

NANOFORCE newsletter

No. 4 / 2013

October

Editorial

Dear Readers!

Welcome to the 4th NANOFORCE newsletter. As you can deduce from the following update of our activities the NANOFORCE Project aims to a successful finale. Our Project team is fully committed to achieve the best results in order to open new opportunities in linking the scientific knowledge to the business in the Central Europe space. We believe that most of our valued readers, stakeholders, companies and institutions operating in nanobusiness will benefit from this ambitious Project outputs in the near future. We would like to thank you for your interest, support and contribution!

Ivo Stanček, Editor

NANOFORCE EVENTS – events' update

2nd NANOFORCE InfoDay and Joint Working Table, 5th June, 2013, Austrian Academy of Sciences, Wien, Austria

BioNanoNet Forschungs gmbH organized the 2nd NANOFORCE InfoDay and Joint Working Table. The sessions focused on health and safety issues especially on toxicological aspects of nanomaterials with experts from the European Center for Nanotoxicology. The Joint Working Table presented a panel discussion on the ongoing risk dialogue on nanomaterials (workplace safety, consumer acceptance, communication between industry and science, etc.).

2nd NANOFORCE Joint Working Table, 11th June 2013, Technological Centre Academy of Sciences, Prague, Czech Republic

The 2nd Prague Joint Working Table was organized by The Association of Czech Chemical Industry and The Technology Centre Academy of Sciences. It was opened for professionals in the field of SHE (Safety, Health & Environment), research, development and industrial applications of nanomaterials. The main discussion covered topics related to responsible development of nanomaterials: current conditions of research and development, recommendations for legislation, obstacles to market and legislation, need for addressing both European and global context of Nanomaterials driven by “safety by design” approach.

NANOFORCE Magic Training Course, 26th–28th June 2013, Prague, Czech Republic

This 2 and ½ day Magic Training Course provided a comprehensive overview on how to become an Entrepreneur in the high-tech business! Graduates with Bachelor Degree up to PhDs in scientific disciplines; young Researchers willing to apply their competences to the markets needs; emerging professionals interested to transform their services into private companies were selected and invited to this Magic Training Course. 27 young talented professionals from 6 Central European countries have learned how to identify their potentialities in order to transform their knowledge into wealth for themselves and for the 8 Areas of Central Europe in which they live in future. Mr. Paolo Manes (SC Sviluppo chimica S.p.A., Milan, Italy) and Mr. Gunter Festel (Festel Capital, Fuerigen,

This project is implemented through the CENTRAL EUROPE Programme co-financed by the ERDF



Participants of the NANOFORCE Magic Training Course, 26th–28th June 2013, Prague, Czech Republic

Switzerland) are the 2 Professionals with international competences and managerial experiences who have trained the participants and on how to set up a nanotech company. At the end of the Magic Training Course, all Participants have received a “Certificate of Attendance”, signed by the two teachers. The training was highly appreciated by the participants.

**1st NANOFORCE Joint Working Table,
11th June 2013, Warsaw, Poland**

Between invited experts there were present representatives of research institutes, national authorities competent in field of nanotechnology and industry. Discussion was about nanomaterials' possible hazardous impact on human health and environment. Conclusions were that the current REACH framework is sufficient to cover nanomaterials, but the definition should be adjusted to match the reality. If nanomaterial is known to be harmful to people or environment it should be treated as such according to current legal framework. If no dangerous properties are scientifically confirmed it shouldn't be treated as dangerous just because it has nanosized structure. Manufacturers should assess threat of nanomaterials during the whole life cycle not just in production or in the use stage. REACH Handbooks for nanomaterials should be created in order to set quantities of nanomaterials that should be covered by the regulation.

**2nd NANOFORCE Joint Working Table,
11th July, 2013, Szczecin, Poland**

The second Joint Working Table in Poland was organized during the VI. “Polish Conference on Nanotechnology”, held in Northern Pomeranian University. After session IV. “Education & Regulation”, there was a time for discussion on necessity of an improvement in nanotechnology education and its responsible use and application, as well as working on standardization issues and definitions of all stages and forms of nanostructures. All this for a better understanding of occurred phenomena and better regulations of nanostructures. The known experts: Maria Zielecka (standardization and normalization issues), Wojciech Wąsowicz (toxicology), Dorota Rutkowska-Żbik (education), Tomasz Stępień (nanotechnology assessment), Lidia Zapór (Health and safety in the workplace), Michał Andrijewski (Law regulations in UE). More information available at: http://nano2013.zut.edu.pl/program_ramowy.php

**2nd NANOFORCE InfoDay, 16th–17th September
2013, Technical University Warsaw, Poland**

As the satellite event to E-MRS Fall Meeting 2013 the Second NANOFORCE InfoDay was organized in Poland. It was attended by 90 participants. During two days of conference there were several sessions



1st NANOFORCE Nanodeals Event,
24th September, Prague, Czech Republic

devoted to NANOFORCE Project, its goals and achievements.

The main topics of this event were: Nanoparticles characterization – Iwona Malka, Roman Pielaszek, Stanisław Gierlotka; Nanoregulations, law, toxicity, Nanometrology – Paulina Porębska – Sęktas, Krzysztof Maruszewski, Jacek Wojtał, Luis Rino; Legal aspects of nanotechnology – Marcin Jurewicz, Elżbieta Jankowska, Maciej M. Stępnik, Tomasz Puzyń.

Business aspects of the NANOFORCE Project as well as Nanodeals activities were described during the session: Funding and future of Nanotechnology – Dariusz Smoleń, Paolo Manes, Grażyna Omarska, Mariusz Wielec, Joanna Ejdys and Krzysztof J. Kurzydłowski.

More information, timetables, Book of abstracts on <http://science24.com/event/nanf2013/>.

**1st NANOFORCE Nanodeals Event,
24th September, Prague, Czech Republic**

The 1st The “Nanodeals Event” was an extraordinary workshop addressed to Scientists, business development Managers, venture Capitalists, competent authorities’ Officers, scientific and technological parks’ Managers, Agencies for foreign direct investment attraction, human resource Managers who were invited to exchange their competences and experiences and to know each other with the objective to capture the potential of the Nanotechnologies in Central Europe. The “Nanodeals Events” presented some success stories, some business opportunities offered through

Nanotechnologies, some experiences by private and public actors aimed to create the right climate for the sustainable development linked by NANOFORCE Project. There was also presented the “PROPOSAL TO SUBSCRIBE THE INCORPORATION Of I.N.V.C.F. – INTERREGIONAL NANOTECH VENTURE CAPITAL FUND, In CENTRAL EUROPE”, with the intent that Potential Investors could evaluate and subscribe it. Nearly 40 experts participated at this Prague session which created a firm basis for creating of future Nanodeals business opportunities.

2nd NANOFORCE InfoDay, 22th–25th September 2013, Svit, Slovakia

The join 6th International NANOVED Conference on Nanosciences, Nanotechnologies and Nanomaterials and the 2nd NANOFORCE InfoDay were organized by the Slovak Academy of Sciences and Association of Chemical and Pharmaceutical Industry of the Slovak Republic, Slovak University of Technology, Slovak Research and Development Agency, Chemosvit Plc. and VUCHV Plc. The NANOVED Conference was focused on the presentation of the latest trends in the field of nanomaterials and nanotechnologies.

The 2nd NANOFORCE InfoDay informed about results and activities of the NANOFORCE Project. Presentations were focused on health effects of nanoparticles and EU legislative framework regarding nanoparticles as well as promising research results. There were 29 specialized presentations on the topics connected with the R&D in the field of nanotechnology, nanoparticles, nanomaterials and consumer goods containing nanoparticles. Some results of young researchers



2nd NANOFORCE InfoDay, 22th–25th September 2013, Svit, Slovakia

This project is implemented through the CENTRAL EUROPE Programme co-financed by the ERDF



were presented on 13 posters. There was the Best Young Researcher Contribution Award Ceremony during the Conference Banquet. There were more than 80 participants from science institutions, universities, R&D institutes and industrial companies from Slovakia, the Czech Republic, Israel and Belorussia. Participants visited Chemosvit Fibrochem Plc. in Svit, one of the first companies in Slovakia which uses nanoparticles in production of consumer goods (special types of hand-made fibers). The Book of abstract is available at: www.zchfp.sk.

**2nd NANOFORCE Joint Working Table,
25th September 2013, Portorož, Slovenia**

University of Nova Gorica organized the 2nd Joint Working Table which focused on topics related to nanomaterials and nanotechnology. Its goal was to enrich knowledge and experiences related to nanoparticles and to promote networking among institutions dealing with nanoparticles. The workshop included presentations on the safety, legislation and potentials of nanoparticles, the benefits of integration between the various institutions in the field of nanoparticles, as well as presentation of activities and future events organized within the project Nanoforce. In addition, we had enough time for effective dialogue and exchange of views. Participants from industry, researchers and ministry were present and all of them expressed a clear need for further closer cooperation.

**2nd NANOFORCE Nanodeals Event,
1st October 2013, Vienna, Austria**

To strengthen the economic potential of the European Union, it's of great relevance to integrate venture capital in science and to encourage young research talents to start their own businesses and step into independence. The 2nd Nanodeals Event organized by the Lead Partner Sviluppo chimica S.p.A., in cooperation with BioNanoNet Forschungs GmbH, was targeted at researchers, business development managers, venture capitalists, funding agencies and science and technology parks to share skills and experience in order to increase the potential of nanotechnologies in Central Europe and to strengthen an interactive dialogue. The Central Europe Programme, which funds the NANOFORCE Project and was represented at the event by Mr. Luca Ferrarese, Head of the



2nd NANOFORCE Joint Working Table,
25th September, 2013, Portorož, Slovenia

CE JTS, strongly supported the NANOFORCE initiative, underlying the importance of developing entrepreneurial mindsets, encouraging the creation of new businesses and enhancing service innovation and business transfers to support growth, competitiveness and innovation of the CE area. All parties highly appreciated the talks and interactive discussion during the event where new funding opportunities emerged.

PROJECT HIGHLIGHTS

**The V NTPF – Nanotech Technical Partnership
Forum, 30th September 2013, Vienna, Austria**

The 5th Nanotech Technical Partnership Forum (NTPF) was held in Vienna. In order to prepare the final phase of the NANOFORCE Project the consortium discussed on important aspects to be finalized within the next 4 months. Researchers, Industry and all interested stakeholders still have the opportunity to enhance their visibility by registering as **Experts** within the NANOFORCE database not only to be found and to find possible project or funding partners but also to be able to bring in their ideas on new nanotechnology developments. These project ideas, product ideas, Start-ups ideas and seek for funding can be placed on the NANOFORCE **NanoDeals Generator!** Additionally, young researchers and experts in nanotechnologies can seek for jobs and be found by Head hunters within the **Discover your Talent** section. Furthermore the NANOFORCE Project will launch a **Technology Rating Methodology** which will give the opportunity to test your product or start-up idea within a 15 minutes questionnaire to receive feedback on possibilities and possible downfalls.

This project is implemented through the CENTRAL EUROPE Programme co-financed by the ERDF



The theme of responsible use of nanomaterials and associated risk management as on the topics of NANOFORCE Project is going to the final phase being able to publish **Safety Data Sheets** for TiO₂, nanoAg and nano ZnO nanoparticles and **Exposure Scenarios**. Furthermore the **Guideline** on Responsible Use and Production of Nanomaterials as well as the **White Book** of Recommendations will be available soon for public download. For more information please visit www.nanoforceproject.eu.

NANOFORCE SUCCESS STORIES

The EuroNanoForum 2013 “Nanotechnology Innovation: From research to commercialization – the bridge to Horizon 2020”, 20th–25th June 2013, Dublin, Ireland

The conference took place in Dublin during the Irish presidency of the European Union. The main focus of the conference has been the commercialization of nanotechnology, exploiting its potential for new applications, pushing it from an enabling technology through to development and on to use in end products. With **Horizon2020 beginning in 2014**, the conference looked at how nanotechnologies will fit into the new structure within the key priority areas of Excellent Science, Industrial Leadership and Societal Challenges.

BioNanoNet represented the Austrian nanocommunity and results from NANOFORCE Project via a poster on Safety Implementation of Nanotechnology for Chemical Enterprises within a Bottom-Up Approach Towards Communication.

UPCOMING NANO EVENTS

NANOFORCE Matchmaking Fair – CALL FOR START-UP – “From the Lab to the Market” dedicated to start-ups, 26th–29th November 2013, Venice, Italy

Veneto Nanotech, the Italian Association for the Industrial Research/AIRI, the National Research Council/CNR and the Istituto Italiano di Tecnologia/IIT, in collaboration with Intesa Sanpaolo Start-Up Initiative and the NANOFORCE Project are organizing a unique coaching and fund-raising fast-track opportunity for nanotechnology entrepreneurs

that will take place during the NanotechItaly 2013 conference, to be held in Venice Mestre (Italy) at the NH Laguna Palace Conference Center on 26th, 27th, 28th and 29th November 2013.

The event, called „**From the Lab to the Market**”, is dedicated to start-ups in the field of nanotechnology and aims at presenting new companies with business ideas in nanotechnology to a wide audience of experts, companies, investors and VCs in order to facilitate the matching of supply and demand of nanotechnology.

In the first phase of the Project more than 30 international start-ups have applied and 12 of them have been selected. They will attend a 3 day training programme activity organized by Intesa Sanpaolo and they will present to the audience of NanotechItaly their new nanotechnology based products or services in the following fields: new materials, biotechnology, nanomedicine or pharma, clean technologies/energy, electronics, sensors or devices. More information available here: <http://www.nanotechitaly.it/>.

2nd NANOFORCE Joint Working Table, 28th November 2013, Venice, Italy

During the NanotechItaly 2013 meeting, on Thursday 28th of November, Veneto Nanotech together with the certification company CSQA, is organizing the second Italian JWT. The workshop, titled “Responsible use of nanomaterials in consumer products: voluntary certification” will discuss the application of a new standard for the responsible management of nanomaterials in companies producing goods that are used by professional users and by the general population. There is a growing use of nanomaterials in consumer products in a variety of sectors, such as automotive, food, cosmetics, medical devices. The regulatory framework is adapting to the fast market change, but the evolving situation cause the lack of data and specific regulatory guidelines making it difficult to properly address the safety of the nanomaterials in consumer products. In this situation it is still possible to ensure the interested parties that every element of the production process was considered and performed responsibly, according to the best available practices. The workshop is especially targeted to industries and industry organizations, but also to research organizations involved in technology

This project is implemented through the CENTRAL EUROPE Programme co-financed by the ERDF



**CENTRAL
EUROPE**
COOPERATING FOR SUCCESS.



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

**nano
FORCE**

transfer, and to consumer protection association. There will be a presentation of the legal framework, explaining the use of soft law tools into the European legal framework, followed by the introduction of the quality management system in light to nanomaterial use and the concept of responsibility in industry, and finally the nanospecific assessment procedure that complements the management standard, with some applicative examples. More information available here: <http://www.nanotechitaly.it/program/workshops/responsible-use-of-nanomaterials/>.

**3rd NANOFORCE Nanodeals Event,
12th December 2013, Milan Italy**

The last interactive and tailored workshop addressed to high-tech and nanotech actors from the Central Europe regions, presenting the NANOFORCE specific tools to support entrepreneurs and talents in identifying all the opportunities offered by Nanotechnologies, and focused on the Project's most challenging target that is to raise the "I.N.V.C.F. – Interregional Nanotech Venture Capital Fund, in Central Europe" with at least € 20.0 Man. dedicated for early stage investment in the 8 Areas of the NANOFORCE Project.

**10. Werkstoffkongress, 6th–7th November 2013,
Montanuniversität Leoben, Austria**

The present two-day symposium has two aims: First, it will provide insight in several promising fields of bioinspired materials research, including functional surfaces and interfaces, photonics, sensorics, actrics, and robotics. Second, the innovation potential and the marked needs for the transfer of biomimetic principles into novel bioinspired materials and devices will be discussed with delegates from industry. More information at: <http://www.ausseninstitut-leoben.at/de/2726>.

**BIO-Europe 2013, 4th–6th November 2013,
Messe Vienna, Austria**

BIO-Europe® is Europe's largest partnering conference, serving the global biotechnology industry. The conference annually attracts leading dealmakers from biotech, pharma and finance along with the most exciting emerging companies. Produced with the support of BIO, it is regarded as a "must attend" event for the biotech industry registration by 21st September 2013. For more details

please visit www.ebdgroup.com/bioeurope and see the registration form!

**Nanosafety 2013, 20th–22nd November 2013,
Saarbrücken, Germany**

NANOSAFETY INCLUDES a detailed knowledge on the materials as well as acquisition of their properties; elucidation of the effects of nanomaterials on human beings, including detailed analyses on their mode of action and structure activity relationships; assessment of the impact of nanomaterials on living organisms and the environment; detection, identification, and quantification of nanomaterials in complex matrices, for example cells and tissues as well as standardization, legislative, regulatory and social aspects.

You are invited to discuss the state of the art, future needs, and developments in these fields in the "Nanosafety 2013" conference. For more details please visit www.nanosafety2013.de.

**Working session of the DGM's (German
Society for Materials Science) expert
committee „Bioinspired und Interactive
Materials“ & working committees „From Gene
to Material“ and „Interfaces: Static & Dynamic“
in cooperation with the NANOFORCE Project,
12th November 2013, Munich, Germany**

Chemistry-Cluster Bavaria contributes in its capacity as a NANOFORCE Project partner to the organization and delivery of the Working session of the DGM's expert committee „Bioinspired und Interactive Materials“ & working committees „From Gene to Material“ and „Interfaces: Static & Dynamic“ with the aim to introduce the project NANOFORCE to the national audience and to acquire high promising nanodeals. The event will be conducted in German and is free of charge. More information available here: <http://www.chemiecluster-bayern.de/> and <http://www.dgm.de/>.

Contact:

Mr. Ivo Stanček
NANOFORCE Communication Manager
The Association of Chemical Industry
of the Czech Republic
ivo.stancek@schp.cz

This project is implemented through the CENTRAL EUROPE Programme co-financed by the ERDF

