

# Nano Bio Clean Tech™

The 4th International Congress of Nanotechnology 2007  
Clean Tech Congress 2007

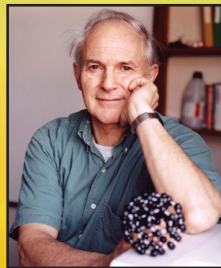
November 5 - 8, 2007 • Hyatt Regency Hotel San Francisco Airport



## Keynote Speakers



**Prof. Roger Kornberg**  
Nobel Laureate in Chemistry 2006



**Sir Prof. Harry Kroto**  
Nobel Laureate in Chemistry 1996



**Loni Hancock**  
Assembly Member



**Senator Leland Yee, Ph.D.**  
Senator of the State of California



International Association  
of Nanotechnology  
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cinano.com



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## Nano Bio Clean Tech™ 2007: Forging the New Frontier in the Global Economy

### Reasons to participate:

- To learn about these new scientific breakthroughs
- How to apply nanotechnology to solve major technical challenges
- How to accelerate commercialization to meet market needs
- How to collaborate in today's "level playing field" environment
- Networking opportunity with academic and industry leaders from 25 countries

### Special Features:

- Nano Bio Clean Tech Investment Forum
- Professional Development Certificates in Nanotechnology

## International Congress of Nanotechnology 2007

### Conference Topics:

- \* Nanomaterials
- \* Nanodevices
- \* Nanoelectronics
- \* Nanobiotechnology
- \* Nanomedicine
- \* Nano Drug Delivery Systems
- \* Nanotechnology in Semiconductor Industry
- \* Nanotechnology in Aerospace
- \* Nanotechnology in Biopharmaceutical Industry
- \* Nanotechnology in Textile industry
- \* Nanotechnology in Energy Industry
- \* Nomenclature Terminology
- \* International Standards
- \* Nano Tools
- \* Molecular Engineering
- \* Nano Manufacturing
- \* Nanoparticles Toxicology
- \* Societal & Environmental Impacts
- \* Health Safety Implications
- \* Intellectual Property and Technology Transfer
- \* Education & Workforce Training
- \* Nanotech Initiatives in State, Federal, Regional and International Arena
- \* Capital Funding and Grants for Start-up Ventures
- \* Other related topics

## Cleantech Congress 2007

### Conference Topics:

- \* Cleantech Business
- \* Biofuels
- \* Photovoltaic
- \* Hydrogen
- \* Fossil Fuels
- \* Electric Car
- \* Sustainable Energy Public Policy
- \* Direct Thermal Energy Conversion
- \* Electrochemical Conversion and Storage
- \* Nanostructured Solar Cell Manufacturing
- \* Intellectual Property
- \* Commercialization
- \* Venture capital investment

### Speaking Opportunity


If you are interested in a speaking opportunity at the upcoming ICNT and Cleantech Congress 2007, please send us a copy of your abstract and a brief summary of your qualification and work experience. Please complete the [Speaker Profile Form](#).

### Abstract Submission:

September 15, 2007

For further information, please visit [Abstract Submission](#)

To submit an abstract, please use the [Abstract Online Form](#)



**INTERNATIONAL ASSOCIATION  
OF NANOTECHNOLOGY**

1290 Parkmoor Ave.  
San Jose, CA 95126 USA  
Tel: 408-277-3071  
Fax: 408-293-9057  
Email: [info@ianano.org](mailto:info@ianano.org)  
<http://www.ianano.org>

We are a nonprofit organization with the goals to foster scientific research and business development in the areas of Nanoscience and Nanotechnology for the benefit of society.

## Program At-a-Glance

### Monday November 5, 2007

8:00 AM-2:00 PM  
10:00 AM-5:00 PM  
11:00 AM-5:00 PM  
9:00 AM-5:00PM

Workshop Registration  
Exhibitor Registration  
General Conference Registration  
\* **Workshop 1:** Introduction to Nanotechnology  
\* **Workshop 2:** Carbon Nanotubes: Research, Manufacturing and Commercialization  
\* **Workshop 3:** Nanobiotechnology & Nanomedicine: an introduction  
\* **Workshop 4:** Thin Film Photovoltaic: Principle and Application in Solar Energy  
\* **Workshop 5:** Biofuel cells  
\* **Workshop 6:** Intellectual Property & Technology Transfer  
Lunch on your own

12:00 PM-1:00 PM

### Tuesday November 6, 2007

7:30 AM-4:00 PM  
7:30 AM-8:30 AM  
8:30 AM-12:00 PM

Registration  
Breakfast  
General Sessions  
Welcoming Remarks from the Program Chair  
Keynote  
Invited Lectures  
Lunch in Reception Area  
Poster Presentation  
Breakout Sessions  
**Track A:** Nanomaterials  
**Track B:** Nanoelectronics  
**Track C:** Nanomedicine  
**Track D:** Environmental Health & Safety  
**Track E:** Professional Development Training Business Re-Engineering  
**Track F:** Professional Development Training- "Train the Trainer"  
Poster/RECEPTION

12:15 PM-1:30 PM

1:30 PM-5:00 PM

5:15 PM-6:30 PM

### Wednesday November 7, 2007

7:30 AM-4:00 PM  
7:30 AM-8:30 AM  
8:30 AM-12:00 PM

Registration  
Breakfast  
General Sessions  
Keynotes  
Invited Lectures  
Lunch in Reception Area  
Breakout Sessions  
**Track A:** Nanomaterials  
**Track B:** Carbon Nanotubes  
**Track C:** Nanomedicine  
**Track D:** Nanotech & Cleantech Investment Forum  
**Track E:** Professional Development Training Business Re-Engineering  
**Track F:** Professional Development Training- "Train the Trainer"  
Congress Discussion

12:15 PM-1:30 PM

1:30 PM-5:15 PM

5:15 PM-6:00 PM

### Thursday November 8, 2007

7:30 AM-4:00 PM  
7:30 AM-8:30 AM  
8:30 AM-12:00 PM

Registration  
Breakfast  
General Sessions  
Keynotes  
Invited Lectures  
Lunch in Reception Area  
Breakout Sessions  
**Track A:** Nanomaterials  
**Track B:** Nanotech & Cleantech Investment Forum  
**Track C:** Thin Film Technology for Solar Energy  
**Track D:** Biofuels  
**Track E:** Professional Development Training Business Re-Engineering  
**Track F:** Professional Development Training- "Train the Trainer": Field Trip to Stanford University  
Nano Characterization Laboratory  
Workshop on How to Use AFM and SEM for Nanoscale Characterization  
Congress Discussion

12:15 PM-1:30 PM

1:30 PM-5:15 PM

5:15 PM-6:00 PM

## KEYNOTE SPEAKERS

**Prof. Roger Kornberg**

Nobel Laureate in Chemistry 2006

**Sir Prof. Harry Kroto**

Nobel Laureate in Chemistry 1996

**Senator Leland Yee, Ph.D.**

Senate 8th District of the State of California

## INVITED SPEAKERS

**Senator Richard Polanco** (Retired)**Paul Alivisatos**

University of California, Berkeley

**Noor Butt**National Commission on Nano Science and Technology (NCNST)  
Islamabad, PAKISTAN**Russell Hancock**

President and CEO, Joint Venture Silicon Valley

**Eric Isaacs**

Argonne National Laboratory

**Mark McGough**

Pentadyne Power Corp. Chatsworth, CA 91311

**Curt Richter**National Institute of Standards and Technology  
Gaithersburg, MD 20899, USA**Robert Sinclair**Department of Materials Science and Engineering,  
Stanford University, Palo Alto, CA, USA**PARTIAL LIST OF SPEAKERS** (Subject to changes and circumstances i.e. Visa approval for some overseas speakers)**Christine Artl**German Aerospace Centre (DLR), Braunschweig, GERMANY  
"Ceramic Nanoparticles: The Key to Future Aerospace Materials"**Raj Bawa**Bawa Biotechnology Consulting, Ashburn, Virginia, USA  
"Nanotechnology, Patents and the US Patent Office"**Elena Bichoutskaia**Cambridge University, Cambridge, UNITED KINGDOM  
"Modelling Novel Nanomaterials: Controllable Properties and Applications"**Paul Brazis**Motorola Printed Electronics Technology, Schaumburg, IL 60196, USA  
"Printed electronics using nanoparticle dispersions"**Asis Kumar Bandyopadhyay**Govt. College of Engineering and Ceramic Technology, Kolkata, INDIA  
"Evidence of Magnons in Small Nano Particles of Magnetite in a Glass-Ceramic"**John Boesel**WestStart-CALSTART, Pasadena, CA 91106  
"Solutions for Sustainable Transportation"**S.K. Chakarvarti**National Institute of Technology, Kurukshehra, INDIA  
"Endurance Investigation on Thermally Stressed Template Synthesized Nano-/micro Resonant Tunneling Diodes"**Andrei Dudnikov**Budker Institute of Nuclear Physics, Novosibirsk, RUSSIA  
"Infrared Lanthanide-Activated Laser Luminometer"**Vaibhav Dubey**Dr. H.S. Gour University Sagar, Sagar, INDIA  
"Nanovesicles mediated transcutaneous immunization"**Albert Figuerola**CNR-INFM-NNL, Lecce, ITALY  
"Synthesis of Novel Size-Controlled Bimagnetic Hybrid Nanocrystals. Structural and Magnetic Characterization and Potential Use as MRI Contrast Agents"**Neville Freeman**Farfield Scientific Inc. Pittsburgh, PA 15090, USA  
"The physical measurement of a wide range of nanosystems in real time"**Yuri Glughoj**Research and Development Department  
California Institute of Nanotechnology, San Jose, CA 95126 USA  
"Magnetic nanoparticles for a magnetically targeted treatment of nail fungus"**Luiz Goulart**Universidade Federal de Uberlandia, Uberlandia, BRAZIL  
"Detection of Mycobacterium Leprae DNA onto Graphite For Leprosy Diagnostics"**Masanori Horie**National Institute of Advanced Industrial Science and Technology  
Ikeda, JAPAN  
"Biological effects induced by ultrafine TiO<sub>2</sub> in cell culture system"**Muhammad Irfan Jalees**University of Engineering and Technology, Lahore-Pakistan  
Lahore, PAKISTAN  
"An In-situ XRD Study of Zeolite Crystallization Kinetics"**V. K. Jindal**Panjab University, Chandigarh, INDIA  
"Salient Features Related to Structure of Carbon Nanotubes Under Pressure"**David Jishiashvili**Georgian Technical University, Tbilisi, GEORGIA  
"Synthesis of Germanium Nitride Nanowires and Spherical Particles"**Masaaki Kawai**Tohoku University, Miyagi, JAPAN  
"Interstitial nano-particle tracking and analysis of movement in the human tumor xenograft in mice"**Marianna Grossman Keller**Minerva Consulting, Palo Alto, CA 94303  
"Vision for new distributed economy for a sustainable future"**Kannan Krishnan**University of Washington, Seattle, WA 98195 USA  
"Biomedical nanoscience: a spin through new possibilities"**Dae Su Kim**Chungbuk National University, Chungbuk, SOUTH KOREA  
"Effects of Amine Functionalization on the Curing and Physical Properties of Epoxy-MWNT Nanocomposites"**Darby Kozak**University of Queensland, Queensland, AUSTRALIA  
"Profiling Protein Surface Interactions of Multicomponent Suspensions via Flow Cytometry"**Pradeep Kumar**Central Drug Research Institute, Lucknow, INDIA  
"Nanotechnology: The Technology of the future"**Yun-Hi Lee**Korea University, Sungbuk-Ku, KOREA  
"In situ lateral grown nanodevices"**Patrick Lin**The Nanoethics Group, Santa Barbara, California, USA  
"Superman vs. Frankenstein's Monster: The Debate on Human Enhancement Technologies"**Wentai Liu**University of California, Santa Cruz, Santa Cruz, CA 95064 USA  
"Biomimetic Microelectronic Systems: Opportunities, Challenges, and Enabling Technology"**Luu Cam Loc**Institute of Chemical Technology, Ho Chi Minh City, VIETNAM  
"The Influence of Size of NiO Cluster on Properties of Carried NiO Catalysts Over Different Supports for CO Methanation"**William Lu**The University of Hong Kong, HONGKONG  
"AFM Study on Human Intervertebral Disc Collagens - A Better Way to Evaluate the Association of Single Nucleotide Polymorphisms with Degenerative Disc Disease"**Md. Abdulla-Al-Mamun**Kagoshima University, Kagoshima, JAPAN  
"Preparation and Characterization of Colloidal Metal Nanoparticles and their Cytotoxic Effect on HeLa Cell"**Giuseppe Manai**Trinity College Dublin, Dublin, IRELAND  
"Growth and reactivity to oxygen of ultra-thin Ni films on Rh(111)."**Roy McAlister**American Hydrogen Association, Phoenix, AZ  
"Nano-Technology to facilitate hydrogen as an energy carrier for the peaceful and healthful Sustainable Prosperity Revolution"**Michael Meador**NASA Glenn Research Center, Cleveland, OH 44135 USA  
"Applications of Nanostructured materials in aerospace"**Arup Mukherjee**Calcutta University, Kolkata, INDIA  
"Core Shell Type Testosterone Nanoparticle in Cross Linked Alginate for Sustained Delivery"**Suprabha Nayyar**National Metallurgical Laboratory, Jamshedpur, INDIA  
"Protein mediated synthesis of iron oxide nanoparticles and its simultaneous dispersion in an aqueous medium"**A. M. Patel**Shri Sarvajani Pharmacy College, Gujarat, INDIA  
"Intellectual Property and Nanomedicine Business"**KSK Rao Patnaik**Osmania University, Hyderabad, INDIA  
"Survey of Social and Ethical Implications of Nanotechnology and Nanostructured materials"**Shakthivel Piraman**Yonsei University, Seoul, SOUTH KOREA  
"Synthesis of LiCo<sub>1</sub>Sr<sub>x</sub>Mn<sub>2-x</sub>O<sub>4</sub> cathodes by a low temperature solid-state routine for lithium ion battery"**Kevin Radican**CRANN, Trinity College Dublin, Dublin, IRELAND  
"Formation of MoO<sub>2</sub> nanowires on the Mo(110) surface"**Priya Rajdev**Indian Institute of Science, Bangalore, INDIA  
"Trapping Single Molecule on Langmuir-Blodgett Films: Thermodynamic and spectroscopic characterization of Nickel-Histagged protein interaction"**Ganesh Rajagopalan**Kennedy/Jenks Consultants, Irvine, CA 92614 USA  
"Removal of Nanomaterials in Wastewater"**K.V. Ravi**Applied materials, Santa Clara, CA 95052  
"Photovoltaics - enabling scale manufacturing and cost reduction"**Yuu Sakurai**Tohoku University, Sendai, JAPAN  
"Nanosized Silver Iodide Beads as X-Ray Contrast Media and its In-vivo Distribution"**Subir Sarkar**Jadavpur University, Kolkata, INDIA  
"Genetic approach for efficient high speed nanodevices"**Roland Schoettle**Optimal Technologies International Inc., Benicia, CA  
"What does the Electric Power System of the Future Need to Be?"**Mojtaba Shariaty-Niassar**University of Tehran, Tehran, IRAN  
"The Application of Materials and their fabrication Processes"**Sanjiv Sharma**Imperial College, London, UNITED KINGDOM  
"The Impact of Micro- and Nanotechnologies on Healthcare"**John Sheehan**LiveFuels, Inc. Menlo Park, CA 94025  
"Biofuels- the state of the art"

## PARTIAL LIST OF VENTURE CAPITALISTS / SPEAKERS

**Mark Chasan**  
Transformative  
Capital, Inc**Chuck McDermott**  
Rockport Capital  
Partners**Scott Chou**  
Gabriel Venture  
Partners**Bill Reichert**  
Garage Technology  
Ventures**Dan Colbert**  
NGEN Partners**David Ward**  
MTI Partners Inc**Mohammad H Sheikh**Nanotechnology Research Institute, Shiraz, IRAN  
"A Special Nano-sensor for HIV-1"**Petia Simeonova**NIOSH, CDC, Morgantown, West Virginia, USA  
"Carbon nanotubes - toxicity evaluation"**Sunil Singroha**Gogte Institute of Technology, Belgaum, INDIA  
"Nano-relative computing"**Kathleen Sirois**University of Newcastle, New South Wales, AUSTRALIA  
"Glucose Biosensors Based on Hygroscopic Insulator Field-Effect Transistors"**Gurvinder Sodhi**Delhi University, Delhi, INDIA  
"Detection of Fingerprints by Nano particle-based Compositions"**Igor Sokolov**Clarkson University, Potsdam, NY 13699 USA  
"Molecules in Confined Silica Nanotubes: A Novel Path to Building NanoDevices"**Lihong Su**Northwestern Polytechnical University, Xi'an, CHINA  
"The solubility of nanometer particles in high-purity water"**Thathan Premkumar**Gwangju Institute of Science and Technology (GIST)  
Gwangju, SOUTH KOREA  
"Surfactants as a Versatile Tool for the Preparation of Gold Nanoparticles"**Francisco Torrens**Universitat de Valencia-ICMol, Valencia, SPAIN  
"Asymptotic Analysis and Simulation of Coagulation-Fragmentation Equations"**Olivier Toussaint**University of Namur - FUNDP, Namur, BELGIUM  
"Nanotoxic: Risk assessment of nanoparticles on human health using in vitro and in vivo models"**Lloyd L. Tran**California Institute of Nanotechnology, San Jose, CA 95126 USA  
"Nano Bio Clean Tech: Opportunities and Challenges in the Global Economy"**Duana Welch**BlabberMouth PR, Austin, TX 78759 USA  
"The Role of PR for Nanotechnology"**Ning Xi**Michigan State University, East Lansing, MI 48824 USA  
"Manufacturing and Testing of Carbon Nanotube (CNT) Based IR Detectors"**Hiroshi Yamamoto**RIKEN, Saitama, JAPAN  
"Molecular Conductor Nanowires Sheathed by Supramolecular Networks"**Jaw-Yen Yang**National Taiwan University, Taipei, TAIWAN  
"Simulation of Thermal Conductivity of Multi-dimensional Nanocomposites using Photo Boltzmann Equation"**Ray Yang**West Virginia University, Morgantown, WV 26506 USA  
"Metal Nanoparticles from Plants"**Kijung Yong**POSTECH, Pohang, SOUTH KOREA  
"Fabrication of ZnO nanorod and hetero-nanostructure array using low temperature method"**Peiyu Zhang**University of Calgary, Calgary, CANADA  
"Analysis of mechanical characterization on microneedles for fluid sampling and drug delivery"**Yong Zhang**National University of Singapore, SINGAPORE  
"NIR-to-visible Upconversion Fluorescent Nanoparticles for Bioimaging"**Yun Zhao**Beijing Institute of Technology, Beijing, CHINA  
"Hydrothermal Synthesis of Ni/Al layered double hydroxide nanorods"

Plus additional number of speakers to be announced soon.

## Registration Form

On-line Registration: <http://ianano.org/registration.htm>

Please complete the following Registration Form

Tel: **408-277-3071** - Fax to: **408-293-9057**

Mail to: **PO Box 28208 San Jose, CA 95159 USA**

Please indicate if you are a member of IANANO  Yes or  No

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First Name: \_\_\_\_\_ M.I. \_\_\_\_\_

Last Name: \_\_\_\_\_

Title: \_\_\_\_\_

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Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Gender:  Male  Female

This address is  Business Address  Home Address

Your participation as  Speaker  Presenter  Attendee

Committee Member  Visitor  Invited Guest of \_\_\_\_\_

### ICNT / Clean Tech Congress 2007 REGISTRATION

Full Conference Registration Fees include a Program Booklet, a CD for Abstracts and conference materials, light breakfast, morning and afternoon coffee breaks and working lunches. Please select one: (Registration fees are in US dollars)

- Industry MEMBER \$695.00
- Industry MEMBER Speaker \$595.00
- Industry Non-Member \$795.00
- Industry Non-Member Speaker \$695.00
- Industry Non-Member EXHIBITOR (included in the exhibit registration)

- Government MEMBER \$595.00
- Government MEMBER Speaker \$495.00
- Government Non-Member \$695.00
- Government Non-Member Speaker \$595.00

- Academic & Non-profit organization MEMBER \$495.00
- Academic MEMBER Speaker \$395.00
- Academic Non-Member \$595.00
- Academic Non-Member Speaker \$495.00
- Academic Speaker from a developing country \$295.00
- Academic Participant from a developing country \$325.00

- Student Member \$245.00 (please provide proof of university enrollment)
- Student Member Presenter \$195.00
- Student Non-Member \$295.00
- Student Non-Member Presenter \$245.00
- Student from a developing country \$195.00

One Day Conference Pass \$325.00 . Please select one day of your choice:

Guest Registration \$295.00 (to cover food and beverage over 3 days)

Extra Copy of Conference CD-ROM including Abstracts and Proceedings. US\$125.00 each, plus shipping charges.

### SCIENTIFIC WORKSHOPS

- Workshop 1: Monday November 5, 2007, from 9:00 AM- 12:00 PM  
Introduction to Nanotechnology (\$295.00)
- Workshop 2: Monday November 5, 2007, from 9:00 AM- 12:00 PM  
Carbon Nanotubes: Research, Manufacturing and Commercialization (\$295.00)
- Workshop 3: Monday November 5, 2007, from 2:00 PM - 5:00 PM  
Nanobiotechnology & Nanomedicine: an introduction (\$295.00)
- Workshop 4: Monday November 5, 2007, from 2:00 PM - 5:00 PM  
Thin Film Photovoltaic: Principle and Application in Solar Energy (\$295.00)
- Workshop 5: Monday November 5, 2007, from 2:00 PM - 5:00 PM  
Biofuels (\$295.00)
- Workshop 6: Monday November 5, 2007, from 2:00 PM - 5:00 PM  
Intellectual Property and Technology Licensing Strategy in Nanotech & Clean Tech (US\$295.00)
- Workshop 7: Thursday November 8, 2007, 1:30 PM -5:00 PM  
How to Use AFM and SEM for Nanoscale Characterization- an introduction (\$295.00) - Stanford University - Nano Characterization Laboratory

### PROFESSIONAL DEVELOPMENT CERTIFICATES IN NANOTECHNOLOGY

- BUSINESS RE-ENGINEERING CERTIFICATE IN NANOTECHNOLOGY**  
(November 5-7, 2007) Discounted tuition fee is \$1,875.00  
Discounted tuition fees under the US Government subsidy for US companies outside California: \$695.00\*  
Discounted tuition fees under the California Community Colleges Chancellor Office for California companies : \$395.00 \*
- "TRAINING THE TRAINER" CERTIFICATE IN NANOTECHNOLOGY**  
(November 5-8, 2007) Discounted tuition fee is \$1,975.00  
Discounted tuition fees under the US Government subsidy for US based companies outside California: \$795.00  
Discounted tuition fees under the California Community Colleges Chancellor Office for California companies only : \$495.00 \*

### PAYMENT METHODS

Total Payment: \$ \_\_\_\_\_

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Check/Money Order (make payable to: California Institute of Nanotechnology)

### HOTEL RESERVATIONS

- San Francisco Airport Hyatt Regency Hotel
- San Francisco Airport Embassy Suites

Discounted room rate for ICNT attendees: US \$159.00/day plus taxes & applicable tourist fees. On-line reservations:

<http://nanotechcongress.com/housing.htm>



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