The background of the entire page is a photograph of the Golden Gate Bridge in San Francisco, California. The bridge's iconic orange-red towers and suspension cables are prominent against a clear blue sky. The bridge spans across a body of water, with green hills visible in the distance.

International Congress of Nanotechnology 2005

Building Infrastructures for the Next Frontier



Oct 31- Nov 4
San Francisco Airport Marriot Hotel
nanotechcongrss.com

WELCOME

IAnano



The International Congress of Nanotechnology 2005

October 31-November 4, 2005
San Francisco Airport MARRIOTT Hotel
San Francisco, California, USA.

The 2005 Conference Theme:

Building Infrastructure for the Next Frontier!

- Forming international collaboration.
- Developing the Road map.
- Converging of material science, engineering and bioscience and medicine.
- Developing International Nomenclature and Standards.
- Developing Education and Training Program.
- Forming workgroup on Nanotoxicology.
- Focusing on applications: chemical, electronics, aerospace, textile and medicine.
- Business planning for venture capital investment.
- Forum on Ethics, Social, Environmental and Safety

CONFERENCE TOPICS

- Nanomaterials
- Nanodevices
- Nanoelectronics
- Nanoelectronics
- Nanobiotechnology
- Nanomedicine
- Nanotechnology in Semiconductor Industry
- Nanotechnology in Aerospace
- Nanotechnology in Biopharmaceutical Industry
- Nanotechnology in Textile industry
- Nanotechnology in Energy Industry
- Nomenclature Terminology
- International Standards
- Molecular Engineering
- Nano Manufacturing
- Nanoparticle Toxicology
- Societal & Environmental Impacts
- Health Safety Implications
- IP and Technology Transfer
- Research Collaboration
- Education & Training
- International Nanotechnology Initiatives
- Capital investment in Nanotechnology
- and other related topics

Welcome To ICNT 2005!

Dear Colleague:

We are pleased to welcome you to our second International Congress of Nanotechnology 2005.

As a young association, our staff and volunteers have been working hard for months to ensure that we provide you with leading-edge content and an outstanding conference experience.

ICNT has offered scientists, engineers and corporate executives from around the world the opportunity to interact, network and exchange ideas for the advancement of the emerging industry. Your contribution to the program and your participation has helped us to achieve our mission.

The program has been designed to help you expand your knowledge and gain insights into some of the latest scientific breakthroughs, exciting business opportunities as well as presenting to you some challenging projects which require international collaboration in building up needed infrastructure for the emerging industry.

In addition to the general sessions and breakout sessions, you will also have an opportunity to network with your peers and build lasting professional relationships and meeting with our sponsors and exhibitors who will be showcasing state-of-the-art products and services related to nanotechnology.

We would like to thank our program committee, volunteers and many of our colleagues who have done so much to make this year's conference successful. We welcome your suggestions for future meetings.

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

With warmest regards,

Lloyd L. Tran, Program Chair
Fabio Pichierri, Session Co-Chair
Nigel M. de S Cameron, Session Co-Chair

INTERNATIONAL ASSOCIATION OF NANOTECHNOLOGY



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Sacramento, CA 95825
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<http://www.ianano.org>

The International Association of Nanotechnology (IANT) 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.

KEYNOTE SPEAKERS



Professor Martin L. Perl,
Nobel Laureate, Stanford University,
California
“The Search for Elementary Particles with
Fractional Electric Charge”



Prof. Chih-Minh Ho,
Director of the Institute for Cell Mimetic
Space Exploration, UCLA
Los Angeles, USA
“Using Nano Modalities Towards the Control
of Bio-Systems”



Dr. A.M. Gatti,
Head, Laboratory of Biomaterials –
University of Modena and Reggio Emilia,
Modena, ITALY
“Nanosafety in nanotechnologies”



Dr. T. Vo-Dinh,
Director, Center for Advanced Biomedical
Photonics,
Oak Ridge National Laboratory
Oak Ridge, TN, USA
“Nanobiosensors and Nanoprobes: Frontiers
and Potential in Nanomedicine”



Prof. K. Barry Sharpless,
Nobel Laureate in Chemistry, The Scripps
Research Institute (TSRI),
La Jolla, California, USA
“Connectivity and Function On Every Scale”



Prof. László Guczi,
Chemical Research Center, Hungarian Academy
of Sciences, Institute of Isotopes,
Budapest, HUNGARY, “Nano structured
Interfaces between Gold Nanoparticles and
Oxide and its Role in Selective CO oxidation”



Prof. Deb Bennett-Woods,
Regis University, Rueckert-Hartman School for
Health Professions, Denver, Colorado, USA,
“A Practical Framework for the Pragmatic
Integration of Ethical and Social Considerations
into Funding Proposals for Emerging
Technologies”

Mr. Keith R. Larson,
Managing Director, Strategic Investments,
INTEL CAPITAL CORPORATION, Hillsboro,
OR, 97124 USA

INVITED LECTURES

Dr. George Maracas

Director of Nanotechnology Program, MOTOROLA, Inc.
Tempe, AZ, USA
“Nanotechnology for Communications”

Dr. Minoo N. Dastoor

Senior Advisor to the Associate Administrator
Office of Aerospace Technology, NASA, Washington DC, USA
“NASA and Nanotechnology”

Prof. Fabio Pichierri

21st century Center of Excellence, Tohoku University, Sendai, JAPAN
“From giant molecules to nanoparticles: on chemistry’s contribution to
nanomedicine”

Dr. Kenji Hirose

Fundamental Research Laboratories, NEC Corporation
Tsukuba, Ibaraki, JAPAN
“Contact effects on transport properties of single molecules between metallic
electrodes: ab initio calculation study”

Dr. Thomas Sawitowski

Head, Nanotechnology Department
BYK-Chemie GmbH, Abelstrasse 45, 46483 Wesel, GERMANY
“The use of Nanoadditives in plastic and coating composites”

Prof. Bernhard Wuderle

Deputy Director, Micro Materials Center Berlin
Fraunhofer Institute for Reliability and Microintegration (IZM) Berlin,
GERMANY
“Packaging Reliability Research on the Way from Micro to Nano”.

Prof. Georgi I. Ivanov

Center for Modern Medicine, Quantum Therapy and Rehabilitation, Plovdiv,
BULGARIA
“Nano-engineering approach in a “lesion” zone in a neural tissue trauma”

Prof. Gordon C. C. Yang

Institute of Environmental Engineering, National Sun Yat-Sen University,
Kaohsiung 80424, TAIWAN
“Degradation of Nitrate in the Aqueous Solution by Nanoscale Iron Prepared by
Three Different Processes: Performance Evaluation and Comparison”

Mr. Alexander Pogany

Federal Ministry for Transport, Innovation and Technology, Vienna,
AUSTRIA “The Austrian NANO Initiative: Small Country with
Strong Expertise”

Dr. James Rudd

Program Director, National Science Foundation, SBIR/Small Business Technology
Transfer (STTR)
“The US National Nanotechnology Initiatives and Small Business Research
Enterprises”

Mr. Richard Helfrich

General Partner, Alameda Capital LLC, Pleasanton, CA 94566 USA
“Opportunities and Challenges for Nanotechnology Start-ups”

Mr. John C. Monica, Jr

Partner, Porter Wright Morris & Arthur LLP, Ohio, USA
“Preparing For Future Health Litigation: The Application of Product Liability Law
To Nanotechnology”

CONFERENCE SCHEDULE



Monday October 31, 2005

The Conference Schedule may be subject to changes

7:30 AM -10:00 AM	Workshop Registration	12:30 PM - 3:30 PM	Workshop 3: Fundamentals & Application of Carbon Nanotubes , by Dr. Cattien Nguyen, Senior Research Scientist, NASA Nanotechnology Research Center, CA, USA
10:00 AM - 5:00 PM	Exhibitor Registration and Setup	12:30 PM - 3:30 PM	Workshop 4: Intellectual Property and Business Strategy in Nanotechnology , by Joel G. Ackerman, Patrick R. Jewick and Stephen T. Kong, of Townsend Townsend and Crew LLP, San Francisco, CA, USA
10:00 PM - 5:00 PM	Conference Registration	3:30 PM	Bus departs from the Marriott Hotel to Fisherman's Wharf
8:30 AM -11:30 PM	Workshop 1: Fundamentals & Application of Nanomaterials: Polymer Nanotechnology , by Professor Yvon Durant, Director, Advanced Polymer Laboratory, University of New Hampshire, NH, USA	4:15 PM - 5:30 PM	<i>Bay Cruise</i> in San Francisco
8:30 AM -11:30 AM	Workshop 2: Fundamentals & Application of Nanobiotechnology by Professor Thomas Webster, Weldon School of Biomedical Engineering and School of Materials Engineering, Purdue University, IN, USA	8:00 PM	Bus departs Fisherman's Wharf to Hotel
11:30 AM - 12:30 PM	Lunch on Your Own		

Tuesday November 1, 2005

The Conference Schedule may be subject to changes

7:00 AM - 4:00 PM	Registration		<i>chemistry's contribution to nanomedicine"</i>
7:00 AM - 8:00 AM	Breakfast at the Exhibit Area	11:15 AM -11:45 PM T-G-6	Thomas Sawitowski BYK-Chemie GmbH, Wesel, GERMANY Sendai, JAPAN <i>"The use of Nanoadditives in plastic and coating composites"</i>
8:00 AM - 8:35 AM T-G-1	Welcoming & Opening Remarks by Lloyd L. Tran Conference Chair. <i>"The State of Nanotechnology 2005: Building Infrastructures for the Next Frontier"</i>	11:45 AM -12:45 AM T-G-7	Oborloo Hochmanks Dow Chemical, New York, USA <i>"The Chemical Industry and Nanotechnology: A Macroscopic Perspective"</i>
8:35 AM -9:10 AM T-G-2	Key note: George Maracas MOTOROLA, Inc., Temple, Arizona <i>"Nanotechnology for Communications"</i>	10:45 AM - 12:15 PM	Session II: Lectures on Nanoelectronics
9:10 AM -9:45 AM T-G-3	Invited Lecture: T. Vo-Dinh Center for Advanced Biomedical Photonics Oak Ridge National Laboratory, Oak Ridge, TN, USA <i>"Nanobiosensors and Nanoprobes: Frontiers and Potential in Nanomedicine"</i>	10:45 AM - 11:15 PM T-G-8	A. De Luca, E. Dien, P. France, and M. Heitzmann CEA-LETI, 17 avenue des Martyrs – 38000 Grenoble, STMicroelectronics, 12 rue Jules Horowitz – 38000 Grenoble, FRANCE <i>"Down to 20nm width photoresist patterns fabricated by using a dry plasma trimming"</i>
9:45 AM - 10:30 AM T-G-4	Keynote lecture: Prof. Martin L. Perl , Nobel Laureate Stanford University, California <i>"The Search for Elementary Particles with Fractional Electric Charge"</i>	11:15 AM - 11:45 AM T-G-9	Anton Koeck, Rainer Hainberger, Rudolf Heer, Michael Kast, Christoph Stepper ARC, Nano-Systemtechnologies, Vienna, Austria <i>"Electrical and optical nanosensors"</i>
10:30 AM -10:45 AM	Coffee Break at the Exhibit Area	11:45 AM - 12:15 AM T-G-10	Kenji Hirose and Nobuhiko Kobayashi Fundamental Research Laboratories, NEC Corporation Tsukuba, Ibaraki, JAPAN <i>"Contact effects on transport properties of single molecules between metallic electrodes: ab initio calculation study"</i>
10:45 AM -12:15 PM	Concurrent Sessions Session I: Lectures on Nanomaterials & Nanomedicine		
10:45 AM -11:15 AM T-G-5	Fabio Pichierri 21st century Center of Excellence, Tohoku University, Sendai, JAPAN <i>"From giant molecules to nanoparticles: on</i>	10:45 AM - 12:15 PM	Session III: Nanotech Concepts and Applications

CONFERENCE SCHEDULE



Tuesday (continued)

The Conference Schedule may be subject to changes

10:45 AM - 11:15 AM T-G-11	William Michael Kallfelz Committee for Philosophy and the Sciences, University of Maryland and College Park, MD, USA <i>"Getting Something Out of Nothing: Implications of a Future Information Theory Based on Vacuum Microtopology"</i>	3:40 PM -4:05 PM T-A-5	Behnam Mostajeran Goortani, and Pierre Proulx Department of Chemical Engineering, University of Sherbrooke, Sherbrooke, J1K 2R1, CANADA <i>"Synthesis of SiO₂ Nanoparticles in RF Plasma Reactor: Effect of Quench Gas Position, Wall Insulation, and Reactor Diameter"</i>
11:15 AM - 11:45 AM T-G-12	S. B. Krivit New Energy Times, Los Angeles, California, USA <i>"What Really Happened with Cold Fusion and Why is it Coming Back"</i>	4:05 - 4:30 PM T-A-6	I.A. Timoshchenko and A.M. Ilyanok Belarusian State University, Fr. Skarina Ave. 4 Minsk, BELARUS Consulting Center "Nanobiology", Ltd. Filimonov Street, 69, ap.222, Minsk, BELARUS <i>"Formation of nanojet of radicals for nanolithography purposes"</i>
11:45 AM - 12:15 PM T-G-13	C.L. Y. Lo, Y. Li, C.W. Yuen and K.W. Yeung Institute of Textiles & Clothing, The Hong Kong Polytechnic University, Hung Hom, Kowloon HONKONG, CHINA <i>"The Stage of Development of Nanotechnology in Textile Industry"</i>	4:30 PM - 4:55 PM T-A-7	T. Dumitrica Department of Mechanical Engineering University of Minnesota, USA <i>"Rate theory of yield in carbon and boron nitride nanotubes"</i>
12:15 PM - 1:30 PM	Lunch at Exhibit Area	5:00 PM - 6:30 PM	Poster Presentation at the Exhibit Area
	Tuesday PM (PM=Afternoon) Symposium on Nanomaterials (Track A) Symposium on Nanomaterials (Track B) Symposium on Nanobiotechnology and Nanomedicine (Track C) Symposium on Nanoethics (Track D)		TRACK B Symposium on Nanomaterials Session MAT-200
	TRACK A Symposium on Nanomaterials - Session MAT-100	1:30 PM -1:55 PM T-B-1	Zhiyong Zhang, Henry J. Liu, and Kyeongjae Cho Department of Mechanical Engineering Stanford University, Stanford, CA, 94305 USA <i>"Ab Initio Study of Hydrogen Storage on CNT"</i>
1:30 PM - 1:55 PM T-A-1	J.J. Carvajal, C.J. Wu, N. M. Gomez, J.C. Rojo Department of Materials Science and Engineering State University of New York, Stony Brook, NY, USA <i>"Controlling GaN nanostructure morphologies via substrate engineering"</i>	1:55 PM -2:20 PM T-B-2	D.D. Sun, P.F. Lee, and J.O Leckie School of Civil and Environmental Engineering Nanyang Technological University, SINGAPORE Department of Civil and Environmental Engineering Stanford University, USA <i>"Synthesis and Characterization of Nano-structured TiO₂"</i>
1:55 PM -2:20 PM T-A-2	Piyali Das and Anuradda Ganesh Energy Systems Engineering, Indian Institute of Technology Bombay, Powai, Mumbai-400076, INDIA <i>"Carbon Nano-chains from Cashew nut Shell-a Novel Route"</i>	2:20 PM -2:45 PM T-B-3	Gustavo A. Aucar, Patricio F. Provasi, Marina Sanchez, Stephan P. Sauer Dept. Physics, Northeastern University Corrientes, ARGENTINA, Dept. Chemistry University of Copenhagen, DENMARK <i>"Theoretical analysis of measurable NMR spectroscopic parameters in medium size acyclic hydrocarbons and H-bonded aminoacids"</i>
2:20 PM -2:45 PM T-A-3	Erjia Liu School of Mechanical and Aerospace Engineering Nanyang Technological University, 50 Nanyang Avenue Singapore, 639798, SINGAPORE <i>"Nanoindentation of diamondlike carbon films"</i>	2:45 PM -3:10 PM T-B-4	S. Kunjara Na Ayudhya, Parawee Tonto, Okorn Mekasuwandumrong, Varong Pavarajarn and Piyasan Prasertthdam Center of Excellence on Catalysis and Catalytic Reaction Engineering Department of Chemical Engineering Faculty of Engineering, Chulalongkorn University Bangkok, 10330, THAILAND Department of Chemical Engineering Faculty of Engineering and Industrial Technology, Silpakorn University, Nakorn Pathom 73000, THAILAND
2:45 PM -3:10 PM T-A-4	Radi Kadushnikov, Vitali Khvatkov, Vladimir Nesh, Ira Bleiweiss Smart Imaging Technologies, 1770 St James Place Suite 414, Houston, TX, 77056 USA <i>"Automated Visual Characterization and Analysis of Nanomaterials"</i>		
3:10 PM -3:40 PM	Coffee Break at the Exhibit Area		

CONFERENCE SCHEDULE



Tuesday (continued)

The Conference Schedule may be subject to changes

3:10 PM -3:40 PM	Coffee Break at the Exhibit Area	2:45 PM -3:10 PM T-C-4	<i>Preparation, Characterization and Cell Growth</i>
3:40 PM - 4:05 PM T-B-5	A. K. Bandyopadhyay* , R. Sen and M. S. Datta Govt. College of Engineering & Ceramic Technology Kolkata – 700010, INDIA. <i>“Preparation of Nanocrystalline SiC Particles by Attrition Milling Route”</i>	3:10 PM -3:40 PM	A. Brown, C. Morales, C. Ufomadu, F. A. Gomez Department of Chemistry and Biochemistry California State University Los Angeles, CA 90032 USA <i>“Microfluidic “Lab-on-a-Chip” Devices for Affinity Capillary Electrophoresis Separations”</i>
4:05 PM - 4:30 PM T-B-6	S.A. Thorne, Y.V. Bhargava, T. Cohen Hyams, T.S. Mintz, V. Radmilovic², Y. Suzuki, T.M. Devine Department of Materials Science and Engineering University of California, Berkeley, Berkeley, CA 94720 USA. National Center of Electron Microscopy Lawrence Berkeley National Laboratory Berkeley, CA 94720 USA <i>“Novel Electrochemical Synthesis of Nickel Oxide Nanowires”</i>	3:40 PM - 4:05 PM T-C-5	Coffee Break at the Exhibit Area K. Tanaka and N. Numao Dept. of Molecular Engineering Kyoto University, Nishikyo-ku, Kyoto, JAPAN <i>“Specification of Kinase Protein Interacting with Mutant p53”</i>
4:30 PM - 4:55 PM T-B-7	B. Mamba, R. Krause, S. Durbach, K Salipira University of Johannesburg Department of Advanced Chemical Technology Doomfontein 2028, Johannesburg, SOUTH AFRICA <i>“Polymerisation of cyclodextrins with carbon nanotubes for use in water treatment”</i>	4:05 PM -4:30 PM T-C-6	K. C. Hewitt, J. St. Aubin, C. Nisbett Dalhousie University, Physics and Atmospheric Science 6300 Coburg Road, Halifax, B3H 3J5, CANADA <i>“Detection of hemoglobin disorders using metal nanoparticles and surface enhanced Raman spectroscopy.”</i>
5:00 PM - 6:30 PM	Poster Presentation at the Exhibit Area	4:30 PM -4:55 PM T-C-7	M.K. Gilmanov & S.M. Gilmanova M.A. Aytkhozhin’s Institute of Molecular Biology and Biochemistry Almaty, Kazakhstan <i>“The new nanocapsules - “Universaldeliverycarrier” for medicinal, biological and gene engineering applications”</i>
	TRACK C Symposium on Nanobiotechnology & Nanomedicine- Session BIO-100	5:00 PM -6:30 PM	Poster Presentation at the Exhibit Area
1:30 PM -1:55 PM T-C-1	Vladimir Parpura University of California Riverside 1208 Spieth Hall, Riverside, CA 92521 <i>“Carbon Nanotubes and Neurons”</i>		Tuesday PM Symposium on Ethics, Societal, Legal, Environmental- Session-100 (Nanoethics)
1:55 PM -2:20 PM T-C-2	Eugenia Pechkova , Valentina Grasso, Federica Valerio, Pietro Perlo and Claudio Nicolini Centro Ricerche FIAT Tecnologie Innovative di Prodotto, Strada Torino 50, 10043 Orbassano (TO), ITALY Nanoworld Institute and Biophysics Division University of Genova, Corso Europa, 30, 16132 Genova (ITALY) and cFondazione Elba Via delle Testuggini, Roma (ITALY) <i>“Nanopatterning of Anodic Porous Alumina for Proteomics and Nanocrystallography”</i>	1:30 PM -1:55 PM T-D-1	TRACK D Patrick Lin The Nanoethics Group Santa Barbara, CA, USA <i>“An overview of issues in Nanoethics”</i>
2:20 PM -3:45 PM T-C-3	Bahattin M. Baysal, Alexandra Porjazoska, Oksan Karal-Yilmaz, Nilhan Kayaman-Apohan, Kemal Baysal, Maja Cvetkovska Dept. of Chemical Engineering Bogazici University, Istanbul, TURKEY <i>“Biodegradable Copolymers for Tissue Engineering :</i>	1:55 PM -2:20 PM T-D-2	Deb Bennett-Woods Regis University Rueckert-Hartman School for Health Professions, Department of Health Care Ethics, Denver, CO 80221 USA <i>“A Practical Framework for the Pragmatic Integration of Ethical and Social Considerations into Funding Proposals for Emerging Technologies”</i>
	<i>Biodegradable Copolymers for Tissue Engineering :</i>	2:20 PM -2:45 PM T-D-3	Nigel M. de S. Cameron Chicago-Kent College of Law Director of Institute on Biotechnology and the Human Future Illinois Institute of Technology, Illinois, USA <i>“Technology and the Human Condition: some questions for policy”</i>

CONFERENCE SCHEDULE



Tuesday (continued)

The Conference Schedule may be subject to changes

<p>2:45 PM -3:10 PM T-D-4</p>	<p>C. Christopher Hook, Jennifer Lahl, C. Ben Mitchell The Center for Bioethics and Culture, CA, USA “<i>Nanotechnology and the future of medicine: a model of healing and human flourishing</i>”</p>	<p>4:05 PM -4:30 PM T-D-6</p>	<p>Stefan L. Gammel Eberhard Karls University Tuebingen, Interdepartmental Centre for Ethics in the Sciences and Humanities (IZEW) Wilhelmstrasse 19, 72074 Tuebingen, GERMANY “<i>Visions of Nanotechnology: Origins of Utopian Visions and their Impact on Society</i>”</p>
<p>3:10 PM -3:40 PM 3:40 PM -4:05 PM T-D-5</p>	<p>Coffee Break at the Exhibit Area</p> <p>David Guston Dept of Political Science, Consortium for Science, Policy and Outcomes University of Arizona, Arizona, USA “<i>NSEC: Center For Nanotechnology In Society At Arizona State University</i>”</p>	<p>4:30 PM - 4:55 PM T-D-7</p>	<p>Ashley J. Shew Department of Philosophy University of South Carolina, Greer, SC 29651 “<i>Codifying the Ethics of Nanotechnology</i>”</p>
		<p>5:00 PM - 6:30 PM</p>	<p>Poster Presentation at the Exhibit Area</p>

Wednesday November 2, 2005

The Conference Schedule may be subject to changes

<p>7:00 AM -4:00 PM</p>	<p>Registration</p>	<p>10:45 AM -11:05 AM W-G-5</p>	<p>Minoo N. Dastoor Office of Aerospace Technology NASA, Washington DC “<i>NASA and Nanotechnology</i>”</p>
<p>7:00 AM -8:00 AM</p>	<p>Light Breakfast at the Exhibit Area</p>		
	<p>Plenary Lectures</p>	<p>11:05 AM -11:25 AM W-G-6</p>	<p>David Vivanco NANOESPACIO, S.L. Madrid SPAIN “<i>Roadmap of Nanotechnologies for Space Exploration</i>”</p>
<p>8:05 AM - 8:05 AM</p>	<p>Open remark by Prof. Fabio Pichierri, Co-Chair</p>	<p>11:25 AM -11:45 AM W-G-7</p>	<p>David M. Livingston “The Space Show”, Tiburon, CA 94920 USA</p>
<p>8:05 AM - 8:40 AM W-G-1</p>	<p>Yvon Durant Advanced Polymers Laboratory, University of New Hampshire, NH, USA “<i>Manufacturing of Polymeric Nanomaterials for Biomedical applications</i>”</p>	<p>11:45 PM -12:05 PM W-G-8</p>	<p>Oudea Coumar EADS-Space Transportation , P. M. on Micro and Nano Technologies for Space applications. FRANCE “<i>Nanotechnology at EADS-Space Transportation</i>”</p>
<p>8:40 AM - 9:15 AM W-G-2</p>	<p>Bernhard Wuderle Micro Materials Center Berlin Fraunhofer Institute for Reliability and Microintegration (IZM) Berlin, GERMANY “<i>Packaging Reliability Research on the Way from Micro to Nano</i>”.</p>	<p>12:05 AM -12:25 PM W-G-9</p>	<p>Michael J. Laine LiftPort Group, USA “<i>Nanotechnology applications for Space Elevators</i>”</p>
<p>9:15 AM - 9:50 AM W-G-3</p>	<p>Chih-Minh Ho Institute for Cell Mimetic Space Exploration UCLA, Los Angeles, USA “<i>Using Nano Modalities Towards the Control of Bio-Systems</i>”</p>	<p>10:45 AM -12:15 PM</p>	<p>Session 2: Nanotoxicology</p>
<p>9:50 AM -10:25 AM W-G-4</p>	<p>A.M. Gatti Laboratory of Biomaterials – University of Modena and Reggio Emilia Modena, ITALY “<i>Nanosafety in nanotechnologies</i>”</p>	<p>10:45 AM -11:15 AM W-G-10</p>	<p>Jo Anne Shatkin The Cadmus Group, Inc., MA 02472 USA “<i>Developing a Framework for Risk-Informed Assessments of Nanomaterials</i>”</p>
<p>10:25 AM -10:45 AM</p>	<p>Coffee Break at the Exhibit Area</p>	<p>11:15 AM -11:45 AM W-G-11</p>	<p>John McGinness , Peter Proctor , James Le Quynh, Mike McGinness Organic Metals, Inc., Houson, TX, USA “<i>Nanotoxicological Frontiers in Nanotechnology</i>”</p>
<p>10:45 AM - 12:30 PM</p>	<p>Concurrent sessions: Session 1: Panel on Nanotechnology & Space Exploration</p>	<p>11:45 AM -12:15 PM W-G-12</p>	<p>Weisheng Lin, Yue-wern Huang, Isaac Stayton, Xiao-Dong Zhou, Paul Nam, and Yinfa Ma Department of Chemistry University of Missouri-Rolla, Rolla, MO, USA “<i>Cytotoxicity of Selected Metal Oxide and SiO2 Nanoparticles against Lung Cancer Cells</i>”</p>

CONFERENCE SCHEDULE



Wednesday (continued)

The Conference Schedule may be subject to changes

10:45 AM
-12:15 PM
W-G-13

Session 3: Societal Impact of Nanotechnology
Moderated by **Nigel M. de S. Cameron**, Chicago-Kent College of Law, Director of Institute on Biotechnology and the Human Future Illinois Institute of Technology, Illinois, USA

David Guston

Dept of Political Science
Consortium for Science, Policy and Outcomes
University of Arizona, Arizona, USA

Christine Peterson

Forsight Nanotech Institute
Palo Alto, CA 94306, USA

Andrew J Cook

Agribusiness and Economic Research Unit
Commerce Division
Lincoln University, NEW ZEALAND

Stefan L. Gammel

Eberhard Karls University Tuebingen
Interdepartmental Centre for Ethics in
the Sciences and Humanities (IZEW)
Wilhelmstrasse 19, 72074 Tuebingen, GERMANY

12:15 PM
-1:30 PM

Lunch at Exhibit Area

Wednesday PM

Symposium on Nanomaterials (Track A)
Symposium on Nanobiotechnology
and Nanomedicine (Track B)
Symposium on Nanoelectronics (Track C)
Symposium on Societal Impacts (Track D)

TRACK A

Symposium on Nanomaterials - Session MAT-300

1:30 PM
-1:55 PM
W-A-1

**H. S. Bhatti, Rajesh Sharma, N. K. Verma,
K. Manzoor, S. R. Vadera and N. Kumar**
Department of Physics
Punjabi University, Patiala, INDIA.
Institute of Engineering and Emerging Technologies
Baddi, INDIA. SPMS,
Thapar Institute of Engineering and Technology
Patiala, INDIA.
Defence laboratory, Jodhpur, INDIA.
*"Zinc Oxide Nanostructures: An Idealistic Approach
to
Sensors, phosphors and Optoelectronics"*

1:55 PM
-2:20 PM
W-A-2

Hideaki Kasai and Wilson Agerico Diño
Department of Applied Physics
Graduate School of Engineering
Osaka University
2-1 Yamadaoka, Suita, Osaka 565-0871, Japan
*"Computational NanoMaterials Design: From Basics
to Actual Applications"*

2:20 PM
-2:45 PM
W-A-3

**Adriyan Milev, Nguyen Tran, G.S. Kamali Kannangara
and Michael Wilson**

College of Science, Technology and Environment
University of Western Sydney
Locked Bag 1797, Penrith South DC 1797, AUSTRALIA
*"Ball Milling of Graphite in Water and Nanotube
Formation upon Annealing"*

2:45 PM
-3:10 PM
W-A-4

**Hui Pan, Jianyi Lin, Weizhe Chen, Han Sun,
Yuanping Feng, and Wei Ji**

Department of Physics, National University of Singapore
2 Science Drive 3, SINGAPORE 117542
Institute of Chemical and Engineering Sciences
1 Pesek Road, Jurong Island, SINGAPORE 627833
*"Optical limiting and hydrogen storage characterization
of Cu, Cu₂O and CuO nanostructure"*

3:10 PM
- 3:40 PM

Coffee Break at the Exhibit Area

3:40 PM
- 4:05 PM
W-A-5

Valerii M. Kobryanskii

Institute of Chemical Physics
RAS Kosygin St. 4, 117997 Moscow, RUSSIA
*"Self-organization of Nanoparticles and Vibrational
Coherence in Gels and Composites
of Nanopolyacetylene"*

4:05PM
-4:30PM
W-A-6

Xuan Wu, Parveen Sachdeva and Ranganathan Kumar

Department of Mechanical Materials and
Aerospace Engineering
University of Central Florida, Orlando, FL, USA
*"Molecular Dynamics Simulation for the Heat Transfer
Enhancement of Silica Nanofluids"*

4:30 PM
- 4:55 PM
W-A-7

P. Xue, X.M. Tao and Keun Hoo PARK

Institute of Textiles and Clothing
The Hong Kong Polytechnic University
Kowloon, Hong Kong
*"Fabrication and Characterization Of
Conductive Yarns"*

5:00 PM
- 6:30 PM

Poster Presentation at the Exhibit Area

TRACK B

Symposium on Nanobiotechnology & Nanomedicine - Session BIO-200

1:30 PM
-1:55 PM
W-B-1

**Galvan-Garcia P, Zhang M, Fang S, Zakhidov AA,
Baughman RH, Romero MI.**

Regenerative Neurobiology Research Division
Texas Scottish Rite Hospital for Children, Dallas, TX
NanoTech Institute, University of Texas at Dallas
Richardson, TX, and Department of Neurology,
University of Texas
Southwestern Medical Center, Dallas, TX
*"Cellular Growth with CNTs, Nanoyarns
and Nanosheets"*

CONFERENCE SCHEDULE



Wednesday (continued)

The Conference Schedule may be subject to changes

1:55 PM
-2:20 PM
W-B-2
Samuel B. Adeloju and Alexander N. Moline
Water and Sensor Research Group
School of Applied Sciences and Engineering
Monash University, Peninsula and Gippsland Campuses
Victoria 3842, AUSTRALIA.
“Nanocomposite Polypyrrole - GOx/Poly-ortho-phenylenediamine Bilayer Biosensor for Potentiometric and Amperometric Detection of Glucose”

2:20 PM
-2:45 PM
W-B-3
Georgi I. Ivanov & Neli D. Neshevska
Center for Modern Medicine
Quantum Therapy and Rehabilitation
Plovdiv, BULGARIA
“Nano-engineering approach in a “lesion” zone in a neural tissue trauma”

2:45 PM
-3:10 PM
W-B-4
A. Merkoçi, M.Pumera, M.Aldavert, S.Marin, T. Castañeda, M.del Valle, S. Alegret
Grup de Sensors i Biosensors
Departament de Química
Universitat Autònoma de Barcelona
E-08193 Bellaterra, Barcelona, SPAIN
“Synthesis and modification of quantum dots and their integration in DNA sensing systems”

3:10 PM
-3:40 PM
Coffee Break at the Exhibit Area

3:40 PM
-4:05 PM
W-B-5
S. Wang, X. Shi, X. Chen, S. Meshinchi and J.R. Baker Jr
Michigan Nanotechnology Institute for Medicine and Biological Sciences
University of Michigan, Ann Arbor, MI 48109 USA
Department of Cell and Developmental Biology
Medical School, University of Michigan
Ann Arbor, MI 48109 USA
“Encapsulation of Submicrometer-Sized 2-Methoxyestradiol Crystals into Polymer Multilayer Capsules for Biological Applications”

4:05 PM
- 4:30 PM
W-B-6
Oleg Andreev, Donald Engelman, Yana Reshetnyak
Physics Department
University of Rhode Island, Kingston, RI 0288, USA
Department of Molecular Biophysics and Biochemistry
Yale University, New Haven, CT 06520, USA
“Molecular Nanosyringe for pH-Triggered Injection of Molecules into Cells”

4:30 PM
- 4:55 PM
W-B-7
N. Samenov
M.A. Aytkhozhin’s Institute of Molecular Biology and Biochemistry
Almaty, KAZKHSTAN
“The new liposomal drug delivery system preparation”

5:00 PM
- 6:30 PM
Poster Presentation at the Exhibit Area

1:30 PM
-1:55 PM
W-C-1

1:55 PM
-2:20 PM
W-C-2

2:45 PM
-3:10 PM

3:10 PM
-3:40 PM

3:40 PM
-4:05 PM
W-C-3

4:05 PM
-4:30 PM
W-C-4

4:30 PM
- 4:55 PM
W-C-5

TRACK C

Symposium on Nanoelectronics - Session NEL-200

Ryza N. Musin and Xiao-Qian Wang
Department of Physics and Center for Theoretical Studies of Physical Systems
Clark Atlanta University, 223 James P. Brawley Drive, S. W, Atlanta, GA 30314, USA
“Theoretical Study of Core-Shell Structured Silicon-Germanium Nanowires: Quantum Size Effect.”

Hiroshi Mizuseki, Rodion V. Belosludov, Amir A. Farajian, Olga V. Pupyshcheva, and Yoshiyuki Kawazoe
Institute for Materials Research
Tohoku University, Sendai, 980-8577, JAPAN
“Prediction of Molecular Devices by First Principles Calculations”

Jang-Yu Hsu, Yee-Mou Kao, Chun-Hung Lin
NCHC/NTHU 7,R&D 6th Road, HsinChu 300, TAIWAN
“Energy Principle of Many Electron Systems”

Coffee Break at the Exhibit Area

Andrea Locatelli, Salia Cherifi, and Stefano Heun Fontana
Sincrotrone Trieste S.C.p.A., Trieste, ITALY
Fulvio Ratto and Federico Rosei
Institut National de la Recherche Scientifique-Energie Materiaux et Telecommunications (INRS-EMT)
Université du Québec, Varennes (Quebec) CANADA
Pierre-David Szkutnik, Anna Sgarlata, and Maurizio De Crescenzi
Dipartimento di Fisica and Unità Istituto Nazionale per la Fisica della Materia (INFN), Università di Roma II Roma, ITALY
Nunzio Motta,
Dipartimento di Fisica and Unità Istituto Nazionale per la Fisica della Materia (INFN), Università di Roma TRE Roma, ITALY
“Critical issues in Ge/Si nanostructures: intermixing and ripening”.

Luis Furtado
Instituto de Química, Universidade de São Paulo, Av. Prof. Lineu Prestes,748, lab.221, São Paulo, BRAZIL
“A New Concept for Light Driven Molecular XOR Logic Gate”

Valentin A. Chanturiya and Igor J. Bunin
Research Institute of Comprehensive Exploitation of Mineral Resources (IPKON RAS)
Russian Academy of Sciences
4 Kryukovsky Tupik, Moscow, RUSSIA
“Nanosecond Pulsed Power Technologies For Disintegration And Breaking-Up Of Fine Disseminated Mineral Complexes”

CONFERENCE SCHEDULE



Wednesday (continued)

The Conference Schedule may be subject to changes

5:00 PM -6:30 PM	Poster Presentation at the Exhibit Area	2:45 PM -3:10 PM W-D-4	G.E. Marchant, K.W. Abbott, S. Gopalan, D. Sylvester Arizona State University, Tempe, AZ, USA <i>“Models for the International Regulation of Nanotechnology”</i>
	Wednesday PM Symposium on Ethics, Societal, Legal, Environmental- Session-200 (Societal)	3:10 PM -3:40 PM	Coffee Break at Exhibit Area
	TRACK D	3:40 PM -4:05 PM W-D-5	Dan A Lewis Institute of Policy Research Northwestern University, Evanston, IL 60208, USA <i>“Beyond the Deficit Model in the Public Understanding of Nanotechnology”</i>
1:30 PM -1:55 PM W-D-1	J. H. Moor and J. Weckert Department of Philosophy Dartmouth College, Thornton Hall 6035 Hanover, NH, USA <i>“Privacy, Control, and Nanotechnology”</i>	4:05 PM -4:30 PM W-D-6	Christine L. Peterson Foresight Nanotech Institute Palo Alto, CA 94306, USA <i>“Maximizing Success in Public Outreach on Nanotechnology”</i>
1:55 PM -2:20 PM W-D-2	Andrew J. Cook Agribusiness and Economic Research Unit Commerce Division, Lincoln University Canterbury, NEW ZEALAND <i>“Nanotechnology: Social issues and implications”</i>	4:30 PM -5:20 PM W-D-7	Panel Discussion
2:20 PM - 2:45 PM W-D-3	Torsten Fleischer, Peter Hocke, Armin Grunwald Institute for Technology Assessment and Systems Analysis (ITAS) Forschungszentrum Karlsruhe GmbH, GERMANY <i>“Nano Technology Assessment: Exploring Potentials of Nanotechnologies, Avoiding Pitfalls of Ignored Risk Perception”</i>	5:00 PM -6:30 PM	Poster Presentation at the Exhibit Area

Thursday November 3, 2005

The Conference Schedule may be subject to changes

7:00 AM -8:00 AM	Light Breakfast at the Exhibit Area		Chemical Engineering & Materials Science University of Oklahoma, Computer Science Worcester Polytechnic Institute, OK, USA <i>“Integration of High Performance Computing in Nanotechnology: Combined Research-Curriculum Development [CRCD]Program”</i>
	General Session		
8:00 AM -8:05 AM	Opening Remarks by Prof. Nigel Cameron , Co-Chair	9:40 AM -10:05 AM Th-G-4	Lloyd L. Tran International Association of Nanotechnology Sacramento, CA 95825, USA <i>“Nanotechnology nomenclature and standards: societal, environmental and safety implications”</i>
8:05 AM 8:50 AM Th-G-1	Keynote Lecture: Prof. K. Barry Sharpless Nobel Laureate in Chemistry The Scripps Research Institute (TSRI) La Jolla, California, USA <i>“Connectivity and Function On Every Scale”</i>	10:05 AM -10:30 AM Th-G-5	Pat A. Picariello ASTM International 100 Barr Harbor Drive, West Conshohocken, PA 19428, USA <i>“Consensus Standards for Nanotechnology: ASTM International Committee E56”</i>
8:50 AM -10:30 AM	Session on “Education & Training and Standard in Nanotechnology”		
8:50 AM -9:15 AM Th-G-2	Tadashi Itoh, Hisazumi Akai, Hisahito Ogawa, Dino Wilson Agerico Tan and Satoshi Ichikawa Organization for the Promotion of Research on Nanoscience and Nanotechnology Graduate School of Engineering Science Osaka University, Osaka, JAPAN <i>“The Graduate and Recurrent Education Programs for Nanoscience and Nanotechnology”</i>	10:30 AM -10:45 AM	Coffee Break at the Exhibit Area
9:15 AM -9:40 AM Th-G-3	Lloyd Lee, Julia Mullen, Henry Neeman, Jorge Arias, Gerard K. Newman University of Oklahoma	10:45 AM -11:15 AM Th-G-6	Concurrent sessions Session I: Lectures on Targeted Nanomedicine Shelton D. Caruthers Philips Medical Systems, and Cardiovascular MR Labs at Washington University

CONFERENCE SCHEDULE



Thursday (continued)

The Conference Schedule may be subject to changes

11:15 AM -11:45 AM Th-G-7	<p><i>“Site-Targeted Perfluorocarbon Nanoparticles for Molecular Imaging and Targeted Therapeutics: Applications in Vascular Disease”</i></p> <p>Steven A. Toms Brain Tumor Institute, Cleveland Clinic Foundation Cleveland, OH 44195</p> <p><i>“Quantum Dots are phagocytized by macrophages and co-localize with experimental glioma”</i></p>	Th-G-15	<p>Panel Discussion:</p> <p>* Colin Wiel President, Keiretsu Forum San Francisco Chapter, CA (Moderator)</p> <p>* Keith Larson Managing Director Manufacturing and Digital Health, Intel Capital Intel Corporation</p> <p>* Martin Pichinson Principal and Co-Founder, Sherwood Partners Palo Alto, CA</p> <p>* Jai Das Partner, Agilent Ventures, Palo Alto, CA</p>
11:45 AM -12:15 PM Th-G-8	<p>Walter H. Chang, Hsiao-Yun Wu, James C.-A Lin and Wen-Hsiung Chan Center for Nano Bioengineering Department of Biomedical Engineering Department of Bioscience and Technology Chung Yuan Christian University</p> <p><i>“Detection of Apoptotic Cells by Using Biofunctional Quantum Dots”</i></p>	12:20 PM -2:00 PM	Lunch at the Restaurant along the seashore
10:45 AM -12:05 PM	<p>Session II: Panel on International Nanotechnology Initiative</p>		<p>Thursday PM Symposium on Nanomaterials (Track A) Symposium on Nanobiotechnology and Nanomedicine (Track B) Intellectual Property and Technology Licensing (Track C) Environmental Impacts of Nanotechnology (Track D)</p>
10:45 AM -11:05 AM Th-G-9	<p>Dr. James Rudd Program Director, National Science Foundation, SBIR/ Small Business Technology Transfer (STTR), USA</p> <p><i>“The US National Nanotechnology Initiative and Small Business Research Enterprises.”</i></p>	2:00 PM -2:25 PM Th-A-1	<p>TRACK A Symposium on Nanomaterials - Session MAT-400</p> <p>Amy Teja School of Chemical & Biomolecular Engineering Georgia Institute of Technology Atlanta, GA 30332 USA</p> <p><i>“Hydrothermal Synthesis and Deposition of Metal Oxide Nanoparticles and Metal Oxide-Activated Carbon Nanocomposites”</i></p>
11:05 AM -11:25 AM Th-G-10	<p>Declan Kirrane ISC, Park Leopold; Brussels, BELGIUM</p> <p><i>“Plans for research in Nanotechnology in the EU 2007-2013”</i></p>	2:25 PM - 2:50 PM Th-A-2	<p>László Guzzi, A. Beck and K. Frey, Chemical Research Center, Hungarian Academy of Sciences Institute of Isotopes, Budapest, HUNGARY</p> <p><i>“Nano structured Interfaces between Gold Nanoparticles and Oxide and its Role in Selective CO oxidation”</i></p>
11:25 AM -11:45 AM Th-G-11	<p>Alexander Pogany Federal Ministry for Transport Innovation and Technology, Vienna, AUSTRIA</p> <p><i>“The Austrian NANO Initiative: Small Country with Strong Expertise”</i></p>	2:50 PM - 3:15 PM Th-A-3	<p>Dietmar Vogel, Neus Sabate, Bernhard Wunderle, Juergen Keller, B. Michel, H. Reichl Fraunhofer Institute for Reliability and Microintegration, Gustav-Meyer-Allee 25, Berlin, GERMANY</p> <p><i>“Nanoreliability for mechanically loaded devices.”</i></p>
11:45 AM -12:05 PM Th-G-12	<p>N. M. Butt, F. A. Khalid, S. K. Hasanain and Shakeel Akbar National Commission on Nano Science & Technology (NCNST) Islamabad, PAKISTAN</p> <p><i>“Nano Science and Technology in Pakistan”</i></p>	3:15 PM -3:40 PM	Coffee Break at the Exhibit Area
12:05 PM - 12:20 PM	Panel Discussion		
10:45 AM -12:15 PM Th-G-13	<p>Session III: Panel on Capital Investment in Nanotechnology</p> <p>Edward Moran Director, Deloitte & Touche, New York, NY, USA</p>	3:40 PM -4:05 PM Th-A-4	<p>O. Mekasuwandumrong, Murray J. Height, Sotiris E. Pratsinis, Piyasan Praserttham Department of Chemical Engineering Faculty of Engineering and Industrial Technology Silpakorn University, Nakhonpathom, THAILAND</p> <p>Particle Technology Laboratory Department of Mechanical and Process Engineering Swiss Federal Institute of Technology ETH Zürich, Sonneggstrasse 5, CH-8092 Zürich, SWITZERLAND</p> <p>Centre of Excellence on Catalysis and</p>
Th-G-14	<p>Richard Helfrich General Partner, Alameda Capital LLC, Pleasanton, CA 94566 USA</p> <p><i>“Opportunities and Challenges for Nanotechnology Start-ups”</i></p>		

CONFERENCE SCHEDULE



Thursday (continued)

The Conference Schedule may be subject to changes

	<p>catalytic Reaction Engineering Department of Chemical Engineering Faculty of Engineering, Chulalongkorn University Bangkok 10330, THAILAND <i>“Synthesis of High Surface Area Ag-doped ZnO Catalyst for Photodegradation of Dye by Flame Spray Pyrolysis”</i></p>	<p>3:40 PM -4:05 PM Th-B-4</p>	<p>M. Su, Y.Wang, G.Y. Sun , Q.Yu, M. Xiao, L. Zhou and X.L.Ding Chongqing Academy of Chinese Materia Medica Chongqing 400065, CHINA <i>“Sinemine Hydrochloride Microemulsion”</i></p>
<p>4:05 PM -4:30 PM Th-A-5</p>	<p>Jing Hu, Irene M .C. Lo and Guohua Chen Environmental Engineering Program School of Engineering, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, HONGKONG “Effect of Metal-doping of Nanoscale Maghemite on Cr(VI) Adsorption and Nanoparticle Dissolution”</p>	<p>4:05 PM -4:30 PM Th-B-5</p>	<p>Herbert Chiou & Hak-Kim Chan Faculty of Pharmacy, The University of Sydney Sydney, New South Wales, AUSTRALIA <i>“Synthesis of nano-pharmaceuticals by liquid impinging jets”</i></p>
<p>4:30 PM -4:55 PM Th-A-6</p>	<p>Ruijiang Li & James Highfield Process & Modeling Science Institute of Chemical & Engineering Sciences Jurong Island, SINGAPORE <i>“Thermodynamic Modeling of Nanostructured Carbon Growth over Transition Metal Catalysts”</i></p>	<p>4:30 PM -4:55 PM Th-B-6</p>	<p>A.T. Mansharipova, S.A. Al-Suhaimi, A.K. Zhusipov, N.A. Samenov, M.K. Gilmanov Scientific Research Institute of Cardiology and Internal Illnesses Almaty; KAZAKHSTAN <i>“The new cardiovascular liposomal preparation based on phosphatidylinositol”</i></p>
	<p>TRACK B Symposium on Nanobiotechnology & Nanomedicine - Session BIO-300</p>	<p>4:55 PM - 5:20 PM Th-B-7</p>	<p>Enrico Capobianco Questlab, Boston University, Biomedical Engineering Dept. 44 Cummington Str., Boston MA, 02215, USA <i>“Computational aspects of high-dimensional genomics”</i></p>
<p>2:00 PM -2:25 PM Th-B-1</p>	<p>Istvan J. Majoros, Thommey P. Thomas, Jolanta F. Kukowska-Latallo, Chandan B. Mehta, and James R. Baker Jr. Michigan Nanotechnology Institute for Medicine and Biological Sciences University of Michigan Ann Arbor, MI 48109-0533, USA <i>“Advances in Dendrimer-Based Nanomedicine”</i></p>	<p>2:00 PM</p>	<p>TRACK C Intellectual Property in Nanotechnology</p> <p>Joel G. Ackerman (Moderator) Townsend and Townsend and Crew LLP Two Embarcadero Center, 8th Floor San Francisco, CA 94111</p>
<p>2:25 PM -2:50 PM Th-B-2</p>	<p>C.S. Toh, L.Y. Liu and L. He Department of Chemistry National University of Singapore 3 Science Drive, SINGAPORE <i>“Immunoglobulin-nanoporous alumina material for analytical applications”</i></p>	<p>2:00 PM - 2:25 PM Th-C-1</p>	<p>Steven Ludwig Sterne, Kessler, Goldstein & Fox PLLC, 1100 New York Ave., NW Washington D.C., 20005, USA <i>“The Impact of Patent Reform on Nanotechnology”</i></p>
<p>2:50 PM - 3:15 PM Th-B-3</p>	<p>Giulio Ruffini, Evangelos Bekiaris, Stella Nikolaou, and Stephen Dunne STARLAB, Edificio de l’Observatori Fabra Muntanya del Tibidabo Cami de l’Observatori s/n, Barcelona, SPAIN CERTH, Centre for Research & Technology Hellas (C.E.R.T.H.) Hellenic Institute of Transport (H.I.T.) Alimos, Athens, GREECE <i>“SENSATION: advanced sensor development for attention, stress, vigilance and sleep / wakefulness monitoring”</i></p>	<p>2:25 PM - 2:50 PM Th-C-2</p>	<p>Erik B Flom Welsh & Katz, L120 South Riverside Plaza, 22nd Floor Chicago, IL60606-3912, USA <i>“Patent Reform and Nanotechnology”</i></p>
<p>3:15 PM -3:40 PM</p>	<p>Coffee Break at the Exhibit Area</p>	<p>2:50 PM -3:15 PM Th-C-3</p>	<p>Casey K. Chan and Seeram Ramakrishnan Division of Bioengineering and NUS Nanotechnology Initiative National University of Singapore, and +WizPatent Pte Ltd SINGAPORE <i>“IP Landscape in Nanotechnology: Competitive Intelligence and Freedom to Operate”</i></p>
	<p>Coffee Break at the Exhibit Area</p>	<p>3:15 PM -3:40 PM</p>	<p>Coffee Break at the Exhibit Area</p>
	<p>Coffee Break at the Exhibit Area</p>	<p>3:40 PM -4:05 PM Th-C-4</p>	<p>John C. Monica, Jr. and John C. Monica Porter Wright Morris & Arthur LLP 925 Euclid Avenue, Suite 1700 Cleveland, Ohio 44115, USA</p>

CONFERENCE SCHEDULE



Thursday (continued)

The Conference Schedule may be subject to changes

<p>4:05 PM – 4:30 PM Th-C-5</p>	<p>Shook, Hardy & Bacon LLP 2555 Grand Avenue, Kansas City, Missouri 64108, USA <i>“Preparing For Future Health Litigation: The Application of Product Liability Law to Nanotechnology”</i></p>	<p>2:50 PM –3:15 PM Th-D-3</p>	<p>(ITESM) Carretera Lago de Guadalupe KM 3.5, Atizapan, Estado de Mexico 52926, MEXICO NanoTech Institute The University of Texas at Dallas, USA TX 75080 <i>”Charateristics Of Nanoparticle Accumulation In Light Duty Motor Vehicle From Mexico Metropolitan Valley”</i></p>
<p>4:30 PM –5:00 PM</p>	<p>Shyam Venkatesh Director, Technology Partnering NASA Ames Research Center Moffett Field, CA 94035-1000, USA</p>	<p>3:15 PM –3:40 PM</p>	<p>Gordon C. C. Yang, Chih-Hsiung Hung, Hsiao-Lan Lee, and Ching-Shan Hsu Institute of Environmental Engineering National Sun Yat-Sen University Kaohsiung 80424, TAIWAN <i>“Degradation of Nitrate in the Aqueous Solution by Nanoscale Iron Prepared by Three Different Processes: Performance Evaluation and Comparison”</i></p>
<p>2:00 PM –2:25 PM Th-D-1</p>	<p>Lawrence M. Gibbs Stanford University, ESF - 480 Oak Road Stanford, CA 94305-8007 <i>“Nanotechnology: Identifying and Managing environmental Health and Safety Risks”</i></p>	<p>3:40 PM –4:05 PM Th-D-4</p>	<p>Coffee Break at Exhibit Area</p> <p>Charles H. Ostman Institute for Global Futures San Francisco, CA USA <i>“At the Intersection of Nano Materials, Fabrication Processes, & “Greentech” Applications”</i></p>
<p>2:25 PM –2:50 PM Th-D-2</p>	<p>Isabel Joaquina Niembro, Anvar Zakhidov & Ilangovan Kuppusamy Research Centre for Environmental Quality Tecnologico de Monterrey</p>	<p>4:05 PM – 5:00 PM</p>	<p>Panel Discussion</p>
<p>TRACK D Environmental Impacts of Nanotechnology (A Public Forum)</p>			

Friday

The Conference Schedule may be subject to changes

<p>TOUR</p>	<p>Visit to Lawrence Berkeley National Laboratory</p>
<p>9:00 AM –11:30 AM</p>	<p>Committee Meeting</p>
<p>9:00 AM</p>	<p>Bus departs to visit a Lawrence Berkeley National Laboratory</p>
<p>1:00 PM</p>	<p>Bus return to Marriott Hotel</p>
<p>Farewell</p>	



POSTER PRESENTATION



Tadafumi Adschiri, Satoshi Ohara, Seiichi Takami, Mitsuo Umetsu, Takashi Naka, Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Sendai, 980-8577 JAPAN, “*Perfect Dispersion and Programmed Assembly of Metal Oxide Nanoparticles via in-situ Surface Modification during Supercritical Hydrothermal Synthesis*”

H. Arakawa, M. Maeda, S. Suzuki, M. Kamahori, Hideki Kambara, School of Pharmaceutical Sciences, Showa University, Tokyo 142-8555, JAPAN. Research & Development Division, Kikkoman Corporation, Chiba 278-0037, JAPAN, Central Research Laboratory, Hitachi Ltd, Tokyo 185-8601, JAPAN, “*Development of novel bioluminescent pyrophosphate assay and its application to SNPs analysis*”

Lloyd Lee, Julia Mullen, Henry Neeman, Jorge Arias, Gerard K. Newman, University of Oklahoma, Chemical Engineering & Materials Science, University of Oklahoma, Computer Science. Worcester Polytechnic Institute, OK, USA, “*Integration of High Performance Computing in Nanotechnology: Combined Research-Curriculum Development [CRCD]Program*”

A. K. Bandyopadhyay, M. S. Dutta, Dept. of Ceramics, Govt. College of Engineering & Ceramic Technology, Kolkata, INDIA, “*Nano Particles of SiC by Attrition Milling Route*”

Lesley Campbell A.D., Damon Smith, Garrett May, Yuxi Chen, Kevin Stokes, Wellie Zhou, Advanced Materials Research Institute, University of New Orleans, LA 70148, USA, “*Nanolithographically Patterned Metal Oxide Nanowire Arrays for Highly Versatile and Sensitive Gas Sensors*”

Jing Hu, Irene M.C. Lo and Guohua Chen, Environmental Engineering Program, School of Engineering, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, “*Cr(VI) Adsorption onto -FeOOH-coated Maghemite (-Fe₂O₃) Nanoparticles*”

Rafael M. Digilov, Department of Education in Technology and Science, Technion - Israel Institute of Technology, 32000, Haifa, ISRAEL, “*Magnetic trap of a reaction zone of catalyzed over colloidal suspension of iron oxide nanoparticles*”

E.H. Efendiyev, R.A. Ali-Zade, Institute Of Physics Of Nashional Academy Of Sciences Of Azerbaijan. 33, H.Javid Str., Baku Az-1143, AZERBAIJAN, “*Investigation Of Magnetic Properties Of Nanoparticles Fe₃O₄ In Polymer Matrix*”

A.A. Mekhtiev, E.H. Efendiyev, Institute of Physiology n.a. A.I. Karaev; Institute of Physics, Azerbaijan National Academy of Sciences, AZERBAIJAN, “*Possible Delivering Of Magnetic Nanoparticles Into Cancer Cells By Antibodies To Serotonin-Modulating Smp-69 Protein*”

Domínguez Chavez J.G., Gutiérrez Nava M., Martínez García M., Instituto de Química, Universidad Nacional Autónoma de México. Cd. Universitaria, Coyoacán, MEXICO, Instituto de Ciencias Nucleares UNAM, Ciudad Universitaria. Circuito exterior, MEXICO, “*Synthesis of Allyl-bearing Dendrimers with a Resorcinarene Core and their Supramolecular Complexes with Fullerene C₆₀*”

Behnam Mostajeran Goortani, and Pierre Proulx, Department of Chemical Engineering, University of Sherbrooke, Sherbrooke, J1K 2R1, CANADA, “*Synthesis of SiO₂ Nanoparticles in RF Plasma Reactor: Effect of Quench Gas Position, Wall Insulation, and Reactor Diameter*”

James Highfield, Yook Si Loo, Ziyi Zhong & Ruijiang Li, Institute of Chemical & Engineering Sciences, Applied Catalysis Technologies, Jurong Island, SINGAPORE, “*Carbon Nanofibre Growth from Low Temperature Methane Decomposition over Skeletal Transition Metal Catalysts*”

M.V. Kireitseu, G.R. Tomlinson, R.A. Williams and L. Bochkareva, National Academy of Sciences of Belarus, Lesnoe 19 – 62, Minsk, BELARUS; Rolls-Royce UTC and Dynamics Group, the University of Sheffield, UK ; Institute for Particle Science & Engineering, the University of Leeds, UK, “*Next generation vibration damping systems: nanoparticle reinforcement design concepts and computational modelling tools*”

Xuan Wu, Parveen Sachdeva and Ranganathan Kumar, Department of Mechanical Materials and Aerospace Engineering, University of Central Florida, Orlando, FL, USA, “*Molecular Dynamics Simulation for the Heat Transfer Enhancement of Silica Nanofluids*”

S. Kunjara Na Ayudhya, Parawee Tonto, Okorn Mekasuwandumrong, Varong Pavarajarn and Piyasan Praserttham, Center of Excellence on Catalysis and Catalytic Reaction Engineering, Department of Chemical Engineering, Faculty of Engineering, Chulalongkorn University, Bangkok, 10330, THAILAND; Department of Chemical Engineering, Faculty of Engineering and Industrial, Technology, Silpakorn University, Nakorn Pathom 73000, THAILAND., “*A Simple Solvothermal Synthesis of Various Aspect Ratio of ZnO Using Various Organic Solvents*”

J.B.K. Law, K.S. Yeong, C.B. Boothroyd, J.T.L. Thong, Department of Electrical and Computer Engineering, National University of Singapore, SINGAPORE., Institute of Materials Research and Engineering, 3 Research Link, SINGAPORE., “*Directed Wiring of Zinc Oxide Nanowires*”

Jae-Hee Lee, Kyungil University, Dept. of Semiconductors, Buho-Ri, Kyungsan-Si, Hayang-Eup, 712-701, SOUTH KOREA, “*Crystallization of Low Pressure Chemical Vapor Decomposition Amorphous Silicon For Single Electron Devices*”

Seung Goo Lee, Gang Li, Il Jun Kwon, Mani Prabakaran, Young A Son, Department of Textile Engineering, Chungnam National University, 220 Gung-dong, Yuseong-gu, Daejeon, 305-764, S. KOREA, “*Preparation of PAN nano-fibers having photochromic dyes*”, “*Electrostatic self-assembly multi-layer of cationic Berberine and anionic polyelectrolyte*”

Xiaohua Li, Jinfan Huang, Department of Chemistry, Nanjing Xiaozhuang College, P. R. CHINA, “*Molecular Dynamics Studies of the Kinetics of Phase Changes in Nanoparticles :Crystal Nucleation from Molten Fe₁₄₃₆ and Fe₂₁₃₃ Nanoparticles*”

Ruijiang Li & James Highfield, Process & Modeling Science, Institute of Chemical & Engineering Sciences, Jurong Island, SINGAPORE, “*Thermodynamic Modeling of Nanostructured Carbon Growth over Transition Metal Catalysts*”

A.M. Lipanov, V.I. Kodolov, A.Yu. Bondar, A.P. Kuznetsov, V.V. Kodolova, I.I. Blagodatskikh, N.V. Semakina, Basic Research-High Educational Center of Chemical Physics and Mesoscopy, Udmurt Scientific Center, Russian Academy of Sciences; Izhevsk, Udmurt Republic, RUSSIA, “*Fundamentals Of Production Technology Of Carbon-Metal-Containing Nanoproducts In Nanoreactors Of Polymeric Matrices*”

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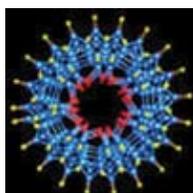
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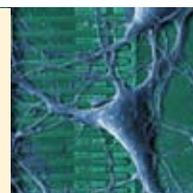
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