Nano Bio Clean Tech™

The 5th International Congress of Nano-Bio Clean Tech 2008

October 27-30, 2008
San Francisco Airport Marriott Hotel

"Accelerating Commercialization in Nano Bio & Clean Tech"

ianano.org

cleantechinstitute.org

cinano.com

MOTOROLA ZEISS NASA APPLIED MATERIALS NIOSH Taylor & Francis Group SVASE NGEN MTI Partners Inc

The 5th International Congress of Nanotechnology & Clean Tech 2008

October 27-30, 2008 • San Francisco Airport Marriott Hotel

"Accelerating Commercialization in Nano Bio & Clean Tech"

http://www.ianano.org

Nanotechnology Congress 2008

Conference Topics:

- Nanomaterials
- Nanodevices
- Nanoelectronics
- Nanobiotechnology
- Nanomedicine
- Nano Drug Delivery Systems
- Nanotechnology in Semiconductor Industry
- Nanotechnology in Biopharmaceutical Industry
- Nanotechnology in Energy Industry
- Nano Tools
- Medical Imaging
- Nano Manufacturing
- Nanoparticles Toxicology
- Societal & Environmental Impacts
- Health Safety Implications
- Intellectual Property and Technology Transfer
- Investment Opportunities for Start-up Ventures

Cleantech Congress 2008

Conference Topics:

- Cleantech Business
- Biofuels
- Photovoltaic
- Electric Car
- Sustainable Energy Public Policy
- Climate Change Protection
- Cities Mayor Global Warming Solutions
- Nano Battery Storage Systems
- Nanostructured Solar Cell Manufacturing
- Intellectual Property
- Commercialization
- Venture capital investment

International Association Of Nanotechnology

The International Association of Nanotechnology is a non-profit organization with the goals to foster scientific research and business development in the areas of nanoscience and nanotechnology for the benefits of society. The Association fosters friendship, equality and cooperation amongst its members around the world.

Under the provisions of a $1.5 million high growth jobs training grant from the federal US government, the Association is able to offer several programs that address the need for workforce training in the nanotechnology and clean tech sectors.

To join the Association, please visit our web site: www.ianano.org

Letter from the Conference Chair

Dear Colleague,

Welcome to the 5th International Congress of Nanotechnology & Clean Tech 2008.

This year's program features a wide spectrum of inter-related topics in the merging field of nano bio and clean tech. In addition to keynotes, invited lectures, breakout scientific sessions and roundtable business discussions, the Congress highlights several forums focusing on the latest development in Nanomaterials Stewardship Initiative, NanoSafety Consortium, Climate Change Protection, Thin Film Photovoltaics, Emerging Nano Bio Clean Tech Companies, and Vneture Capital Investment Forum.

The nano bio and clean technologies are becoming increasingly important to the continued growth and welfare of the global economy. On an annualized basis, the federal government of the United States earmarks $1.5 billion to the development and enrichment of nanotechnology. Within the past year, the European Union has committed more than $2 billion a year to the development of nanotechnology-related projects; other countries have invested a significant R&D budget towards nanotechnology research.

While nanotechnology continues to fill the gap between concept and reality, clean tech has also emerged as the third largest venture investment, with more than $3 Billion has been invested in start-up in the USA over the past 12 months. More companies and organizations are focusing on the demand for technologies that protect the climate, provide power and offer more efficient means of storing energy. In many cases, nanotechnology is the engine that drives the advancement of clean tech.

The program has been designed to help you to gain insights into some of the latest scientific breakthroughs and exciting business opportunities as well as to present to you challenges facing the emerging industries which require international collaboration.

I would like to thank our volunteers, and many of our colleagues who have done so much to make this year's conference successful.

I look forward to meeting each one of you in San Francisco. I hope you enjoy this beautiful city and find the program, papers, and workshops stimulating and valuable.

With warmest regards,

Lloyd L. Tran
President, International Association of Nanotechnology
Director, Clean Tech Institute
San Jose, California, USA

Program At-A-Glance

nanobio-cleantech CONGRESS 2008

Monday October 27, 2008 (DRAFT)

8:30 AM - 2:00 PM	Workshop Registration
10:00 AM - 5:00 PM	Exhibitor Registration
9:00 AM - 5:30 PM	**Pre-Conference Workshops**
9:00 AM - 10:30AM	Workshop 1: Nanotech & Clean Tech: an industry overview
10:45AM - 12:15PM	Workshop 2: Nanofabrication: Principles and Applications
1:30 PM - 3:00 PM	Workshop 3: (Concurrent workshop) Introduction to Carbon Nanotubes Advanced Workshop 4: (Concurrent workshop) Nano Thin Film Photovoltaics
3:15 PM - 5:30 PM	Workshop 5: (Concurrent workshop) Nanobiotechnology & Tissue Engineering
1:30 PM-5:30 PM	**Nanomaterials Stewardship - A Stakeholder's Workshop**

Tuesday October 28, 2008 (DRAFT)

7:30 AM - 4:00 PM	Registration
7:30 AM - 8:30 AM	Breakfast
9:00 AM - 12:00 PM	General Sessions Welcoming Remarks from the Program Chair Keynotes Invited Lectures Climate Change Protection- Mayor Forum
10:00 AM- 6:00 PM	Exhibit Poster Presentations
12:15 PM - 1:30 PM	Lunch
1:30 PM - 5:00 PM	**Breakout Sessions** Track A: Nanomaterials Track B: NanoCharacterization Track C: NanoBiotechnology Track D: Clean Tech & Climate Change Solutions Track E: Intellectual Property
1:30 PM-5:00 PM	Poster Presentations Reception

Wednesday October 29, 2008 (DRAFT)

7:30 AM - 4:00 PM	Registration
7:30 AM - 8:30 AM	Breakfast
8:30 AM - 12:00 PM	**General Sessions** Welcoming Remarks from the Program Chair Keynotes Invited Lectures Panel Discussion
10:00 AM- 5:00 PM	Exhibit
12:00 PM - 1:30 PM	Lunch Poster Presentations
1:30 PM - 5:00 PM	**Breakout Sessions** Track A: NanoToxicology Track B: Nanoparticles Track C: Biofules Track D: Nanoscale Photovoltaics

Thursday October 30, 2008 (DRAFT)

7:30 AM - 4:00 PM	Registration
7:30 AM - 8:30 AM	Breakfast
8:30 AM - 12:00 PM	**General Sessions** Welcoming Remarks from the Program Chair Keynote Invited Lectures
10:00 AM- 2:00 PM	Exhibi
12:15 PM - 1:30 PM	Lunch
12:00 PM- 4:00 PM	Job Fair
1:30 PM - 5:00 PM	**Breakout Sessions** Track A: Nanostructures Track B: Medical Imaging & Diagnostics Track C: Nanoscale Photovoltaics Track D: Emerging Tech Investment Forum
5:00 PM- 6:00 PM	Congress Discussion Meeting Adjourned

SPONSORED BY

Clean Tech Institute provides expert management consulting services on strategic planning, corporate development, business positioning, and capital funding assistance in the emerging clean tech industry. In partnership with the International Association of Nanotechnology, the Institute provides workforce training as well as facilitating the deployment and use of clean tech solutions by business, government, universities and other institutions.

Clean Tech INSTITUTE

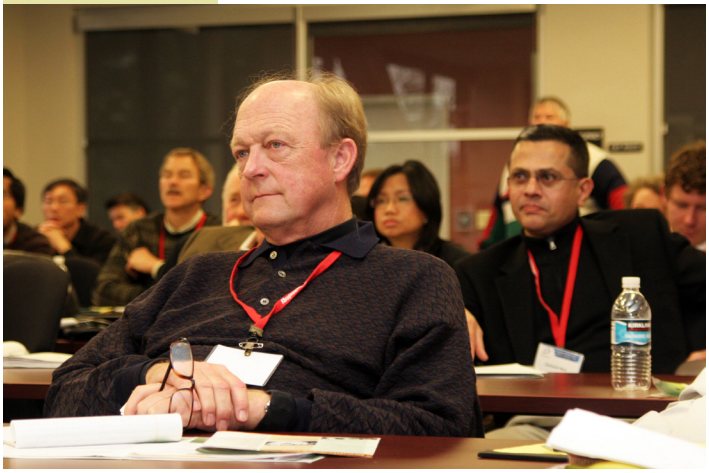
http://cleantechinstitute.org/

Conference Schedule

nanobiocleantech CONGRESS 2008

Monday October 27, 2008 (DRAFT)

8:00 AM - 10:00 AM	Workshop Registration
10:00 AM - 5:00 PM	Exhibitor Registration
10:00 AM - 5:00 PM	Conference Registration
	PRE-CONFERENCE WORKSHOPS (90 min)
9:00 AM - 10:30AM M-W-1	Workshop 1: **Nanotech & Clean Tech: an industry overview** ***Lloyd L. Tran*** Director, California Institute of Nanotechnology, USA
10:45 AM - 12:15 PM M-W-2	Workshop 2: **Nanofabrication: Principles and Applications** ***Mahmadur Rahman*** Associate Professor, Santa Clara University
12:15 PM - 1:30 PM	Lunch on your own
1:30 PM - 3:00 PM M-W-3	Workshop 3: (Concurrent workshop) **Introduction to Carbon Nanotubes** ***Cattien Nguyen*** Senior Scientist, NASA Ames Research Center, USA
3:15 PM - 5:30 PM M-W-4	Workshop 4: (Concurrent workshop) **Nanobiotechnology & Tissue Engineering** ***Thomas Webster*** Associate Professor, Brown University, USA
1:30 PM - 3:00 PM M-W-5	Workshop 5: (Concurrent workshop) **Nano Thin Film Photovoltaics** ***William Kao*** Assistant Professor, California Institute of Nanotechnology, USA
3:15 PM - 5:30 PM M-W-6	Workshop 6: (Concurrent workshop) **Biofuels** *(TBA)*
1:30 - 5:00 PM M-W-7	**Nanomaterials Stewardship - A Stakeholder's Workshop** (Concurrent workshop) ***Jeff Wong*** Chief Scientist, California Environmental Protection Agency ***Kristen Mackey*** U.S. Environmental Protection Agency



Tuesday October 28, 2008 (DRAFT)

7:30 AM - 12:00 PM	Registration
7:30 AM - 8:45 AM	Breakfast
	General Session
8:30 AM - 9:00 AM T-G-1	Opening Remarks from **Lloyd L. Tran**, Presient International Association of Nanotechnology; Director, California Institute of Nanotechnology.
9:00 AM - 9:15 AM T-G-2	Welcome Remarks from Honorable Senator **Richard Polanco** (retired) Former Senate Majority Leader State of California
9:15 AM - 9:45 AM T-G-3	**Chih-Ming Ho** Director, Institute for Cell Mimetic Space Exploration
9:45 AM -10:15 AM T-G-4	**Timothy Sands** Director, Birck Nanotechnology Center, Purdue University
10:15 AM - 10:30 AM	Coffee Break
10:30 AM - 12:15 PM T-G-5	**Climate Change Protection- Mayor Forum Panel Discusion with cities mayors** Dana Williams, Mayor of Park City, Utah Mark Wheetley, Mayor of Arcata Pat Eklund, Mayor of San Leandro Mike Weber, Mayor of South Lake Tahoe Susan Gorin, Vice Mayor of Santa Rosa Ross Clark, Climate Change Action Coordinator, City Of Santa Cruz
12:15 PM - 1:30 PM	Lunch
	Breakout Sessions
	Track A : NanoMaterials
1:30 PM - 2:00 PM T-A-1	**H. A. Zambrano1, J. H. Walther1,2, P. Koumoutsakos2, I. F. Sbalzarini3** 1 Technical University of Denmark,Denmark 2 Chair of Computational Science, ETH Zurich, Switzerland 3 Chair of Computational Science and Swiss Institute of Bioinformatics, ETH Zurich, Switzerland *"Thermophoretic motion of water nanodroplets confined inside carbon nanotubes"*
2:00 PM - 2:30 PM T-A-2	**Qing-Hua Xu** National Unverisity of Singapore, Singapore *"Fluorescence Enhancement of Fluorescein Isothiocynanate by Silver Nanoparticles"*
2:30 PM - 3:00 PM T-A-3	**Yuliang Li** Institute of Chemistry, Chinese Academy of Sciences, P.R. China *"Gold Nanoparticle-Based Optical Sensing of Cu(II) Ions"*
3:00 PM - 3:15 PM	Coffee Break

Conference Schedule

nanobiotech CONGRESS 2008

The Conference Schedule may be subject to changes

3:15 PM - 3:45 PM
T-A-4

Sangyeob Lee1, Jinshu Shi2, Sheldon Q. Shi3 and H. Michael Barnes4
Dept. Forest Products, Mississippi State University, USA
"Inorganic Nanoparticles Impregnated Kenfa Fibers as Reinforcement for Polymer Matrix Composites in the Automobile Application"

3:45 PM - 4:15 PM
T-A-5

Anthony Wagner
Clean Technologies International Corp.,USA
"A novel new carbon nano material made into threads"

4:15PM - 4:45 PM
T-A-6

Veronica Kim, Young Baek Kim
Plainsborough West HS, USA
PaiChai Univerisity, South Korea
"Photo-induced Translational Motions of Small Particles with Various Potential Applications"

4:45 PM - 5:15 PM
T-A-7

Farbod Khoshnoud1, 2, Clarence W. de Silvia1
1Industrial Automation Laboratory, University of British Columbia, Canada
2SOFTEK Services, Ltd., Canada
"An Embedded Nano-electromechanical Capacitive Sensor Based on Carbon Nanotubes for Vibration Monitoring"

5:15 PM - 5:45 PM
T-A-8

Teena James1, Manu Sebastian Mannoor1, Dentcho V. Ivanov1, Bill Braunlin2 & Les Beadling2
1Microelectronics Research Center, New Jersey Institute of Technology, USA
2Rational Affinity Devices LLC, USA
"Ultra Sensitive Debye Capacitive Sensor with Nanoscale Electrode Spacing for Label-free Nucleic Acid Analysis"

Track B: NanoCharacterization

1:30 PM - 2:00 PM
T-B-1

T. Nogami, M. Hashimoto, K.Tsukagoshi
Doshisha University, Japan
"Microship Capillary Electrophoresis with chemiluminescence detection for separation and deterination of trace amounts of metal ions"

2:00 PM - 2:30 PM
T-B-2

P. Lemoine
University of Ulster, Ireland
"Characterisation of periodic nanostructures for nano bio-application"

2:30 PM - 3:00 PM
T-B-3

P. Zhdan
University of Surrey, United Kingdom
"Nanoscale surface SPM characterization in ambient environment of nanomaterials and "industrial" samples with unlimited size and thickness: some problems and solutions"

3:00 PM - 3:15 PM

Coffee Break

3:15 PM - 3:45 PM
T-B-4

Weixuan Jing1, Ruxu Du1, Zhuangde Jiang2
1 The Institute of Precision Engineering at the Chinese University of Hong Kong, Hong Kong, PR China
2 State Key Laboratory for Manufacturing Systems Engineering at Xi'an Jiaotong University, Xi'an, PR China
"Characterization of Au Ring Microelectrodes with Cyclic Voltammetry and AC Impedance Spectroscopy"

3:45 PM - 4:15 PM
T-B-5

Tran Hoang Hai, Phan Nha Truc, Doan Thi Kim Dung, Le Hong Phuc
Ho Chi Minh City Institute of Physics, Vietnam
"Immobilizing and characterization of trypsin on magnetic nanoparticles coated chitosan"

4:15 PM - 4:45 PM
T-B-6

Elnaz Yaghini1, Alexander M Seifalian2, Alexander J MacRobert1
1 National Medical Laser Centre (NMLC), UCL Medical School, University College,London, UK
2 Biomaterial and Tissue Engineering Centre, Academic Division of Surgical and Interventional Science, University College, London, UK
"Measurement-layer Seperation of Nanorod Assembly Multi-layer Structure for Ways Nanorod-Characteristic Measurement Method, Simulation & Application Possibility"

Track C: NanoBio & NanoMedicine

1:30 PM - 2:00 PM
T-C-1

Victor Morozov
National Center for Biodefense and Infectious Diseases (NCBDID), George Mason University, USA
Institute of Theoretical and Experimental Biophysics, Russian Academy of Sciences, Russia
"New Electrospray based technology for manufacturing nano-aerosols, free nanomats and nanofilters for collection of bio-aerosol"

2:00 PM - 2:30 PM
T-C-2

Rodion Belosludov
Tohoku University, Japan
"Ab initio Study on the Quantum Dot Organic Ligand Interface: Effect of Core Structure on Cytotoxicity"

2:30 PM - 3:00 PM
T-C-3

Baiju G. Nair, Saino H. Varghese, Remya Nair, T. Maekawa, Y. Yoshida, D. Sakthi Kumar
Bio Nano Electronics Research Center, Graduate School of Interdisciplinary New Science, Toyo University, Japan
"A bio polymer developed from poly ethylene glycol - An effective material to modify the surface of the nano drugs"

3:00 PM - 3:15 PM

Coffee Break

3:15 PM - 3:45 PM
T-C-4

Jason Sakamoto
The Alliance for NanoHealth, USA
"Silicon Biomedical nano-devices for early detection and drug delivery for cancer and other clinical applications"

3:45 PM - 4:15 PM
T-C-5

Janne Nikkinen
Center for Social Ethics, University of Helsinki, Finland
"Socio-Ethical Analysis of the Use of Quantum Dots in Nanomedicine"

4:15 PM - 4:45 PM
T-C-6

Lucia G. Delogu1, Nunzio Bottini1, Massimo Bottini2
1 Institute for Genetic Medicine, Keck School of Medicine, University of Southern California, USA
2 Burnham Institute for Medical Research, USA
"Enhanced Learning and Psychomotor Effects of Microhydrinr, a Nano Particulate Antioxidant Supplement, in Young and Aging Rats"

The Conference Schedule may be subject to changes

4:45 PM - 5:15 PM
T-C-7

Irfan S. Ahman[1,2], Ken L. Watkin[1,3], Brian T. Cunningham[1,4], Rashid Bashir[1,4,5], Atiya Abbasi[6], Sherine George[1,5], Saubia Naz[6], Uzma Zaman[6]
1 Center for Nanoscale Science and Technology, and Micro and Nanotechnology Laboratory, 2 Agricultural and Biological Engineering, 3 College of Applied Health Sciences, 4 Electrical and Computer Engineering, 5 Bioengineering, University of Illinois, USA, and 6 Dr. Panjwani Center for Molecular Medicine and Drug Research, ICCBS, University of Karachi, Pakistan
"Integrating Medicinal Plants with Biosensing for Cancer Nanomedicine"

Track D: Renewable Energy & Climate Change

1:30 PM - 2:00 PM
T-D-1

Rama Venkatasubramanian
RTI International
"Nanoscale Thermoelectric Materials for Energy Efficiency"

2:00 PM - 2:30 PM
T-D-2

Gerald Braun
California Energy Commission (CEC)
Public Interest Energy Research (PIER) Renewable Energy Technologies Program Area, University of California, USA

2:30 PM - 3:00 PM
T-D-3

Kent Prentice
Nordic Wind Power

3:00 PM - 3:15 PM

Coffee Break

3:15 PM - 3:45 PM
T-D-4

Margaret Taylor
Goldman School of Public Policy, University of California, Berkeley, USA

3:45 PM - 4:15 PM
T-D-5

Mike Hess
Mariah Power, USA
Others to be announced

Track E: Intellectual Property

Peter Skiff
Buchanan Ingersoll & Rooney
"Intellectual Property"

1:30 PM - 5:00 PM
T-E-1

James Wood
Reed Smith LLP, USA
"The impact of litigation on nanotechnology and how to minimized the risk"

2:00 PM - 2:30 PM
T-E-2

David Walker
Enable IPC, USA
"Intellectual Property and Technology Transfer"

2:30 PM - 3:00 PM
T-E-3

Coffee Break

Sam Nguyen
Foley & Lardner LLP, USA
"Clean Tech Patents with Demonstrated Commercial Value: An Analysis of the Characteristics of Licensed Clean Tech Patents from Publicly Announced Commercialization Deals"

3:00 PM - 3:15 PM

3:15 PM - 3:45 PM
T-E-4

Joseph Kovarik

Wednesday October 29, 2008 (DRAFT)

7:30 AM - 12:00 PM

Registration

7:30 AM - 8:30 AM

Breakfast

General Session

8:30 AM - 8:45 AM
W-G-1

Welcomimg Remarks from
Lloyd L. Tran, President
International Association of Nanotechnology;
Director, California Institute of Nanotechnology.

8:45 AM - 9:15 AM
W-G-2

Michael Tseng
Professor of Anatomical Sciences and Neurobiology, University of Louisville, USA

9:15 AM - 9:45 AM
W-G-3

John McDevitt
Professor of Chemistry & Biochemistry,
University of Texas at Austin
Chief Technologist, LabNow Corp

9:45 AM -10:00 AM

Coffee Breaks

10:00 AM - 10:30 AM
W-G-4

Welcome Remarks from
Lt. Governor John Garamendi
State of California

10:30 AM - 12:15PM
W-G-5

Panel Discussion

Martha Symko-Davies
Research Senior Scientist, NREL

Scott Livingston
Livingston Group of Companies, USA
"Institutional investment trends in nanotechnology"

Kate Gordon
Apollo Alliance, USA
"The New Apollo Program - A Federal Investment Strategy for the New Clean Energy Economy"

Bob Rudd
Sustainable Energy Partners, USA

Eric Wesoff
Greentech Media, USA

Breakout Sessions

Track A: NanoToxicology

1:30 PM - 2:00 PM
W-A-1

Jeff Wong
Department of Toxic Substances Control, California Environmental Protection Agency

2:00 PM - 2:30 PM
W-A-2

Arezoo Campbell1, Flemming R. Cassee2, Miriam E. Gerlofs-Nijland2
1 Western University of Health Sciences,USA
2 Centre for Environmental Health Research, National Institute for Public Health and the Environment, The Netherlands
"Brain Regions show Variation in response after exposure to diesel engine exhaust"

The Conference Schedule may be subject to changes

2:30 PM - 3:00 PM
W-A-3

Mary Jane Cunningham1, Linda Bockoven2, Mrinal Shah3, and Carolina Lema4
1Integrated Laboratory Systems, Inc., USA
2Lone Star College-Montgomery, USA
3Rensselaer Polytechnic Institute, Center of Biotechnology & Interdisciplinary Studies, USA
4University of Texas at El Paso, USA
"mRNA,miRNA and Protein Expression Profiling: Tools to Predict Toxicity of Nanomatericals?"

3:00 PM - 3:15 PM

Coffee Break

3:15 PM - 3:45 PM
W-A-4

Golrokh Malihi1, Azam Bakhtiarian2
School of Medicine, Washington University in St. Louis,School of Medicine, Tehran University of Medical Sciences
"The Role of Lynsophosphatidic Acid-Induced Stimulation of a Calcium-dependent K+ Channel on BAVSM Cells and their possible involvement in Atherosclerosis Prevention"

3:45 PM - 4:15 PM
W-A-5

Arthur Zucker
Ohio University, USA
"New and Old in Nanoscience"

4:15 PM - 4:45 PM
W-A-6

Danial Shahmirzadi1, Adam Hsieh2, Henry W. Haslach1
Orthopaedic Mechanobiology Laboratory
1 Dept. of Mechanical Engineering, University of Maryland, USA
2 Dept. of Bioengineering, University of Maryland, USA
"Quantifying Microscale Solid Area via Macroscale Measurements of Soft Tissues: Application to Elastin Fibers in Arterial Tissue"

TRACK B: Nanoparticles

1:30 PM - 2:00 PM
W-B-1

Sheng-Chiang Lee and Randall D. Peters
Mercer University, USA
"Novel Nano-Positioning Sensor with Un-limited Dynamic Range for Nano-Fabrication Process and Scanning Probe Microscopy"

2:00 PM - 2:30 PM
W-B-2

Arthur Chait
EoPlex Technologies. Inc
"Bridging the Gap Between Macro and Micro Devices for Manufacture of Portable Fuel Cells and Energy Harvesters With High Volume Print Forming HVPF"

2:30 PM - 3:00 PM
W-B-3

Rahme Kamil, Sistach Stephanie, Marty Jean-Daniel, De Viguerie Nancy, Mingotaud Christophe, Gauffre Fabienne
Laboratoire des IMRCP, Universit, de Toulouse, France
"Amphiphilic Stabilizers for Water-soluble Nanoparticles"

3:00 PM - 3:15 PM

Coffee Break

3:15 PM - 3:45 PM
W-B-4

Ramin Sattari, Csaba László Sajti,a Niko Bärsch,a Jurij Jakobi,a Stephan Barcikowski
Laser Zentrum Hannover Membership Corporation, Germany
"Continuous Production of Ceramic Nanoparticles by Laser Ablation in Liquid Media"

3:45 PM - 4:15 PM
W-B-5

Jasmine A. Jacob1, Sergej Naumov2,Nandita Biswas1, Tulsi Mukherjee1 and Sudhir Kapoor1
Radiation & Photochemistry Division, Bhabha Atomic Research Centre, India
Leibniz-Institut für Oberflächenmodifizierung, Germany
"Synthesis of Silver Nanoparticles: Experimental and Theoretical Simulations"

4:15 PM- 4:45 PM
W-B-6

Tran Hoang Hai, Ly Thi My Huong,Le Khanh Vinh, Le Hong Phuc, Doan Thi Kim Dung, Bui Duc Long
Ho Chi Minh City Institute of Physics, Vietnam
"Studying Arsenic Absorbability of magnetic nanoparticles Fe3O4 With Oleate Coating"

TRACK C : Biofuels & Water Resources

1:30 PM - 2:00 PM
W-C-1

Ganapthy Arumugam
Enhanced Biofuels & Techologies India PVT Ltd., India
"Production of Non Edible Feed Stock from Jatropha and Micro algae and aviation Biofuels"

2:00 PM - 2:30 PM
W-C-2

Josef Schroder
Chemspeed Techologies, USA
"Acclerating Sample Preparation in the Biofuel R&B by automated High Output Technologies"

2:30 PM - 3:00 PM
W-C-3

S.A. Shah, R. Saunders, R. Clarke, C. E. Davies, R. Y. G. Davies
University of the West Indies, Trinidad & Tobago W.I.
"The decontamination of E. Coli infected water using a reactor containing a special membrane of Titanium Dioxide nanoparticles"

3:00 PM - 3:15 PM

Coffee Break

3:15 PM - 3:45 PM
W-C-4

D.M.A. Alrousan, P.S.M. Dunlop, P.Fernandez, J.A. Byrne
University of Ulster, Ireland
"Solar Photocatalytic disinfection of water for use in developing countries"

3:45 - 5:00 PM

Panel Discussion

Track D: Nanoscale Photovoltaics

1:30 PM-2:00 PM
W-D-1

Peggy Hock
United Solar Ovanic, LLC, USA

2:00 PM- 2:30 PM
W-D-2

Michael Cumbo
NanoGram Solar, USA

2:30 PM- 3:00 PM
W-D-3

Mike Casterline
SolarCity, USA

3:00 PM- 3:15 PM

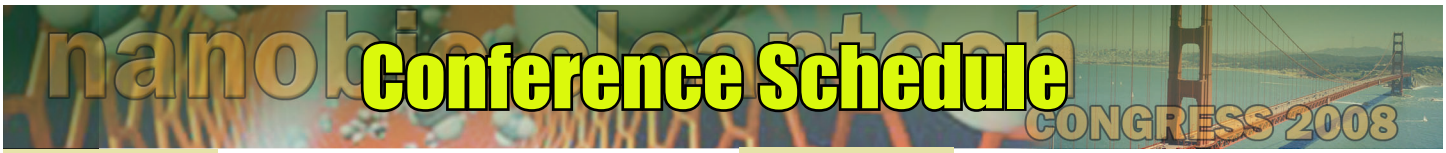
Coffee Break

3:15 PM- 3:45 PM
W-D-4

Alex van der Beek
Solarbotanic, Latvia

3:45 PM - 5:30 PM
W-D-5

Panel Discussion
(To be announced)



The Conference Schedule may be subject to changes

Thursday October 30, 2008 (DRAFT)

7:30 AM - 12:00 PM	Registration
7:30 AM - 8:30 AM	Breakfast
8:30 AM - 8:45 AM	Welcoming remarks from Conference Chair
8:45 AM - 9:15 AM TH-G-1	**Guozhong Cao** Professor of Materials Science and Engineering, University of Washington
9:15 AM - 9:45 AM TH-G-2	**Tinh Nguyen** National Institute of Standards and Technology, USA *"Degradation and Nanoparticle Release of Polymer Nanocomposites Exposed to Solar UV Radiation"*
9:45 AM-10:15 PM TH-G-4	**Dennis Discher** Professor, Chemical & Biomolecular, Mechanical, and Bio- Engineering University of Pennsylvania, USA
10:15 AM - 10:30 AM	Coffee Break
10:30 AM - 12:00 PM TH-G-4	**Clean Tech - Panel Discussion** **Mark Bunger** Director of Research, LUX Research **Nitin Parekh** VP, Business Development Palo Alto Research Center (Others to be announced)

TRACK A: NanoStructures

1:30 PM - 2:00 PM TH-A-1	**Benoit Simard** National Research Council Canada, Canada *"Single-walled carbon nanotube-based high performance materials"*
2:00 PM - 2:30 PM TH-A-2	**Nandanan Erathodiyil, Hongwei Gu, Yu Han, Su Seong Lee and Jackie Y. Ying** Institute of Bioengineering and Nanotechnology, Singapore *"Metal Nanostructures as Advanced Catalysts for Hydrogenations"*
2:30 PM - 3:00 PM TH-A-3	**I. Mende, H. Way** NETZSCH-Feinmahltechnik GmbH, Bavaria NETZSCH Fine Particle Technology, LLC., USA *"Manufacturing of Particles in the Nanometer Size Range"*
3:00 PM - 3:15 PM	Coffee Break
3:15 PM - 3:45 PM TH-A-4	**Wuzong Zhou** University of St Andrews *"Formation Mechanism of Anodic Titanium Oxide Nanotubes"*
3:45 PM - 4:15 PM TH-A-5	**Qiao Lin** Dept. of Mechanical Engineering, Columbia University *"Exploiting Micro- and Nanotechnology for Thermal Characterizationand Manipulation of Biomolecules"*
4:15 PM - 4:45 PM TH-A-5	**Maribel Guzman1, Jean Dille2, St,phane Godet2** 1 Pontificia Universidad Catolica del Peru, PERU 2 Universit, Libre de Bruxelles, BELGIUM *"Synthesis of silver nanoparticles by chemical reduction method and their antibacterial activity"*

TRACK B: Medical Imaging & Diagnostics

1:30 PM - 2:00 PM TH-B-1	**Krassen Dimitrov** Australian Institute for Bioengineering and Nanotechnology, Australia *"Nano-barcoding of Single Molecules for Biomedical Applications"*
2:00 PM - 2:30 PM TH-B-2	**Barbara Blasiak1,4, Ulrike Trojahn2,3, Abedelnasser Abulrob8,9, Zhijun Zhang4, Teodor Veres4,5, Celine Desvaux4, Umar Iqbal9, Maureen O'Connor2,3, Garnette Sutherland1, Boguslaw Tomanek1,6,7** 1Department of Clinical Neurosciences,University of Calgary, Canada 2Biotechnology Research Institute, National Research Council of Canada, Canada, 3McGill University, Canada 4Functional Nanomaterials Group, Industrial Materials Institute, National Research Council of Canada, Canada 5 INRS - Energie et mat,riaux Institut national de recherche scientifique 6Institute of Nuclear Physics, Polish Academy of Sciences, Poland 7Institute for Biodiagnostics (West),National Research Council Canada 8Institute of Biological Sciences, National Research Council Canada, Canada 9Faculty of Medicine, University of Ottawa, Canada *"A magnetic resonance study of Fe304 and FeCo core nanoparticles for molecular MR imaging"*
2:30 PM - 3:00 PM TH-B-3	**David.C. Kennedy, Lilin Tay, Yanouchka Rouleau and John. P. Pezacki** Steacie Institute for Molecular Sciences, National Research Council, Canada *"Design of Nanoparticle-based Contrast Agents for Live Cell Imaging of Cell Surface Receptors"*
3:00 PM - 3:15 PM	Coffee Break
3:15 PM - 3:45 PM TH-B-4	**Shu Wang** Key Laboratory of Organic Solids, Institute of Chemistry, Chinese Academy of Sciences, China "Fluorescent Assays for DNA Methylation and SNP with Conjugated Polyelectrolytes"
3:45 PM - 4:15 PM TH-B-5	**Pompi Hazarika and David A. Russell** School of Chemical Sciences & Pharmacy, University of East Anglia, UK *"Detection of Drugs and Metabolites in Latent Fingerprints using Antibody-Magnetic Particle Conjugates"*

Conference Schedule

nanobiotechnology CONGRESS 2008

1:30 PM - 2:00 PM TH-C-1

T.Y. Yin, L.S. Ling, M. Nazlan Mohd Muhid, H. Hamdan
Universiti Teknologi Malaysia, Malaysia
"Nanostructured Couples Semiconductor Photo-catalyst"

TRACK C: Nanoscale Photovoltaics

2:00 PM - 2:30 PM TH-C-2

Kee S. Moon, Sam Kassegne, Khaled Morsi, Jin-gang Yi, Asfaw Beyene
Department of Mechanical Engineering, College of Engineering, San Diego State University, USA

2:30 PM- 3:00 PM TH-C-3

"Low-cost Polymeric and Carbon-based Photovoltaic cells for Clean-Energy Applications"

Joe Raguso
Intrinsiq Materials Ltd, United Kingdom
"Nanomaterials for thin film silicon photovoltaics, air filtration and other cleantech applications"

3:00 PM - 3:15 PM

Xiaojuan Fan1, Honghan Fei2, David Rogow2, Scott R. J. Oliver2, Thomas Wilson1,Huong Nguyen1,and Michael Norton3
1 Department of Physics and Physical Science, Marshall University, USA
2 Department of Chemistry and Biochemistry, University of California, Santa Cruz, USA

3:15 PM - 3:45 PM TH-C-4

3 Department of Chemistry, Marshall University, USA
"Porous Nanocrystalline TiO2 Electrodes for Dye-Sensitized Solar Cells"

Coffee Break

3:45 PM - 5:00 PM TH-C-5

Hatice Sengul, Thomas L. Theis
Institute for Environmental Science and Policy, University of Illinois at Chicago, USA
"Environmental tradeoffs of nanophotovoltaics: A life cycle analysis of quantum dot PV modules"

1:30 PM - 5:00 PM TH-D-1

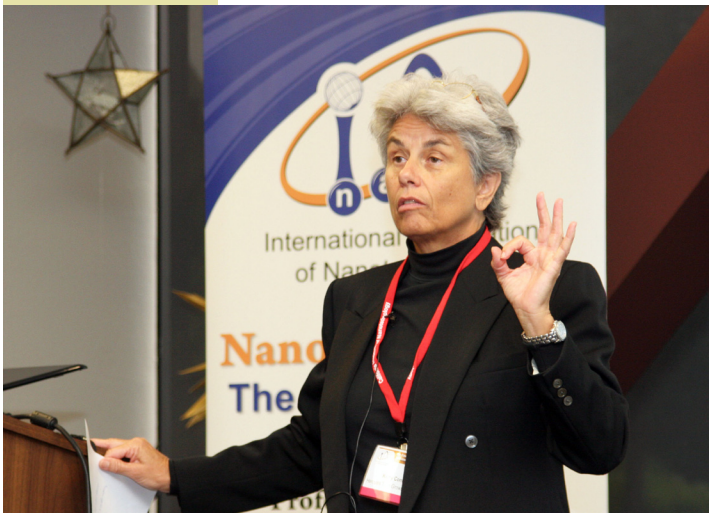
Panel Discussion

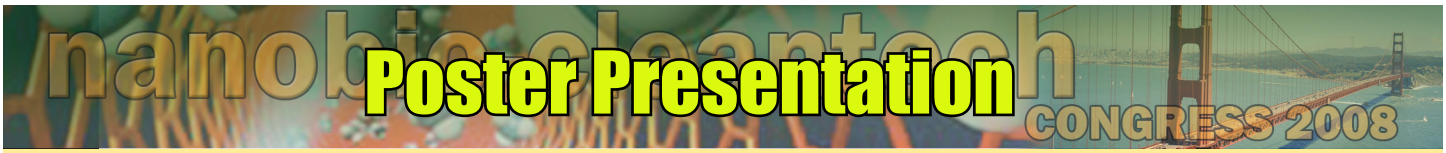
5:15 PM - 6:30 PM

6:00 PM

TRACK D: Emerging Investment Forum

(Company presentation will be announced)





Poster Presenters on October 28 from 10:00 AM - 6:30 PM, October 29 from 10:00 AM - 4:00 PM (DRAFT)

New approaches for fabrication of 2D magnetophotonic crystals: structural and optical properties
S.M. Baek1, M.E. Dokukin1, A.V. Baryshev1, K. Yayoi2, J. Kim1, H. Uchida1, M. Inoue1
1 Toyohashi University of Technology, Toyohashi 441-8580, Japan
2 Ibaraki National College of Technology, Hitachinaka 312-8508, Japan

Molecular Level Description of Thermodynamics Properties of Hydrogen Clathrate Hydrate: Theoretical Aspects of Hydrogen Storage Application
Rodion Belosludov
Institute for Materials Research, Tohoku University, Sendai, Japan

Effect of processing parameters on nylon 6.6 nano-fibers and their morphology
Mohammad M Chowdhury,
Heriot-Watt University Edinburgh, United Kingdom

In Vitro Studies Concerning the Use of Elastic Vesicles for Drospirenone Transdermal Delivery
Cristina Dinu - Pirvu1, Alina Ortan2, Cristina Hlevca3
1 University of Medicine and Pharmacy, "Carol Davila", Str. Traian Vuia nr 6, sect 2, Bucharest, Romania
2 University of Agricultural Sciences and Veterinary Medicine, B-dul Marasti nr. 59 sector1, Bucharest, Romania
3 National Institute for Chemical Pharmaceutical Research and Development, Soseaua Vitan nr 112, sector 3, Bucharest, Romania

Water-soluble ZnO nanoparticles
Rubio Garcia Javier1,2, Kahn Myrtil1 Chaudret Bruno1, Mingotaud Christophe 2, Gauffre Fabienne2
1Laboratoire de Chimie de Coordination, 205 rte de Narbonne, 31000 Toulouse, France
2laboratoire des IMRCP, Université de Toulouse, 118 rte de Narbonne, 31000 Toulouse, France

Tamm states at interfaces in one-dimensional magnetophotonic structures
T. Goto,1 A.V. Dorofeenko,2 A.M. Merzlikin,2 A.V. Baryshev,1 A.P. Vinogradov,2
M. Inoue,1 A.A. Lisyansky,3 A.B. Granovsky4
1 Toyohashi University of Technology, Toyohashi 441-8580, Japan
2 Institute for Theoretical and Applied Electromagnetics, Moscow 125412, Russia
3 Queens College of the City University of New York, Flushing, NY 11367, USA
4 Moscow State University, Moscow 119992, Russia

In vivo Consequences of Nanoparticles-induced Magnetic Field in C. elegans-Reduction of Mobility and Elevation of Apoptosis
G.S. Huang, H.M. Chen, Y.C. Chen, and L.K. Yeh
Institute of Nanotechnology, National Chiao Tung University, Hsinchu, Taiwan, ROC,

Nanovaccine- assessment for the properties of gold nanoparticles as immunogenic carrier to elicit focused antibody responses against synthetic peptides
G. Steven Huang, Yu-Shiun Chen, and Wei-Shi Lin
Instititute of Nanotechnology, National Chiao Tung University, 1001 University Road, EE137, Hsinchu 300, Taiwan, ROC.

Nanolandscapes Differentiate Cancer Stages: Cytoskeleton Organization and Focal Adhesions
Y. F. Huang1, G. S., Huang2, Y. C., Hung1, H. A., Pan2, and S. M., Dai2
1 Department of Obstetrics and Gynecology, China Medical University, Taichung, Taiwan
2 Institute of Nanotechnology, National Chiao Tung University, Hsinchu, Taiwan, ROC;

Electro-optical Effect in Polymer Dispersed Liquid Crystal Based on Liquid Crystal-Montmorillonite-Clay Nanocomposite
Eun Hwa Jung2, Ju Yeon Woo1, Young Keun Jeong2, Byung Kyu Kim1,x
1, x Department of Polymer Science and Engineering, Pusan National University, Busan 609-735, Korea,
2 National Core Research Center for Hybrid Materials Solution, Pusan National University, Busan, 609-735,

Analysis of a Carbon Nanotube-based Nano-electromechanical Vibration Sensor Using Finite Element Modeling
Farbod Khoshnoud1,2 and Clarence W. de Silva1
1 Industrial Automation Laboratory, Department of Mechanical Engineering, The University of British Columbia, Vancouver, BC, Canada
2 SOFTEK Services Ltd., 275 – 13500 Maycrest Way, Richmond, BC, Canada V6V 2N8

Comparing the Influence of Additives on Reaction Sintering, Microstructure and Properties of solid- state and Sol_Gel-Drived Aluminum Titanate in Aqueous Solution
Maryam Khosravi Saghezchi, Mahila Biazar Markie, Reza Ajami, Hossein Sarpoolaky
K.n.Toosi University of Thechnology, No58, 7th, Sarjangaldari St, Khosrramshahr St, Zanjan, Iran

Oxidation behavior of oxynitrided Ti-6Al-4V alloys between 400 and 800oC in air
Chan-Woo Kim, & Dong-Bok LEE
School of Advanced Materials Science & Engineering, Sungkyunkwan University, South Korea

Study on the Photocatalytic Behavior for the Hetero-junction of Nanocrystalline TiO2-Phosphors
Jin-Ho Yoon, Chang-Woo Ham and Jung-Sik Kim
Department of Materials Science and Engineering, The University of Seoul, Seoul, 130-743 Korea

Application of Ultrasound to the Biodiesel Production from Jatropha Seed Oil (Jatropha Curcas)
Le Viet Hai, Nguyen Mong Hoang, Nguyen Thanh Tien, Tran Thi Phuong Thao, Nguyen Thi Phuong Thoa
Vietnam National University – Ho Chi Minh City
227 Nguyen Van Cu Street, District 5, Ho Chi Minh City, Vietnam

Current Research and Development of Biodiesel in Vietnam
Le Viet Hai, Nguyen Thi Phuong Thoa
Vietnam National University – Ho Chi Minh City
227 Nguyen Van Cu Street, District 5, Ho Chi Minh City, Vietnam

Nanotechnology Based Antimicrobial Surfaces
Sang Beom Lee, Joseph DiMauro Jr, Alan Rae
NanoDynamics Life Sciences, 100 Technology Drive, Suite 420, Pittsburgh, PA 15219

Fabrication and tribological behavior of metal nanohoneycomb structure
Sangmin Lee1, Seonghan Kim2, Woonbong Hwang3
1 Dept. of Mechanical Engineering, POSTECH, Republic of Korea

Poster Presentation

nanobio cleantech CONGRESS 2008

Poster Presenters on October 28 from 10:00 AM - 6:30 PM, October 29 from 10:00 AM - 4:00 PM (DRAFT)

2 Electrophotography System R&D Group, Samsung Electronics, Republic of Korea,
3 Dept. of Mechanical Engineering, POSTECH, Republic of Korea

Measurement-layer Separation of Nanorod Assembly Multi-layer Structure for Easy Nanorod-Characteristic Measurement Method, Simulation And Application Possibility
Myoung-Kun Leem1, Chang-Man Kim1, Jin-Uk Park1, Kyu-Jin Kim1 and Shin-Won Kang2
1Department of Electronic Engineering, Kyungpook National University,1370 Sankyuk-dong, Bukgu, Daegu, Korea
2School of Electrical Engineering and Computer Science, Kyungpook National University,1370 Sankyuk-dong, Bukgu, Daegu, Korea

Disordered nanocrystalline zinc ferrite appearing as magnetic semiconductor and magneto-optical material
Shinichiro Mito, Jooyoung Kim, Hironaga Uchida, Mitsuteru Inoue
Toyohashi University of Technology, Tempaku, Toyohashi, Aichi 441-8580, Japan

Bus Moved by Ethanol- BEST Project
José Roberto Moreira1, Sílvia Velázquez1,2, Sandra Apolinario1, Euler Hoffman Melo1,2, Paulo Henrique Elmadjian1,2
1 CENBIO – Brazilian Reference Center on Biobass, Av. Prof. Luciano Gualberto, 1289 São Paulo – SP Cep: 05508-010, Brazil,
2 Mackenzie Presbyterian University, Rua da Consolação, 930 – São Paulo, Brazil

Survey on Sugarcane Biomass Residues Aiming the Production of Ethanol via Enzymatic Hydrolysis Technology
Suani T. Coelho, Patrícia Guardabassi, Beatriz A. Lora, Alia Rached, M Beatriz Monteiro, Renata Grisoli, Jose Moreira
Brazilian Reference Center on Biomass - CENBIO, Avenida Prof. Luciano Gualberto, 1289, Cidade Universitária. São Paulo – SP, Brazil.

Effects of Electrolyte Additives on the Open-circuit Voltage of Dye-Sensitized Solar Cells
Nguyen Thai Hoang1, Nguyen Thi Phuong Thoa1, Torben Lund2
1Vietnam National University – Ho Chi Minh City
227 Nguyen Van Cu Street, District 5, Ho Chi Minh City, Vietnam
2Roskilde University, 4000 Roskilde, Denmark

Actuation and Inherent-Sensing of Modified Carbon Naonomaterials (CNMs)/ Conductive Polymer Nanocomposites by Electro-Micromechanical Techniques
Jung-Hoon Jang1, Zuo-Jia Wang1, Sung-Ju Kim1, Joung-Man Park1,2, K. Lawrence DeVries2
1School of Materials Science and Engineering, Engineering Research Institute
Gyeongsang National University, Jinju 660-701, KOREA
2Department of Mechanical Engineering, University of Utah, Salt Lake City, Utah 84112:

Statistical Approach in Drug Discovery and Development
Krishna Patel
Shri Sarvajanik Pharmacy College

Stakeholder Perceptions of the Benefits, Risk, and Potential Regulation of Nanoscale Technologies
Mark Philbrick
Terra Consulting, San Ramon, CA, USA

Polymorphous silicon thin films for applications in photovoltaic devices, obtained by plasma enhanced chemical vapor deposition
A. Remolina1, G. Santana1, B. M. Monroy1, A. López-Suárez2, M. F. García-Sánchez1, A. Ponce3 and A. Ortiz1.
1 Instituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México. A.P. 70-360, Coyoacán 04510, México, D.F.
2 Instituto de Física, Universidad Nacional Autónoma de México, Ap. Postal 20-364, México, D.F. 01000, México.
3 Centro de Investigación en Química Aplicada, Saltillo, Coahuila, México.

Size and Shape-Dependent Uptake of Polymeric Nanoparticles by Macrophages
Gaurav Sharma, David T. Valenta. Hui Xie, Sheryl Harvey and Jeffrey W. Smith
Program for Excellence in Nanotechnology, Burnham Institute for Medical Research, 10901 N. Torrey Pines Road, La Jolla, CA 92037 USA,

Effects of Silica on Multiplexed Holographic Polymer Dispersed Liquid Crystal
Ka Ram Sun, Joo Yeon Woo, Byung Kyu Kim
Department of Polymer Science and Engineering, Pusan National University, Busan 609-735, Korea

Mechanisms of Nanostructures Synthesis in the Polymeric Matrixs Nanoreactors Using Wastes of Metallurgical and Polymeric Composites Plants
Vera Trineeva
Institute of Applied Mechanics, Ural Division, Russia Academy of Sciences

Nanobio computing – Synthesis of a nanonio computer using DNA and nanorobots
G. Vaidyanathan1 and T.Annamalai2 and B.Ravi Kiran3
1UG Student 3rd Electronics and Communication Engineering
2,3UG Student 3rd Information Technology
1Vickram College of Engineering, Sreenivasa Gardens, Madurai-Sivagangai Highway , Enathi, Tamil Nadu-630561, India
2,3 Velammal Engineering College, Velammal Nagar, Chennai, Tamil Nadu, India.

Poly(aryl ester)/poly(benzyl ether) dendrimers with fullerene C60 as the core: structure-properties relations
Natalia Yevlampieva1, Nikolai Beljaev1, and Robert Deschenaux2
1 V.A. Fock Institute of Physics, St. Petersburg State University, 198504 St. Petersburg, Russia
2 Institut de Chimie, Université de Neuchâtel, 2009 Neuchâtel, Switzerland

Ultra-high-resolution characterisation of nanostructured magnetic materials and magnetic nanoparticles by High-Vacuum Magnetic Force Microscopy with External Magnetic Field: challenges, hopes and limitations.
Peter Zhdan & Niyaz Nurgazizov
Faculty of Engineering and Physical Sciences, University of Surrey, Guildford, Surrey, GU2 7XH, United Kingdom