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"

International Association of Nanotechnology
ianano.org

California Institute of Nanotechnology
cinano.com

Clean Tech Institute
cleantechinstitute.org

American Energy Choice
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Welcome

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 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
- Other related topics

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 emerging 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 Nanoscale Materials Stewardship Program, NanoSafety Consortium, Climate Change Protection, Thin Film Photovoltaics, Emerging Nano Bio Clean Tech Companies, and Venture Capital Investment Forum.

The nano bio and clean technologies are becoming increasingly important to the continued growth and welfare of the global economy. Significant R&D has been increasingly allocated towards nanotechnology research: indeed, on an annual basis the United States federal government earmarks $1.5 billion to the development and enrichment of nanotechnology. Within the past year, the European Union has similarly committed more than $2 billion a year to the development of nanotechnology-related projects.

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 invested in start-ups over the past 12 months in the U.S. alone. 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 insight 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 the volunteers and 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, California Institute of Nanotechnology
San Jose, California, USA

Program At-A-Glance

nanobio-cleantech CONGRESS 2008

Monday October 27, 2008

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 - 12:00M	**Workshop 1:** Nanofabrication: Principles and Applications
1:30M - 3:00 PM	**Workshop 2:** 2A. Introduction to Carbon Nanotubes
3:15 PM - 6:00 PM	2B. Nanobiotechnology & Tissue Engineering
1:30 PM - 6:00 PM	**Workshop 3:** NanoScale Materials Stewardship - A Stakeholder's Workshop

Tuesday, October 28, 2008

7:30 AM - 4:00 PM	Registration
7:30 AM - 8:30 AM	Breakfast
8:30 AM - 12:00 PM	General Session Welcoming Remarks Keynotes Invited Lectures Climate Change Protection- Mayor Forum
10:00 PM- 6:30 PM	Exhibit & Poster Presentations
12:30 PM - 1:30 PM	Lunch
1:30 PM - 5:30 PM	Breakout Sessions Track A: Nanomaterials Track B: NanoCharacterization Track C: NanoBio & Nanomedicine Track D: Clean Technology Track E: Intellectual Property
5:30 PM - 7:00 PM	Poster Presentations, Exhibit & Reception

Wednesday, October 29, 2008

7:30 AM - 4:00 PM	Registration
7:30 AM - 8:30 AM	Breakfast
8:30 AM - 12:00 PM	**General Session** Welcoming Remarks Keynotes Invited Lectures
10:00 AM- 5:00 PM	Exhibit
12:00 PM - 1:30 PM	Lunch
1:00 PM - 5:00 PM	Job Fair
1:30 PM - 5:00 PM	**Breakout Sessions** Track A: Nanomedicine Track B: Nanoparticles Track C: Clean Technology Track D: Nanoscale Photovoltaics

Thursday October 30, 2008

7:30 AM - 4:00 PM	Registration
7:30 AM - 8:30 AM	Breakfast
8:30 AM - 12:00 PM	**General Session** Welcoming Remarks Keynotes Invited Lectures
10:00 AM - 12:00 PM	Exhibits
12:00 PM - 2:00 PM	Lunch at *El Torito* (Restaurant)
2:00 PM - 5:00 PM	**Breakout Sessions** Track A: Nanostructures Track B: Medical Imaging & Diagnostics Track C: Emerging Tech Investment Forum
5:00 PM	Meeting Adjourned

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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

Monday, October 27, 2008

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

9:00 AM - 12:00 PM M-W-1	Workshop 1 **(located in Marina del Rey)** **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 2A **(located in Marina del Rey)** **Introduction to Carbon Nanotubes** ***Cattien Nguyen*** Senior Scientist, NASA Ames Research Center
3:00 PM - 3:15 PM	Coffee Break
3:15 PM - 6:00 PM M-W-4	Workshop 2B **(located in Marina del Rey)** **Nanobiotechnology & Tissue Engineering** ***Thomas Webster*** Associate Professor, Brown University, USA
1:30 PM - 6:00 PM M-W-5	Workshop 3 **(located in Monterey)** **Nanomaterials Stewardship - A Stakeholder's Workshop** ***Jeff Wong*** Chief Scientist, Dept. of Toxic Substances Control, California Environmental Protection Agency (CAL EPA) ***Robert A. Sullivan*** Staff Counsel, Dept. of Toxic Substances Control, CAL EPA ***Stan Phillippe*** Dept. of Toxic Substances Control, CAL EPA ***Kristen Mackey*** U.S. Environmental Protection Agency

Tuesday, October 28, 2008

7:30 AM - 4:00 PM	Registration
7:30 AM - 8:30 AM	Breakfast
10:00 AM- 6:30 PM	Exhibit Poster Presentation

General Session (located in Salon E)

8:30 AM - 8:45 AM	Opening Remarks
8:45 AM - 9:15 AM T-G-1	**Lloyd L. Tran**, President International Association of Nanotechnology; Director, California Institute of Nanotechnology *"The State of Nanotech and Clean Tech Industry: An Overview"*
9:15 AM - 9:45 AM T-G-2	**Chih-Ming Ho** Director, Institute for Cell Mimetic Space Exploration, University of California, Los Angeles, CA, USA
9:45 AM - 10:15 AM T-G-3	**Timothy Sands** Director, Birck Nanotechnology Center, Purdue University *"Will Nanotechnology Enable Efficient Thermoelectric Refrigerators and Waste Heat Generators?"*
10:15 AM - 10:30 AM	Coffee Break
10:30 AM - 11:00 AM T-G-4	**S. Seeger, G.R.J. Artus, J. Zimmermann** Director, Institute of Physical Chemistry, Zurich, Switzerland; Chair, Physical Sciences, University of Zurich, Zurich, Switzerland *"Silicone Nanofilaments: Platform Technology for Tailored Surface Properties"*
11:00 AM - 12:30 PM T-G-5	**Climate Change Protection- Mayor Forum** **Panel Discusion with cities mayors** Pat Eklund, Mayor of Novato, CA Ross Clark, Climate Change Action Coordinator, City Of Santa Cruz, CA Christine Krolik, Vice Mayor, Hillsborough, CA Susan Gorin, Vice Mayor of Santa Rosa, CA Tony Santos, Mayor of San Leandro, CA Mike Weber, Mayor of South Lake Tahoe, CA Dana Williams, Mayor of Park City, Utah Mark Wheetley, Mayor of Arcata, CA
12:30 PM - 1:30 PM	Lunch Exhibit Poster Presentation

Breakout Sessions

Track A : NanoMaterials (Marina del Rey)

1:30 PM - 2:00 PM T-A-1	**H. A. Zambrano[1], J. H. Walther[1,2], P. Koumoutsakos[2], I. F. Sbalzarini[3]** [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"*

Conference Schedule

The Conference Schedule may be subject to changes

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

Sangyeob Lee[1], Jinshu Shi[2], Sheldon Q. Shi[3] and H. Michael Barnes[4]
Dept. Forest Products, Mississippi State University,

USA
"Inorganic Nanoparticles Impregnated Kenfa Fibers as Reinforcement for Polymer Matrix Composites in the Automobile Application"

3:00 PM - 3:15 PM

Coffee Break

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

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

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

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

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

Teena James[1], Manu Sebastian Mannoor[1], Dentcho V. Ivanov[1], Bill Braunlin[2] & Les Beadling[2]
[1]Microelectronics Research Center, New Jersey Institute of Technology, USA
[2]Rational Affinity Devices LLC, USA
"Ultra Sensitive Debye Capacitive Sensor with Nanoscale Electrode Spacing for Label-free Nucleic Acid Analysis"

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

Yuliang Li
Institute of Chemistry, Chinese Academy of Sciences, P.R. China
"Gold Nanoparticle-Based Optical Sensing of Cu(II) Ions"

5:30 PM- 7:00 PM

Reception
Exhibit
Poster Presentation

Track B : NanoCharacterization
(Monterey)

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

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

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

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

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

Peter 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 Jing[1], Ruxu Du[1], Zhuangde Jiang[2]
[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 & AC Impedance Spectroscopy"

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

Elnaz Yaghini[1], Alexander M Seifalian[2], Alexander J MacRobert[1]
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"

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

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

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

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"

5:30 PM- 7:00 PM

Reception
Exhibit
Poster Presentation

Track C: NanoBio & NanoMedicine
(Santa Barbara)

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

Juntao Luo, Kai Xiao, Yuan-pei Li, Joyce Lee, Holland Cheng, Li Xing, and Kit S. Lam
UC Davis Cancer Center, Division of Hematology and Oncology, Dept. of Internal Medicine, College of Biological Sciences, University of California, Davis, CA, USA
"Novel Size-tunable Cancer Nanotherapeutics"

3:00 PM - 3:15 PM

Coffee Break

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

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"

Conference Schedule

The Conference Schedule may be subject to changes

3:45 PM - 4:15 PM T-C-5	**Irfan S. Ahmad[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"*
4:15 PM - 4:45 PM T-C-6	**Jason Sakamoto** The Alliance for NanoHealth, USA *"Silicon Biomedical nano-devices for early detection and drug delivery for cancer and other clinical applications"*
4:45 PM - 5:15 PM T-C-7	**Danial Shahmirzadi[1], Adam Hsieh[2]** *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"*
5:30 PM- 7:00 PM	Reception Exhibit Poster Presentation

Track D: Clean Technology
(San Ramon)

1:30 PM - 2:00 PM T-D-1	**Gerald Braun** California Energy Commission (CEC) Public Interest Energy Research (PIER) Renewable Energy Technologies Program Area, University of California, CA, USA
2:00 PM - 2:30 PM T-D-2	**Gregg Dixon** EnerNOC, Inc., Boston, MA, USA *"Saved Energy is Cleanest - How Energy Efficiency and Demand Response Help Stop Climate Change"*
2:30 PM - 3:00 PM T-D-3	**Tara Marchant** Greenlining Institute *"Sustainable Energy Public Policy: Health Impacts and Investment to Burden Communities"*
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, CA, USA
3:45 PM - 4:15 PM T-D-5	**John Hettrich** American Energy Choice, Inc, San Jose, CA, USA
4:15 PM - 4:45 PM T-D-6	**Mike Hess** Mariah Power, Reno, NV, USA
4:45 PM - 5:15 PM T-D-7	**Darcie Houck** Fredericks Peebles & Morgan, Sacramento, USA *"Effect of Climate Change & Renewable Energy Development on Native Communities"*
5:30 PM - 7:00 PM	Reception, Exhibit, & Poster Presentations

Track E: Intellectual Property
(Santa Clara)

1:30 PM - 2:00 PM T-E-1	**Peter Skiff** Buchanan Ingersoll & Rooney, Alexandria, VA, USA *"Intellectual Property"*
2:00 PM - 2:30 PM T-E-2	**Sam Nguyen** Foley & Lardner LLP, Palo Alto, CA, USA *"Clean Tech Patents with Demonstrated Commercial Value: An Analysis of the Characteristics of Licensed Clean Tech Patents from Publicly Announced Commercialization Deals"*
2:30 PM - 3:00 PM T-E-3	**David Walker** Enable IPC, USA *"Intellectual Property and Technology Transfer"*
3:00 PM - 3:15 PM	Coffee Break
3:15 PM - 3:45 PM T-E-5	**Michelle Hedges** Griffith Hack, Patent and Trademark Attorneys, Melbourne, Australia *"IP Considerations in Structuring Nanotechnology Research"*
3:45 PM - 4:15 PM T-E-6	**James Wood** Reed Smith LLP, Oakland, CA, USA *"The impact of litigation on nanotechnology and how to minimized the risk"*
4:15 PM - 4:45 PM T-E-7	**Joseph Kovarik** Sheridan Ross PC, USA *"Mediation of Patent Disputes: "You can't shake hands with a clenched fist"*
4:45 PM - 5:15 PM T-E-8	**Joel Ackerman** Townsend & Townsend, San Francisco, CA, USA *"Identifying and Resolving Intellectual Property Issues in Business Transactions"*
5:30 PM - 7:00 PM	Reception Exhibit Poster Presentation

Wednesday, October 29, 2008

7:30 AM - 4:00 PM 7:30 AM - 8:30 AM 10:00 AM - 5:00PM	Registration Breakfast Exhibits

General Session
(Salon E)

8:30 AM - 8:45 AM W-G-1	Welcoming Remarks from Program Chair
8:45 AM - 9:15 AM W-G-2	**Guozhong Cao** Professor of Materials Science and Engineering, University of Washington, Seattle, WA, USA *"Popcorn-style ZnO/TiO2 Films for Dye-Sensitized Solar Cells"*
9:15 AM - 9:45 AM W-G-3	**Michael T. Tseng[1], Eric Grulke[2] & Robert A. Yokel[2]** [1]University of Louisville, Louisville, KY, USA [2]University of Kentucky, Lexington, Kentucky, USA *"Pivotal Role of Reticuloendothelial Cells in Biodistribution of Engineered Nanomaterials"*
9:45 AM - 10:15 AM W-G-4	**John McDevitt** Professor of Chemistry & Biochemistry, University of Texas at Austin, Austin, TX, USA Chief Technologist, LabNow Corp

Conference Schedule

The Conference Schedule may be subject to changes

10:15 AM - 10:30 AM — Coffee Break

10:30 AM - 11:00 AM W-G-5 — Welcome Remarks from
Lt. Governor John Garamendi
State of California, CA, USA

11:00 AM - 11:30 AM W-G-6 — **Kate Gordon**
Apollo Alliance, USA
"The New Apollo Program - A Federal Investment Strategy for the New Clean Energy Economy"

11:30 AM - 12:00 PM W-G-7 — **Eric Archambault**
Science-Metrix, Montreal, CANADA

12:00 PM - 1:30 PM — Lunch
1:00 PM - 5:00 PM — Job Fair

Breakout Sessions

Track A: NanoMedicine
(Marina del Rey)

1:30 PM - 2:00 PM W-A-1 — **Arezoo Campbell[1], Flemming R. Cassee[2], Miriam E. Gerlofs-Nijland[2]**
[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"

2:00 PM - 2:30 PM W-A-2 — **Kwang Jae Cho[1], Yu Jin Kim[2],Hyun Tae Moon[3], Youngro Byun[3,4] , Heung Soo Shin[5] and Yong-kyu Lee[2]**
[1]Department of Otolaryngology, Head and Neck Surgery, The Catholic University of Korea, College of Medicine Uijeongbu, St. Mary's Hospital, Kyunggi-Do, Korea,
[2]Department of Chemical and Biological Engineering, Chungju National University, Chungbuk, Korea,
3Mediplex Corporation, Seoul, Korea,
[3,4]College of Pharmacy, Seoul National University, Seoul, Korea,
[5]Department of Bioengineering, Hanyang University, Seoul, Korea
"Sodium Deoxycholate (DOC) Conjugated Heparin Nanoparticles for Inhibition of Angiogenesis"

2:30 PM - 3:00 PM W-A-3 — **Mary Jane Cunningham[1], Linda Bockoven[2], Mrinal Shah[3], and Carolina Lema[4]**
[1]Integrated Laboratory Systems, Inc., USA
[2]Lone Star College-Montgomery, USA
[3]Rensselaer Polytechnic Institute, Center of Biotechnology & Interdisciplinary Studies, USA
[4]University 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 Malihi[1], Azam Bakhtiarian[2]**
[1] School of Medicine, Washington University in St. Louis,School of Medicine, [2]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 — **L.T. Thompson[1], P. Lea[1], G.E. Farmer[1], K.L. Lloyd[2]**
[1]Aging & Memory Research Laboratory, School of Behavioral & Brain Sciences, University of Texas at Dallas, Richardson, TX, USA [2]RBC Life Sciences Inc., Irving, TX, USA
"Enhanced Learning and Psychomotor Effects of Microhydrin®, a Nano Particulate Antioxidant Supplement, in Young and Aging Rats"

4:15 PM-4:45 PM W-A-6 — **Arthur Zucker**
Ohio University, Athens, OH, USA
"New and Old in Nanoscience"

4:45 PM - 5:15 PM W-A-7 — **Janne Nikkinen**
Center for Social Ethics, University of Helsinki, Finland
"Socio-Ethical Analysis of the Use of Quantum Dots in Nanomedicine"

Track B: Nanoparticles
(Monterey)

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 — **Lucia G. Delogu[1], Nunzio Bottini[1], Massimo Bottini[2]**
[1] Institute for Genetic Medicine, Keck School of Medicine, University of Southern California, USA
[2] Burnham Institute for Medical Research, USA
"ASO-conjugated PEGylated carbon nanotubes for PTPN22 silencing"

4:15 PM - 4:45 PM W-B-6 — **Jasmine A. Jacob[1], Sergej Naumov[2],Nandita Biswas[1], Tulsi Mukherjee[1] and Sudhir Kapoor[1]**
Radiation & Photochemistry Division, Bhabha Atomic Research Centre, India
Leibniz-Institut für Oberflächenmodifizierung, Germany
"Synthesis of Silver Nanoparticles: Experimental and Theoretical Simulations"

4:45 PM - 5:15 PM W-B-7 — **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"

Conference Schedule

nanobiotechnology CONGRESS 2008

The Conference Schedule may be subject to changes

Track C : Clean Technology
(San Ramon)

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

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

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

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"

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

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"

3:00 PM - 3:15 PM

Coffee Break

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

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

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

Kee S. Moon, Sam Kassegne, Khaled Morsi, Jingang Yi, Asfaw Beyene
Department of Mechanical Engineering, College of *Engineering, San Diego State University, USA*
"Low-cost Polymeric and Carbon-based Photovoltaic cells for Clean-Energy Applications"

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

Bob Rudd
Sustainable Energy Partners, San Francisco, CA, USA

Track D: Nanoscale Photovoltaics
(Santa Barbara)

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

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"

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

Xiaojuan Fan,[a] Honghan Fei,[b] David Rogow,[b] Scott R. J. Oliver,[b] Thomas Wilson,[a] Huong Nguyen,[a] and Michael Norton[c]
[a]Department of Physics and Physical Science, Marshall University, Huntington, WV, USA
[b]Department of Chemistry and Biochemistry, University of California, Santa Cruz, CA, USA
[c]Department of Chemistry, Marshall University, Huntington, WV, USA
"Porous Nanocrystalline TiO2 Electrodes for Dye-Sensitized Solar Cells"

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

Stephen Compagni Portis
UC Berkeley Renewable and Appropriate Energy Laboratory (RAEL)

3:00 PM - 3:15 PM

Coffee Break

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

Craig Hill
Principal, Northcross, Hill & Arch

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

Peggy Hock
United Solar Ovonic, San Diego, CA, USA

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

Michael Cumbo
NanoGram Solar, Milpitas, CA, USA

4:45 PM - 5:15 PM
W-D-7

Max Greenberg
REC Solar, Sunnyvale, CA, USA

Thursday, October 30, 2008

7:30 AM - 12:00 PM

Registration

7:30 AM - 8:30 AM

Breakfast

General Session
(Salon E)

8:30 AM - 8:45 AM

Welcoming remarks from Conference Chair

8:45 AM - 9:15 AM
TH-G-1

Samuel B. Adeloju, Qaisar Ameer and Manzar Sohail
Nanoscience and Sensor Technology Research Group, School of Applied Sciences and Engineering, Monash University, Victoria, Australia
"Electrochemical Embedment of Gold Nanoparticles and Enzymes into Polypyrrole for Fabrication of Robust NanoBiosensors"

9:15 AM - 9:45 AM
TH-G-2

Qiao Lin
Dept. of Mechanical Engineering, Columbia University
"Exploiting Micro- and Nanotechnology for Thermal Characterizationand Manipulation of Biomolecules"

9:45 AM - 10:15 AM
TH-G-3

Thomas Fischer[1], Suraj Puri[2], Ronald Hoyer[3], Kurt Wostyn[4],Tom Janssens[4]
1 Infineon AG, Germany
2 Nano Green Technology Inc. California USA
3 Qimonda., Germany
4 IMEC, Belgium
"A New Approach for Feol Critical Wafer Surface Cleaning"

10:15 AM - 10:30 AM

Coffee Break

10:30 AM - 11:00 AM
Th-G-4

Tinh Nguyen
National Institute of Standards and Technology, Gaithersburg, MD, USA
"Degradation and Nanoparticle Release of Polymer Nanocomposites Exposed to Solar UV Radiation"

11:00 AM - 11:30 AM
TH-G-5

Paula Mints
Principal Analyst, PV Services Program
Associate Director, Energy Practice
Navigant Consulting

11:30 AM - 12:00 PM
TH-G-6

Mark Bunger
Director of Research, LUX Research

12:00 PM - 1:30 PM

Lunch

Conference Schedule

The Conference Schedule may be subject to changes

Breakout Sessions

Track A: NanoStructures
(Marina del Rey)

2:00 PM - 2:30 PM TH-A-1
Benoit Simard
National Research Council Canada, Canada
"Single-walled carbon nanotube-based high performance materials"

2:30 PM - 3:00 PM TH-A-2
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 - 3:30 PM TH-A-3
Wuzong Zhou
University of St Andrews, Fife, Scotland
"Formation Mechanism of Anodic Titanium Oxide Nanotubes"

3:30 PM - 3:45 PM
Coffee Break

3:45 PM - 4:15 PM TH-A-4
Amir Khosravani[1], A.J. Latibari[2], M. Tajvidi[3], S.A. Mirshokraei[4], M. Rahmaninia[5], and Mousa M. Nazhad[6]
1 Research Fellow, Asian Institute of Technology (AIT), Thailand
2 Associate Professor, Azad University, Karaj, Iran
3 Assistant Professor, Tehran University, Iran
4 Professor, Wood & Paper Science Dept, Tehran University, Iran
5 Research Fellow, Asian Institute of Technology, Thailand
6 Corresponding author, Pulp and Paper Technology, AIT
"The Performance of NanoParticles in Relation with Zeta Potential of the Wet-End System"

4:15 PM - 4:45 PM TH-A-5
Maribel Guzman[1], Jean Dille[2], Stephane Godet[2]
[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
(Monterey)

2:00 PM - 2:30 PM TH-B-1
Krassen Dimitrov
Australian Institute for Bioengineering and Nanotechnology, Australia
"Nano-barcoding of Single Molecules for Biomedical Applications"

2:30 PM - 3:00 PM TH-B-2
T.Y. Yin, L.S. Ling, M. Nazlan Mohd Muhid, H. Hamdan
Universiti Teknologi Malaysia, Malaysia
"Nanostructured Couples Semiconductor Photocatalyst"[2]

3:00 PM - 3:30 PM TH-B-3
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"

3:30 PM - 3: 45 PM
Coffee Break

3:45 PM - 4:15 PM TH-B-4
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"

4:15 PM - 4:45 PM TH-B-5
Barbara Blasiak[1,4], Ulrike Trojahn[2,3], Abedelnasser Abulrob[8,9], Zhijun Zhang[4], Teodor Veres[4,5], Celine Desvaux[4], Umar Iqbal[9], Maureen O'Connor[2,3], Garnette Sutherland[1], Boguslaw Tomanek[1,6,7]
[1]Department of Clinical Neurosciences,University of Calgary, Canada
[2]Biotechnology Research Institute, National Research Council of Canada, Canada,
[3]McGill University, Canada
[4]Functional Nanomaterials Group, Industrial Materials Institute, National Research Council of Canada, Canada
[5] INRS - Energie et mat,riaux Institut national de recherche scientifique
[6]Institute of Nuclear Physics, Polish Academy of Sciences, Poland
[7]Institute for Biodiagnostics (West),National Research Council Canada
[8]Institute of Biological Sciences, National Research Council Canada, Canada
[9]Faculty of Medicine, University of Ottawa, Canada
"A magnetic resonance study of Fe304 and FeCo core nanoparticles for molecular MR imaging"

4:45 PM - 5:15 PM TH-B-6
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"

2:00 PM - 5:00 PM
Track C: Emerging Investment Forum
(San Ramon)

Forest Baskett
General Partner, New Enterprise Associates

Vlad Dabija
Managing Director, IgniteIP, LLC

Liangjie Dong
MicroNose Technology, Inc.

Rich Helfrich
Managing Director, Alameda Capital

Victor Hwang
Managing Director, T2 Venture Capital

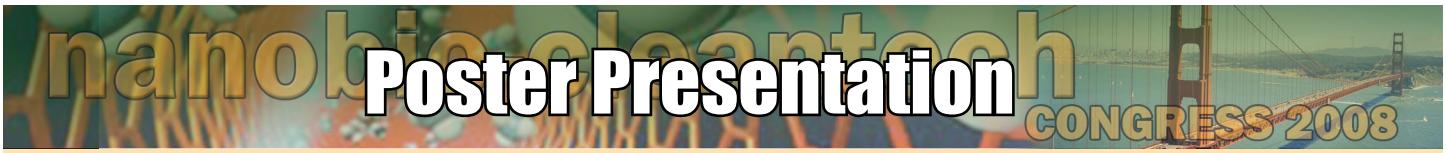
Rick DeGolia
The Angels Forum

Patrick Plummer
Plummer Law Office

Susan Preston
General Partner, CalCEF Clean Energy Angel Fund

Peter Shannon
Principal, Atlas Venture

5:00 PM
Congress Adjourned



October 28 from 12:00 PM - 1:30 PM; 5:30 PM - 7:00 PM

New approaches for fabrication of 2D magnetophotonic crystals: structural and optical properties
S.M. Baek[1], M.E. Dokukin[1], A.V. Baryshev[1], K. Yayoi[2], J. Kim[1], H. Uchida[1], M. Inoue[1]
[1] Toyohashi University of Technology, Toyohashi, Japan
[2] Ibaraki National College of Technology, Hitachinaka, 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

Hardness enhancement of Aluminum Nitride thin films by Nickel incorporation
D. Cardona[1], S. E. Rodil[1], S. Muhl1, E. Camps[2]
[1]Instituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México. Ciudad Universitaria, México D. F. México.
[2]Instituto Nacional de Investigaciones Nucleares, México D. F., México.

In Vitro Studies Concerning the Use of Elastic Vesicles for Drospirenone Transdermal Delivery
Cristina Dinu - Pirvu[1], Alina Ortan[2], Cristina Hlevca[3]
[1] University of Medicine and Pharmacy, "Carol Davila,"Bucharest, Romania
[2] University of Agricultural Sciences and Veterinary Medicine, Bucharest, Romania
[3] National Institute for Chemical Pharmaceutical Research and Development, Bucharest, Romania

Water-soluble ZnO nanoparticles
Rubio Garcia Javier[1,2], Kahn Myrtil[1], Chaudret Bruno[1], Mingotaud Christophe[2], Gauffre Fabienne[2]
[1]Laboratoire de Chimie de Coordination, Toulouse, France
[2]Laboratoire des IMRCP, Université de Toulouse, 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. Granovsky[4]
[1] Toyohashi University of Technology, Toyohashi, Japan
[2] Institute for Theoretical and Applied Electromagnetics, Moscow, Russia
[3] Queens College of the City University of New York, NY, USA
[4] Moscow State University, Moscow, Russia

Electro-optical Effect in Polymer Dispersed Liquid Crystal Based on Liquid Crystal-Montmorillonite-Clay Nanocomposite
Eun Hwa Jung[2], Ju Yeon Woo[1], Young Keun Jeong[2], Byung Kyu Kim[1,x]
[1, x] Department of Polymer Science and Engineering, Pusan National University, Busan, Korea
[2] National Core Research Center for Hybrid Materials Solution, Pusan National University, Busan, Korea

Analysis of a Carbon Nanotube-based Nano-electromechanical Vibration Sensor Using Finite Element Modeling
Farbod Khoshnoud[1,2] and Clarence W. de Silva[1]
[1] Industrial Automation Laboratory, Department of Mechanical Engineering, The University of British Columbia, Vancouver, BC, Canada
[2] SOFTEK Services Ltd., Richmond, BC, Canada

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, Zanjan, Iran

Oxidation behavior of oxynitrided Ti-6Al-4V alloys between 400 and 800°C 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, 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, Vietnam

Current Research and Development of Biodiesel in Vietnam
Le Viet Hai, Nguyen Thi Phuong Thoa
Vietnam National University, Ho Chi Minh City, Vietnam

Nanotechnology Based Antimicrobial Surfaces
Sang Beom Lee, Joseph DiMauro Jr, Alan Rae
NanoDynamics Life Sciences, Pittsburgh, PA, USA

Fabrication and tribological behavior of metal nanohoneycomb structure
Sangmin Lee[1], Seonghan Kim[2], Woonbong Hwang[3]
[1] Dept. of Mechanical Engineering, POSTECH, Republic of Korea
[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 Leem[1], Chang-Man Kim[1], Jin-Uk Park[1], Kyu-Jin Kim[1] and Shin-Won Kang[2]
[1]Department of Electronic Engineering, Kyungpook National University, Daegu, Korea
[2]School of Electrical Engineering and Computer Science, Kyungpook National University, Daegu, Korea

Size tunable multifunctional polymeric nano-carriers for targeted drug delivery and imaging
Yuanpei Li, Juntao Luo, Kai Xiao, Sheng Liang, Joyce Lee and Kit S Lam
University of California Davis Cancer Center, Division of Hematology and Oncology, Department of Internal Medicine, University of California Davis, Sacramento, CA

A novel nanocarrier formed by telodendritic polymer for drug delivery
Juntao Luo[1], Kai Xiao[1,2], Yuanpei Li[1,3], Joyce Lee[1], Li Xing[4], Holland Cheng[4], Kit S. Lam[1]
[1]Hematology & Oncology, Cancer Center, UC Davis, Medical Center, Sacramento, CA U.S.A.
[2] West China Hospital, Sicuan University, Chengdu, China
[3] The First Affiliated Hospital, Sun Yat-Sen University, GuangZhou, China
[4] Department of Molecular and Cellular Biology, University of California, Davis, CA U.S.A

October 28 from 12:00 PM - 1:30 PM; 5:30 PM - 7:00 PM

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, Japan

Bus Moved by Ethanol- BEST Project
José Roberto Moreira[1], Sílvia Velázquez[1,2], Sandra Apolinario[1], Euler Hoffman Melo[1,2], Paulo Henrique Elmadjian[1,2]
[1] CENBIO – Brazilian Reference Center on Biobass, Av. Prof. Luciano Gualberto, São Paulo, Brazil
[2] Mackenzie Presbyterian University, 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, São Paulo, Brazil

Effects of Electrolyte Additives on the Open-circuit Voltage of Dye-Sensitized Solar Cells
Nguyen Thai Hoang[1], Nguyen Thi Phuong Thoa[1], Torben Lund[2]
[1]Vietnam National University – Ho Chi Minh City, Vietnam
[2]Roskilde University, Denmark

Actuation and Inherent-Sensing of Modified Carbon Naonomaterials (CNMs)/ Conductive Polymer Nanocomposites by Electro-Micromechanical Techniques
Jung-Hoon Jang[1], Zuo-Jia Wang[1], Sung-Ju Kim[1], Joung-Man Park[1,2], K. Lawrence DeVries[2]
[1]School of Materials Science and Engineering, Engineering Research Institute
Gyeongsang National University, Jinju, KOREA
[2]Department of Mechanical Engineering, University of Utah, Salt Lake City, Utah, USA

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

Stakeholder Perceptions of the Benefits, Risk, and Potential Regulation of Nanoscale Technologies
Mark Philbrick
University of California, Berkeley, CA, USA

Polymorphous silicon thin films for applications in photovoltaic devices, obtained by plasma enhanced chemical vapor deposition
A. Remolina[1], G. Santana[1], B. M. Monroy[1], A. López-Suárez[2], M. F. García-Sánchez[1], A. Ponce[3] and A. Ortiz[1].
[1] Instituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México., México, D.F.
[2] Instituto de Física, Universidad Nacional Autónoma de México, México, D.F.
[3] Centro de Investigación en Química Aplicada, Saltillo, Coahuila, México.

Development of a biocompatible semiconductor nanocrystal for biomedical application
Sarwat B. Rizvi[1], M. Green[2], A. Darbyshire[1], S. Yang[1], M. Keshtgar[3], and A. Seifalian[1]
Centre of Nanotechnology, Biomaterial & Tissue Engineering, UCL Division of Surgery and Interventional Science, University College London[1], Department of Physics, King's College London[2] and Breast Unit, Royal Free Hamstead NHS Trust Hospital, London[3]

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, La Jolla, CA, 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, Korea

Magnetic Nanoparticles for Fighting Infected Implants
Erik Taylor and Thomas J. Webster
Division of Engineering, Brown University, Providence, RI, USA

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, RUSSIA

Nanobio computing – Synthesis of a nanonio computer using DNA and nanorobots
G. Vaidyanathan[1] and T.Annamalai[2] and B.Ravi Kiran[3]
[1]UG Student 3rd Electronics and Communication Engineering
2,3UG Student 3rd Information Technology
[1]Vickram College of Engineering, Tamil Nadu, India
[2,3] Velammal Engineering College, Tamil Nadu, India.

Optical Responsive Nanoparticles for Controlled Drug Release
Guohui Wu, Ph.D[1], Alexander Mikhailovsky, Ph.D[2], Htet A. Khant [1,3], Caroline Fu[3], Wah Chiu, Ph.D[3], and Joseph A. Zasadzinski, Ph.D[1].
1 Department of Chemical Engineering, 2 Department of Chemistry, University of California, Santa Barbara, CA & 3 National Center for Macromolecular Imaging, Verna and Marrs McLean Department of Biochemistry and Molecular Biology, Baylor College of Medicine, Houston, Texas

OA02 peptide conjugated nanoparticle for targeted drug delivery to ovarian cancer
Kai Xiao, Juntao Luo, Yuanpei Li, Kit S. Lam
UC Davis Cancer Center, Sacramento, USA

Poly(aryl ester)/poly(benzyl ether) dendrimers with fullerene C60 as the core: structure-properties relations
Natalia Yevlampieva[1], Nikolai Beljaev[1], and Robert Deschenaux[2]
[1] V.A. Fock Institute of Physics, St. Petersburg State University, St. Petersburg, Russia
[2] Institut de Chimie, Université de 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, United Kingdom

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The Center brings together scientists from the disciplines of chemistry, physics, biology, engineering and medicine. Initially the Center is focusing on carbon, silicon and biology as these three areas already make compelling arguments for the power of the nanoscale world. The focus for CNSE is predicated on the idea that biology is the theater in which nanotechnology will have its first successful applications. This follows from the fact that biology is the premier example of nanoscale science and engineering, and also because biology is currently the most important driver of the research enterprise.
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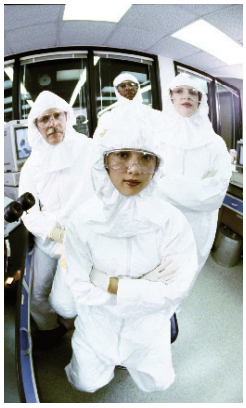

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The primary goal of the consortium is to optimize the beneficial applications of nanotechnology by expanding the knowledge of the health and environmental implications of nanoparticles.

The Consortium will foster communication between a number of regional, national and international initiatives, and facilitate collaboration amongst stakeholders worldwide.

coordinated by
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OBJECTIVES

- Review latest scientific research on the potential risk of nanoparticle exposure to human health and the environment
- Disseminate and facilitate collaboration through knowledge transfer workshops and conferences
- Serve as a coordinating body for the development of international standards
- Create and enhance good communication amongst stakeholders and to provide leadership in developing sound public policy
- Provide expert recommendations and consulting services to industry members and funding bodies

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