



NANOTECHINSIGHT

BRIDGING THE NANO DIVIDE

10 - 14 MARCH, 2012 CAIRO, EGYPT



◆ Energy ◆ Water ◆ Cement, Steel & Construction ◆ Petroleum ◆ Nano Science ◆ Agriculture



The Nanotech Insight Conference

A novel meeting on the scientific, technological and social aspects of nanometre scale systems.

Cairo, Egypt

Table of Contents

1. Welcome Letter
.....
2. About the Conference
.....
3. Topics
.....
4. Speakers
.....
5. Agenda
.....
6. Registration Information
.....
7. Event Testimonials
.....
8. Application Form
.....



WELCOME LETTER

Dear Colleague,

It is my pleasure to welcome you to the fourth edition of the International Conference on Nanotechnology: Science and Applications (Nanotech Insight). Nanotechnology will affect all walks of life: the way we live, work, and play. Research in nanoscience is exploding and the development of numerous key enabling technologies by nanoscience will lead to far-reaching changes in our lives. This offers us great hope: a chance for a cure to cancer, quick and affordable medical diagnostic systems, cheaper and cleaner fuel supplies, access to clean water, and perhaps it is our best chance to overcome poverty and environmental degradation. Nanotechnology offers many cost-effective solutions for issues common to developing countries.

This conference aims to integrate the scientific and sociological aspects of nanoscience and technology, while forging lasting relationships between industry, academe, scientists, technologists and legislators in the developed and developing areas of the planet. By bridging different perspectives, the conference aims to promote sustainable development and global prosperity by addressing nanotechnology applications available worldwide. I invite you to join us in Cairo to learn about the latest exciting breakthroughs in the rapidly growing nanotechnology field and to connect with professionals from across the globe who are at the forefront of these recent developments and initiatives.

Nanotechnology is the engineering of matter at dimensions of one to 100 nanometers. By manipulating matter on this small scale, researchers and engineers are now able to have precision control over surface properties and interactions of materials, bringing about enhanced understanding and improvements of traditional materials, and also entirely new and multi-functional materials with ultra high performance. Research in nanoscience is therefore naturally exploding. Analysts estimate that by 2015, nanotechnology products will soar above the 2.6 trillion dollar mark. Industry giants such as IBM, Hewlett-Packard, Samsung, Nestle, Siemens, BMW, Ford, Boeing and Nikon have been increasingly pouring investment dollars in nanotechnologies and nanotech research, some investigating nanoscience for 20 years already. Nanotechnology offers a host of opportunities in high-tech high-growth innovations that offer not only to evolve current technologies but to radically transform entire industries. NTI will be the definitive event to learning everything you need to know about this amazing new technology.

I look forward to hearing from you and to welcoming you to Cairo,

Prof. Mohamed M. Abdel-Mottaleb

Germany

Kreuzstrasse 7a, 80331 München
Tel.: +49 89 23512 0621 Fax: +49 180 50029 0621

Egypt

4 Al-Sabbagh Str., 11757, El Korba, Cairo, Egypt
Tel: +20 2 2414 6493 Fax: +20 2 2415 0992

nanoinsight@sabrycorp.com
www.nanoinsight.net

ABOUT THE CONFERENCE

This 4th edition of the Nanotech Insight conference, NTI 2012, seeks to be an incubator of new ideas to explore how nanotechnology can help develop Egypt and the wider region both economically and socially, facilitating the rise of an innovation culture based on rigorous scientific debate and exploration in the following key areas:

- Energy
- Water
- Agriculture
- Cement, Steel and Construction
- Petroleum, Gas and Petro-chemicals
- Nanoscience

More than any other science, nanotechnology highlights the importance of communication and collaboration. In today's increasingly interconnected world, nanoscience has a fundamental role to play in bridging communities and narrowing the gap between those who have opportunities and those who do not - both within and between countries.

In the wake of the Arab revolutions, Egypt is embarking on a pivotal transformation towards long withheld freedom and prosperity. Critical to the success of this political transition is Egypt's parallel ability to transform into a modern knowledge economy, positioning scientific thinking and ingenuity at the helm. Egyptians have astonished the world in the past months by their courage, creativity, and captivating engagement. The time is now, to meet with young Egyptians, forge lasting collaborations, and establish mutually reinforcing academic and business opportunities for the years ahead.

We welcome you to Cairo to join us this multidisciplinary meeting with renowned scientists, engineers and industry leaders, aiming to bridge the gaps that currently separate nanoscientists worldwide and aiming to spark a new scientific revolution marked by the cleverness and ingenuity latent in the region.

Germany

Kreuzstrasse 7a, 80331 München
Tel.: +49 89 23512 0621 Fax: +49 180 50029 0621

Egypt

4 Al-Sabbagh Str., 11757, El Korba, Cairo, Egypt
Tel: +20 2 2414 6493 Fax: +20 2 2415 0992

nanoinsight@sabrycorp.com
www.nanoinsight.net

TOPICS

Energy

- Fuel cells
- Batteries
- Photovoltaics
- Thermoelectric power
- Piezoelectric power
- Nanotechnology in geothermal energy

Water

- Advanced filtration techniques
- Environment, health and safety
- **Water treatment**
 - Bio approaches and treatment
 - Carbon nanotube membranes
 - Nanoparticles in water treatment
 - Nano zeolites
 - Self-assembled mono-layer on mesoporous supports (SAMMS)
- **Water quality**
 - Management
 - Sensors

Agriculture

- Agricultural crop processing
- Controlled release approaches
- Environment, health and safety
- Food processing
- Nanotechnology in packaging
- Pest control
- **Smart farming**
 - Management
 - Sensors
- Soil preparation and treatment

Cement, Steel & Construction

- **Nano-construction road map**
 - Nanotechnology: Unique properties of nanoscale materials
 - Nano construction in emerging markets
 - Nano construction worldwide vision
- **Nanotechnology and construction materials: small science for big changes**
 - Green nanotechnology in concrete & construction industries
 - Nano asphalt & concrete for hi-way & bridge applications
 - Applications for nanoscale ASR (concrete aids)
 - Nano modification of cementation materials
 - Advanced Iron & steel technologies
 - Nanotechnology applications for refractories
- **Nano-modelling and characterization of construction materials**
 - The nanogranular nature of cement paste
 - Characterizations of construction materials (elasticity, porosity, hydration)
- **Nano-construction materials**
 - Ultra high performance concrete (UHPC)
 - Self-consolidating concrete (SCC)
 - Super hard steel
 - Advanced paints
 - Nano-ceramics
 - Nano-applications for fatigue properties of steel
 - Nano steel casting (casting)
 - Nanotechnology's influence on refractory properties
 - Nano additives for concrete
- **Nano-construction products**
 - Nanostructured materials & surfaces
 - Nanosensors & electronics
 - Nano- integrated energy production & storage and environmental remediation

TOPICS

Petroleum

- **UpStream:**
 - **Exploration**
 - Sensors
 - High performance materials
 - **Drilling**
 - Chemical and abrasion resistant coating
 - Production tubulars
 - Alloys for increased strength and endurance at reduced weight
 - Nano-scale chemicals to control fluid losses
 - Nano-composite elastomers
 - Hydrophobic/hydrophilic properties control
 - Novel materials responding to water presence
 - **Production**
 - Fluid flow sensors
 - Fluid type recognition sensors
 - Nano-membranes
 - **Reservoir engineering**
 - Rock porosity sensors
 - **Well logging**
 - Wireless sensors
 - Applications of molecular simulation in the oil and gas industry: Monte-Carlo Methods
- **MidStream**
- **Refining and Processing**
 - Nano-composite membranes
 - Nano-catalysis
- **Transport**
 - Self-healing tubes
 - Intelligent tubes (detect and respond to unfavorable conditions)
 - Flow assurance additives
 - Wireless sensors

Nano Science

- Electronics
- Optics
- Nanomedicine
- Magnetism
- Nanofabrication
- Characterisation and manipulation
- Nano ethics / Environmental impact



SPEAKERS



Mohamed Abdel-Mottaleb
Nile University, Egypt

AGENDA

Sunday March, 10th.	Morning	Registration Welcome Coffee Reception Conference opening
	Afternoon	Networking Lunch Conference sessions
	Evening	Poster Presentations Gala dinner
Monday, March, 11th.	Morning	Conference sessions
	Afternoon	Networking Lunch Conference sessions
	Evening	Poster Presentations
Tuesday, March 12th.	Morning	Conference sessions
	Afternoon	Networking Lunch Conference sessions
	Evening	Poster Presentations Gala dinner
Wednesday, March 13th.	Morning	Conference sessions
	Afternoon	Networking Lunch Conference sessions
	Evening	Poster Presentations
Thursday, March 14th.	Morning	Conference sessions
	Afternoon	Networking Lunch Conference sessions
	Evening	Closing

Germany

Kreuzstrasse 7a, 80331 München
 Tel.: +49 89 23512 0621 Fax: +49 180 50029 0621

Egypt

4 Al-Sabbagh Str., 11757, El Korba, Cairo, Egypt
 Tel: +20 2 2414 6493 Fax: +20 2 2415 0992

nanoinsight@sabrycorp.com
www.nanoinsight.net

REGISTRATION INFORMATION

How To Register

To register for the conference, please fill in the attached registration form and send it by either email or fax to the conference organizers with accompanying proof of payment (information is included on the form).

Exhibitor's & Sponsors should fill in a separate registration form, please contact us for exhibitor & sponsorship forms.

What the fees include

Registration fees include attendance at all conference sessions and the exhibition, as well as the attendee bag, coffee breaks and lunches.

Fees

	Early Bird	Regular
Students	250.00 €	350.00 €
Academic	450.00 €	600.00 €
Company	1,250.00 €	1,400.00 €

Important Notice

Please contact us for Special Egyptian rates.

Sponsors and Exhibitors who will take accommodation or participate directly in the conference sessions should fill out a participant's application form in addition to the sponsor and exhibitor's form.

EVENT TESTIMONIALS

"It was a great conference, well organized, very good lectures: in one word 'perfect'."

- Roeland Nolte (KU Nijmegen, The Netherlands)

"This has been an excellent conference both in terms of scientific content and in terms of atmosphere...it has really been a 'tour de force'."

- Roberto Lazzaroni (Université de Mons-Hainaut, Belgium)

"For a businessman, like myself, [your conference] was a huge success and a wonderful venue in which to see the cutting edge research that is being conducted around the world."

- Nicolaas K. Beyers (Senior Consultant for Keystone International, Inc., USA)

"I wanted to thank you for one of the best run, best organized meetings I have ever seen."

- David Drabold (Ohio University, United States)

"I really enjoyed the trip, and I think the conference was excellent and was well attended with excellent papers. I learned a lot about what is going on in Europe, which you do not see often in the nanotech conferences in the US."

- Raouf Loutfy (Fullerene International Corporation, USA)

Please fill out, sign then fax this form to either our Cairo office: +20 2 2415 0992 or our Munich office: +49 180 50029 0621

Contact Details

Mr. Mrs. Miss. Dr. Eng.

First Name: _____ Last Name: _____

Affiliation: _____ Job Title: _____

Address: _____ Postal Code: _____

City: _____ Country: _____

Tel.: + () _____ Fax: + () _____

E-mail: _____

Web: http://www. _____

Accompanying Person

First Name: _____ Last Name: _____

Registration (Please tick your options)

<p><i>Please mark below your Registration and be sure to deliver the form before the deadline. Registration prices include the conference reception, all conference materials, lunches, and coffee breaks.</i></p>		Early Bird	Regular	<p><i>Please mark your topic :</i></p> <p><input type="checkbox"/> Water <input type="checkbox"/> Cement <input type="checkbox"/> Agriculture</p> <p><input type="checkbox"/> NanoScience <input type="checkbox"/> Petroleum <input type="checkbox"/> Energy</p>
	Students	250.00 €	350.00 €	
	Academic	450.00 €	600.00 €	
	Company	1,250.00 €	1,400.00 €	

Hotel Registration

Single - 155 Euro Double - 170 Euro Smoking Non-smoking
(Rates include bed & breakfast)

Guest Name: _____
 (First) (Middle Initial) (Family Name)

Arrival Date _____ Departure Date _____

Gala Dinner

40 Euro per person: 1 pers. 2 pers.

Other Details :

Please Specify any dietary requirements (Vegetarian, No fish, No meat, etc ...)

Dietary Requirements :

Dietary Requirements (Accompanying Guest) :

