecuador (5), Egypt (5), El Salvador (1), Eritrea (4), Finland (10), France (9), Gambia (3), Georgia (2), Germany (10), Ghana (1), Greece (1), Guatemala (3), Guinea-Bissau (1), Honduras (2), Hungary (4), India (12), Iran (1), Ireland (2), Italy (16), Japan (1), Jordan (1), Kenya (1), Liberia (1), Malaysia (2), Mexico (60), Moldova (1), Morocco (1), Netherlands (8), New Zealand (2), Nicaragua (8), Nigeria (2), Norway (1), Panama (1), Peru (3), Poland (3), Portugal (4), Romania (1), Russia (3), Samoa (3), Serbia (1), Singapore (2), Spain (23), Sudan (3), Sweden (3), Switzerland (1), Timor-Leste (1), Tobago (1), Togo (1), Tunisia (1), Tuvalu (1), UK (15), Ukraine (2), Uruguay (10), USA (7), Venezuela (8) and Zimbabwe (1).

Despite the focus of the project on Euro-Latin American cooperation, this list demonstrates the global interest in international cooperation on nanotechnology, materials and production technologies for health, water and energy applications.

**5. Mapping and follow-up for exchange of scientist and industry involvement:** Mapping and follow-up of incentives/activities for exchange have been promoted online (through the website, e-mail, newsletters and a dedicated LinkedIn page) as well as during the events. Mobility programs, grants and tenders between EU and LAC have been promoted as “finding partners for mobility”. This activity covers the integration of local enterprises, identification of potential end-users, service providers, industry associations, capital investors from EU/LAC (information is available from the NMP-DeLA website). During the second project’s year, different channels have again been used for promotion of student and industry involvement and exchange.

#### **Final results:**

- Networking, education and training in Advance materials (nanosciences, nanotechnologies, materials and new production technologies): **“Four Expert workshops and two Summer schools”**.

- Building new skills to enhance and strengthening the local knowledge in Latin America about nanomaterial technologies.
- Boosting synergy with local/regional policy programs and cooperation programs related to advance materials between Europe and Latin America: **“Roadmap and recommendations (health, water and energy)”**.
- Boosting the creation of a Nanocluster between EU and Latin America: **“Open Innovation Platform”**.
- Exchange of best practices, build capacity in nanomaterial innovation and technology.
- Dissemination of results through (peer reviewed) publications, oral presentations and other ways.

**Project Public Website:** [www.nmpdela.eu](http://www.nmpdela.eu)

**List of participants:**

NMP-DeLA consortium comprises different countries from Europe (5) and Latin America (5) region:

- [FUNDACIO PRIVADA ASCAMM \(ASCAMM\)](#) / renamed [EURECAT Centre Tecnologic de Catalunya](#) **Spain**, - Coordinator
- [REDINN SRL \(REDINN\)](#) **Italy**,
- [MALSCH TECHNO VALUATION \(MTV\)](#) **Netherlands**,
- [ZENTRUM FUER SOZIALE INNOVATION \(ZSI\)](#) **Austria**,
- [TEKNOLOGIAN TUTKIMUSKESKUS VTT \(VTT\)](#) **Finland**,
- [UNIVERSIDADE FEDERAL DO PARANA RELANS](#) **Brazil**,
- [Ministerio de Ciencia, Tecnología e Innovación Productiva \(MINCyT\)](#) **Argentina**,
- [CENTRO DE INVESTIGACION EN MATERIALES AVANZADOS SC \(CIMAV-CONACYT\)](#) **Mexico**,
- [MINISTERIO DE EDUCACION Y CULTURA \(MEC\)](#) **Uruguay**,
- [FUNDACION EMPRESARIAL COMUNIDAD EUROPEA CHILE \(EUROCHILE\)](#) **Chile**.

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