



SYMPOSIUM ON NANOTECHNOLOGY TITLED “Nanotechnology: The Future is Now”

Date: Friday, July 29, 2005

Time: 10:00 a.m.-4:30 p.m.

Location: Chicago Hilton and Towers, Chicago, Illinois

http://www.hilton.com/en/hi/groups/private_groups/chich_wfs/index.jhtml

Registration Fee: \$295 members/\$345 nonmembers

Registration Site: <http://www.wfs.org/2005main.htm> (Please click on “Nanotech Symposium”)

Information and Sponsorships: Dr. Raj Bawa, 703-582-1745 or bawabio@aol.com

INTRODUCTIONS:

Timothy C. Mack, JD, MBA, president, World Future Society, Bethesda, Maryland

Raj Bawa, MS, PhD (symposium chair), patent agent; president, Bawa Biotechnology Consulting LLC, Ashburn, Virginia; advisor, office of technology commercialization, Rensselaer Polytechnic Institute, Troy, New York; professor of natural and applied sciences, NVCC, Annandale, Virginia

This symposium on nanotechnology represents a new endeavor for the World Future Society in terms of pre-conference activities. In response to a substantial number of requests, we are beginning an "exploration series" designed to provide an outline of several critical new fields with the potential for significant impact on the social, economic, and cultural fabric of modern society. This format offers a great deal of in-depth detail and audience dialogue, and a chance to network with leaders in nanotechnology.

DESCRIPTION OF THE SYMPOSIUM:

Nanotechnology involves the design, characterization, production and application of structures, devices and systems by controlled manipulation of size and shape at the nanometer scale (atomic, molecular and macromolecular scale) that produces structures, devices and systems with at least one novel/superior characteristic or property.

Innovations at the intersection of medicine, engineering, biotechnology, and the physical and information technology are spurring new directions in research, education, and technology transfer. Basic research in nanosciences is rapidly producing commercially viable products. Governments and industries across the globe are staking their claims by investing billions of dollars, euros and yen for research. International rivalries are growing. Political alliances and battle lines are beginning to gel.

This symposium focuses on nanotechnology’s interdisciplinary nature, highlighting cutting-edge R&D in nanomedicine, nanoelectronics, and nanomaterials. The presentations will explore commercial opportunities and offer networking opportunities to researchers from industry, government, academia, and other professions. We will discuss current factors fueling nanotechnology’s growth, start-up opportunities and potential bottlenecks to viable commercialization. We will also examine predictions for future societal, environmental, ethical, and privacy issues; the impact of nanotechnology on the future soldier and warfare; and the vital role of US regulatory agencies, such as the Food and Drug Administration and the Patent Office. All presentations will be 20 minute PowerPoints. They will be fast-paced, focused, and will rely upon extensive color graphics.

The special inaugural issue of the peer-reviewed journal *Nanotechnology Law & Business* (pubs.nanolabweb.com/nlb/) will be distributed to all registered attendees (a \$49.95 value). The first 100 paid registrants will receive a copy of *Futuring: The Exploration of the Future* (www.wfs.org/futuring.htm) by former World Future Society president Edward Cornish (a \$29.95 value). In addition, a 550-page handbook containing classic papers and others materials pertaining to nanotechnology will be distributed to all attendees.

Who should attend: Citizens, futurists, lawyers, physicians, engineers, regulators, health-care professionals, biomedical researchers, legislators, policy makers, intellectual property practitioners, etc.

What you'll learn: Attendees will get a glimpse of the coming revolution of nanotechnology and nanoscience. As we enter the "golden era" of nanotechnology in the next decade, with the field maturing and the promised breakthroughs accruing, attendees will experience how nanotechnology in the future will impact every aspect of human existence in novel and revolutionary ways.

How this knowledge can be applied: This information will prepare you for the profound future impact of nanotechnology.

SPEAKER LIST:

Stephen B. Maebius, leader, nanotechnology industry team and partner, Foley & Lardner LLP, Washington, D.C.; Editor-in-Chief, *Nanotechnology Law & Business* "Ten classic nanotech products ready for the market today"

Dr. Raj Bawa, patent agent; president, Bawa Biotechnology Consulting LLC, Ashburn, Virginia; advisor, office of technology commercialization, Rensselaer Polytechnic Institute, Troy, New York; professor of natural and applied sciences, NVCC, Annandale, Virginia "What is nanotechnology? - a journey through pictures"

Michael L. Weiner, CEO, Biophan Technologies, Inc., West Henrietta, New York "Nanotechnology for enabling medical innovations"

Dr. Sander Rabin, physician and attorney, Convergent Technology Patent Law Group, Whiteman Osterman & Hanna LLP, Albany, New York "The pivotal role of the FDA in nanomedicine"

Dr. Zvi Yaniv, CEO, Applied Nanotech, Inc., Austin, Texas "The symbiotic relationship of nanotechnology and creativity"

Kirk Hermann, associate editor, *Nanotechnology Law & Business*; IP attorney, Shimokaji & Associates, Irvine, California "Nanotechnology's impact on information systems - a journey through pictures"

Mike Treder, co-founder and executive director, Center for Responsible Nanotechnology, New York, New York "The flat horizon problem: nanotechnology on an upward slope"

Dr. Sean A. Passino, patent attorney and member, intellectual property group, Foley & Lardner LLP, Washington, D.C. "Inventions in nanotechnology: what, how, why, where"

Dr. Yali Friedman, chief knowledge officer, New Economy Strategies LLC, Washington, D.C. "Overcoming hurdles to nanotechnology commercialization"

John Miller, vice president, Arrowhead Research Corporation; Pasadena, California; coauthor of *The Handbook of Nanotechnology Business, Policy and Intellectual Property* (John Wiley, 2004). "Outsourcing prototype development: why the Arrowhead model makes sense for nanotechnology"

Chid Iyer, partner, Sughrue Mion PLLC, Washington, D.C. "Developments in nanophotonics"

Kitu Bindra, senior counsel, Buchanan Ingersoll, Redwood Shores, California "Nanotechnologies for the global good: the Indian perspective"

Dr. Chiming Wei, director, Cardiothoracic-Renal Molecular Research Program, Department of Surgery, Johns Hopkins University School of Medicine, Baltimore, MD; Editor-in-Chief, *Nanomedicine* "New advances in nanomedicine: from basic to clinical"

Dr. Jayshree Pandya, Founder and CEO, Risk Group, Houston, Texas "Are the benefits of nanotechnology worth the risks?"

Dr. Marvin Motsenbocker, attorney, Heller Ehrman, Washington, D.C. "Promising nanotechnologies for energy production and storage for the new hydrogen age"

Jonathan Grant, principal, Grant Patent Services, Silver Spring, Maryland "Business strategies for startup nanotech companies"

PRELIMINARY PROGRAM

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Note: THIS PRELIMINARY PROGRAM CONTAINS INFORMATION THAT WAS CORRECT AS OF FEBRUARY 14, 2005. ADDITIONS, CHANGES, AND CANCELLATIONS WILL UNDOUBTEDLY OCCUR BEFORE THE CONFERENCE TAKES PLACE.

THE ANNUAL CONFERENCE OF THE
WORLD FUTURE SOCIETY

JULY 29-31, 2005

CHICAGO HILTON HOTEL AND TOWERS

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Dear Fellow Futurist:

Chicago provides a unique strategic vantage point for viewing the future. Tomorrow is being built today right there by such leading institutions as the Chicago Board of Trade and the Chicago Mercantile Exchange, the many major colleges and universities, and government research labs such as Argonne National Laboratory (where a special preconference tour is scheduled). The leading trend in the Midwest is an economic transition from agriculture and industry to the high employment businesses of services, technology development, and knowledge acquisition.



In addition to our regular sessions, the World Future Society will be providing a wide range of preconference learning programs about the future and futures methodologies. These courses are taught by longtime practicing futurists who comfortably and enthusiastically separate the wheat from the chaff (a good Midwestern metaphor) so participants find out what theories and practices work best and are most accepted by clients.

The topic areas in this year's conference provide the context for the presentations and discussions on business, economics, environment, futures, globalization, governance, health, learning and education, science and technology, society, and values.

There are also special events and special activities, including a bookstore with a large selection of future-oriented titles in both the social and hard sciences, tabletop displays from a wide variety of forward-thinking institutions, meet-the-author sessions, and free career counseling by professionals. And the members of the press will undoubtedly ask some of you for your points of view.

The program for WorldFuture 2005 was conceived, developed, and implemented in collaboration with experienced futurists from around the world. The planning committee received excellent input on sessions and speakers from many of our members. I thank you all for your contributions and participation, and I especially want to thank the World Future Society staff. They are the experienced, pragmatic, and competent people who provide the good humor and help to the committee, the speakers, the vendors, and all the participants in the conference. Working together, we will make WorldFuture 2005 a friendly, informative, and challenging event.

As we look forward to July 2005 and our next adventure of intellectual stimulation, renewed and new friendships, I encourage each of you to register now and participate in another wonderful World Future Society conference.

Cordially,

John J. Gottsman
Chair, WorldFuture 2005 Conference

TENTATIVE CONFERENCE SCHEDULE

THURSDAY, JULY 28, 2005

9:00 A.M.-5:00 P.M. PRECONFERENCE COURSES
11:00 A.M.-7:00 P.M. FUTURIST BOOKSTORE OPEN

FRIDAY, JULY 29, 2005

9:00 A.M.-2:00 P.M. TOUR—ARGONNE NATIONAL LABORATORY
9:00 A.M.-5:00 P.M. PRECONFERENCE COURSES
10:00 A.M.-4:30 P.M. SYMPOSIUM ON NANOTECHNOLOGY
11:00 A.M.-7:00 P.M. FUTURIST BOOKSTORE OPEN
5:00 P.M.-7:00 P.M. DINNER ON YOUR OWN
7:00 P.M.-9:00 P.M. OPENING KEYNOTES
9:00 P.M.-10:00 P.M. WELCOMING RECEPTION

SATURDAY, JULY 30, 2005

7:00 A.M. 5K RUN/WALK
7:30 A.M.-8:45 A.M. NEW MEMBER MEETING
7:30 A.M.-8:45 A.M. WOMEN AS FUTURISTS MEETING
8:00 A.M.-8:00 P.M. FUTURIST BOOKSTORE OPEN
9:00 A.M.-10:30 A.M. SPECIAL EVENTS/CONCURRENT SESSIONS
11:00 A.M.-12:00 P.M. FUTURISTS LECTURE SERIES
12:15 P.M.-1:45 P.M. KEYNOTE LUNCHEON
2:00 P.M.-3:30 P.M. CONCURRENT SESSIONS/INDIVIDUAL SESSIONS
4:00 P.M.-5:30 P.M. CONCURRENT SESSIONS/INDIVIDUAL SESSIONS
5:30 P.M.-6:30 P.M. DINNER ON YOUR OWN
6:30 P.M.-7:00 P.M. INDIVIDUAL SESSIONS
7:00 P.M.-9:00 P.M. SPECIAL EVENTS
8:30 P.M.-10:00 P.M. CONCURRENT SESSIONS/INDIVIDUAL SESSIONS

SUNDAY, JULY 31, 2005

8:30 A.M.-10:00 A.M. CONCURRENT SESSIONS/INDIVIDUAL SESSIONS
8:00 A.M.-4:00 P.M. FUTURIST BOOKSTORE OPEN
10:30 A.M.-12:00 P.M. CONCURRENT SESSIONS/INDIVIDUAL SESSIONS
12:15 P.M.-1:45 P.M. KEYNOTE LUNCHEON
2:00 P.M.-3:30 P.M. SPECIAL EVENTS
3:45 P.M.-4:45 P.M. CLOSING KEYNOTE
4:45 P.M.-5:30 P.M. CONFERENCE WRAP-UP

MONDAY, AUGUST 1, 2005

9:00 A.M.-5:00 P.M. PROFESSIONAL MEMBERS' FORUM



ISSUE AREAS

- FUTURES METHODOLOGIES AND PROCESSES
- TECHNOLOGY AND SCIENCE
- BUSINESS AND CAREERS
- HEALTH FUTURES
- RESOURCES AND ENVIRONMENT
- LEARNING AND EDUCATION
- GOVERNANCE AND COMMUNITIES
- SOCIAL AND CULTURAL TRENDS
- VALUES AND SPIRITUALITY

SPECIAL ACTIVITIES

- WELCOMING RECEPTION
- KEYNOTE LUNCHEONS
- FUTURIST BOOKSTORE
- MEET-THE-AUTHOR SESSIONS
- FREE CAREER COUNSELING
- TABLE-TOP DISPLAYS
- WFS-PFI WALK/RUN
- NEW MEMBER MEETING
- WOMEN AS FUTURISTS MEETING
- CHAPTER ACTIVITIES MEETING
- RELIGIOUS FUTURISTS MEETING



Yes! I want to meet, exchange ideas with, and learn from my futurist colleagues. Please reserve my place at the World Future Society's WorldFuture 2005. I understand registration includes admission to all sessions, the welcoming reception, the conference volume, and a list of pre-registrants. And if for any reason I am unable to attend, I may cancel and receive a full refund until June 30, 2005.

A member may register additional persons (friend, colleague, spouse, etc.) at the member rate. Please use a separate form for each registrant (photocopies are fine). Please include the sponsoring member's name/identification number here.

Name _____ Identification # _____

	Register by April 29, 2005	Register by June 30, 2005	On site	Amount Due
	SAVE \$100	SAVE \$50		
Registration.....	\$500	\$550	\$600	_____
Member's Rate.....	\$445	\$495	\$545	_____
Senior Citizen 65 or older / Citizen of a developing nation	\$390	\$440	\$490	_____
Full-time student under the age of 25	\$100	\$100	\$125	_____
→ (Please attach appropriate documentation.)				

2-day Luncheon Package (with speakers) — \$110..... _____
 Single Luncheons — \$59 Circle one: Saturday Sunday..... _____

PRECONFERENCE COURSES

- C-1 Futuring: An Introduction to the Study of the Future** — *Thurs., July 28, 2005, 9:00 a.m.-5:00 p.m.*, \$140 for members, \$190 for nonmembers..... _____
- C-2 Introduction to Futures Studies: New Concepts, Novel Methods, and Case Studies** — *Fri., July 29, 2005, 9:00 a.m.-5:00 p.m.*, \$225 for members, \$275 for nonmembers..... _____
- C-3 Combining Creativity Tools with Foresight Techniques** — *Thurs., July 28, 2005, 9:00 a.m.-5:00 p.m.*, \$150 for members, \$200 for nonmembers..... _____
- C-4 Re-Careering** — *Thurs., July 28, 2005, 9:00 a.m.-5:00 p.m.*, \$200 for members, \$250 for nonmembers..... _____
- C-5 Integral Futures** — *Thurs., July 28, 2005, 9:00 a.m.-5:00 p.m.*, \$175 members, \$225 nonmembers..... _____
- C-6 Anticipating Global Futures** — *Fri., July 29, 2005, 9:00 a.m.-5:00 p.m.*, \$180 for members, \$230 for nonmembers..... _____
- C-7 Using Futures Tools to Better Understand and Create the Future** — *Fri., July 29, 2005, 9:00 a.m.-5:00 p.m.*, \$200 for members, \$250 for nonmembers..... _____
- C-8 Introduction to TRIZ as a Futures Forecasting Tool** — *Fri., July 29, 2005, 9:00 a.m.-5:00 p.m.*, \$225 for members, \$275 for nonmembers..... _____
- C-9 How to Use Creative Problem Solving and Decision Making with Whole-Brain Thinking** — *Thurs., July 28, 2005, 9:00 a.m.-5:00 p.m.*, \$325 for members, \$375 for nonmembers. (Limited to 25 participants.)..... _____
- C-10 How to Think Like a Futurist** — *(two-day course) Thurs., July 28, 2005 and Fri., July 29, 2005, 9:00 a.m.-5:00 p.m.*, \$350 for members, \$400 for nonmembers..... _____

TOUR

T-1 The Advanced Photon Source (APS) at the U.S. Department of Energy's Argonne National Laboratory — *Fri., July 29, 2005, 9:00 a.m.-2:00 p.m.*, \$24 for members, \$29 for nonmembers, (Includes transportation and entry to the Advanced Photon Source at the Argonne National Laboratory. Lunch is on your own at the National Laboratory Cafeteria.) **Registration deadline: June 10, 2005.**..... _____

SYMPOSIUM

- S-1 A Symposium on Nanotechnology** — *Fri., July 29, 2005, 10:00 a.m.-4:30 p.m.*, \$295 for members, \$345 for nonmembers..... _____
- Professional Members' Forum — \$105 (for Professional Members only)..... _____
- Professional Membership — \$118 Renewal New (Join now to qualify for the Forum.)..... _____
- Comprehensive Professional Membership — \$225 Renewal New..... _____
- World Future Society membership — \$45 (\$20 for full-time students under the age of 25)
 Renewal New (Join now and take advantage of the members' rate.)..... _____

Tax-deductible Contribution to Scholarship Fund — \$100

(Your \$100 contribution will make it possible for a student to attend, but every dollar will help.)..... _____

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 Expiration Date _____ Signature _____

Hotel reservation forms will be sent with the acknowledgment of registration, or you can call the hotel directly at 312-922-4400. Mention that you're attending the WFS meeting to receive your special rate of \$155 per night (single or double).

REFUND POLICY: If your plans to attend the conference change, you may receive a full refund until June 30, 2005. There will be a \$75 administrative charge for cancellations received after June 30, 2005. No refunds after July 15, 2005. Refund requests must be in writing by mail or fax. Substitutions are welcome.