



Mid-Atlantic Micro-Nano Alliance Mission Statement:

To network expertise, capabilities, and research to facilitate the development of new applications and commercialization of miniaturization technologies.

Dr. Robert Fischell to keynote Mid Atlantic Micro Nano Alliance Special Topics Symposium October 19th



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Registration Open <http://www.midatlanticmana.com/>

Early registration ends September 15th

The 4th Carbon Nanotube Workshop at NIST: Control and Measurement of Chirality

September 23rd and 24th, 2010

Gaithersburg, MD

This workshop will feature in-depth presentations and discussion of recent breakthroughs in the control and measurement of single-wall carbon nanotube chirality, along with the resulting advances in chirality resolved measurements and applications.

A portion of the workshop will be devoted to analyzing the results of an inter-laboratory study on various chirality measurement methods, conducted under the auspices of the Versailles Project on Advanced Measurements and Standards (VAMAS).

A poster session featuring breaking results will be held in addition to the invited oral presentations.

Speakers will include:

Mark Hersam
Northwestern University

Jeffrey Blackburn
Nat'l Renewable Energy Lab.

Jin Zhang
Peking University

Hirohichi Kataura
AIST Japan

Xiaomin Tu
Nat'l Inst. of Std. And Tech.

Philip Wallis
Southwest Nanotechnologies



Keynote Speaker: *Dr. Robert Fischell*

Scientist and engineer Robert Fischell has had two pioneering careers: his current one inventing life-saving medical devices, and a former one helping create the modern era of space satellites so critical to communications, entertainment, business and national security.

Fischell, who holds more than 200 patents, is the father of modern medical stents, lifetime pacemaker batteries and implantable insulin pumps. Named by his granddaughter, Angel Medical is one of more than half a dozen companies, including Pacesetter Systems, IsoStent, NeuroPace, and NeuraLieve, that Fischell has founded since 1969 to develop his inventions. NeuroPace is developing a new implantable device for ending epileptic seizures. NeuraLieve is developing a magnetic pulse device that stops migraine headaches.

Fischell received his B.S. in mechanical engineering from Duke University in 1951, and an M.S. in physics from the University of Maryland in 1953. He was awarded an honorary doctoral degree from the University of Maryland in 1996. He is a member of the National Academy of Engineering and has received numerous awards and recognitions including induction into the Space Technology Hall of Fame.

Reference: <http://www.bioe.umd.edu/about/meetthefischells.html> (accessed: 7/14/2010)

Program:

There will be a full program of short (30 minute) technical presentations focusing on technologies that have a potential for a substantial beneficial impact. Platform talks will be technical in nature; however, each speaker will present a clear and compelling vision of the unanswered market need that it is filling.

UMD ISR NEW COURSE FOR FALL SEMESTER, 2010

ENES 489P Special Topics in Engineering: Hands-On Systems Engineering Projects

For junior- and senior-level undergraduate and graduate-level students from all areas of engineering
Instructors: Professor Mark A. Austin and Professor John S. Baras
Lecture: Tuesdays, 3:30–4:45 p.m. in CSIC 2107
Lab: Thursdays, 3:30–6:00 p.m. in the Systems Engineering and Integration Laboratory, 2250 A.V. Williams Building

Course website: <http://www.isr.umd.edu/~austin/enes489p.html>

Credits: 3 credits Class limit: 20 students Would you like to understand...

- How to master system complexity?
- How to build systems to meet time and budget requirements?
- How to build systems that can be easily verified and validated?
- How to control risk?
- How to design safe systems?

This course will be a great opportunity for junior- and senior-level undergraduates, and graduate students in all engineering disciplines. You'll get the chance to work in teams on hands-on, complex systems design in collaboration with industry and government experts. Be among 10 select groups in the country to be introduced to the new area of systems engineering. Systems engineering is rapidly developing as a much-sought-after career path for engineers of all kinds and is proven to be a critical factor for U.S.

competitiveness. Get ahead and get introduced to the emerging model-based systems engineering discipline!

Details on the course goals and contents, guest lectures, projects, and evaluation procedures may be found at the course website. This course is currently available for registration.

Maryland Robotics Day

No-charge open house event on Friday, Sept. 10, that showcases robotics research.

[Maryland Robotics Day](#) will be held on campus in College Park, Md., from 10 a.m. to 2 p.m. At this event, you'll learn about the scope of robotics research at the university, visit our robotics labs, and see robots in action. You'll hear a keynote talk on "Robotics: Successes and Challenges" by Dr. Tom Wagner, the vice president and technical director of iRobot. Complimentary lunch also will be provided.

Research areas include:

- **Collaborative, Cooperative, Networked Robotics:** bio-inspired robotics concepts, time-delayed robotics, robotic swarms, robotic cooperation under limited communication, and distributed robotics.
- **Medical Robotics:** MRI-compatible surgical robotics, haptics-enabled AFM, exoskeletons for rehabilitation, and magnetic micromanipulation for drug delivery.
- **Miniature Robotics:** mesoscale robots; bio-inspired sensing, actuation, and locomotion; cell manipulation (optical, AFM based, and micro fluidics); and micro and nano manipulation (optical and magnetic).
- **Robotics for Extreme Environments:** space robotics and autonomous deep-submergence sampling systems.
- **Unmanned Vehicles:** micro air vehicles, unmanned sea surface vehicles, unmanned underwater vehicles, and planetary surface rovers.

The event is co-sponsored by the [Institute for Systems Research](#) and its new [Maryland Robotics Center](#), both units within the A. James Clark School of Engineering. [Registration](#) is complimentary but necessary! To register and learn more about Maryland Robotics day, visit robotics.umd.edu/Md_rob_day/ If you are unable to attend, feel free to browse the website of the [Maryland Robotics Center](#), which contains a lot of great information on robotics research.

Stanford University to Host MEMS Technology Summit Featuring a "Who's Who" of the MEMS Community

Two Day Event to Provide a Lesson Learned Perspective on MEMS and Offer a Vision for the Future

The Stanford University campus will provide a beautiful backdrop for the [MEMS Technology Summit](#) that will take place on October 18-20, 2010. The conference will feature a unique mix of leading worldwide experts who will share their extensive experience and review from today's perspective the critical academic and commercialization developments of the past to provide attendees a valuable history lesson as a stepping stone to the future success of MEMS. The event will have more than 30 speakers over two days that will represent the "who's who" of the MEMS community. In addition to the featured speakers, some panel discussions are planned including "Monetizing MEMS" which will conclude the program. For a schedule of the various events, agenda, speaker bios and abstracts to-date, hotel accommodations and other incidentals, and to register please visit the conference [website](#).

The event is a true "who's who in MEMS". So many of the speakers at this event have spoken to the Mid Atlantic Micro-Nano Alliance at our events (Kensall Wise, Beth Pruitt, Mark Allen, Tom Kenny...)

The event Organizing Committee includes NovaSensor Founders Dr. Janusz Bryzek, Mr. Joseph R. Mallon Jr., Dr. Kurt Petersen, and Mr. Roger Grace who from the beginning helped guide NovaSensor's Marketing Strategy and Positioning. Bette Cooper of MEPTEC is the Event Manager.

If you have questions or require further information contact bcooper@meptec.org or call 650-714-1570.

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For TRF Sponsored Conferences and Meetings - visit

Solid-State Sensor, Actuator and Microsystems Workshop (Hilton Head 2012)

June 3-7, 2012
Crown Plaza Hotel
Hilton Head Island, South Carolina
www.hh2012.org

International Conference on Microtechnologies in Medicine and Biology (MMB 2011)
May 4-6, 2011
Hotel Seeburg
Lucerne, Switzerland
www.mmb2011.org

Commercialization of Micro-Nano Systems Conference

COMS 2010

Hyatt Regency Tamaya Resort & Spa

Albuquerque , New Mexico

August 29 - September 2, 2010

COMS brings together leaders from all over the world and every sector of industry; from high tech companies, national labs, regional development and government agencies, investment and consulting groups, market researchers, educators and students; all sharing, learning and creating partnerships in an open interactive setting. This is a powerful environment focused on accelerating commercialization activity among established and emerging micro and nano businesses. COMS focuses primarily on solutions, not just science and technology. It is a hands on, practical meeting to assist you in bringing your products to market, finding new customers, or the perfect development partner. Meet with decision makers & qualified buyers from every sector in an atmosphere designed for business development.

They are working on the finishing touches to the COMS 2010 program, it should be complete in the next few weeks. Until then, click here to view a few of the sessions they have [lined up](#).

11th Annual Micro/Nano Alliance Symposium

October 19th

CALL FOR ABSTRACTS

The annual symposium of the Mid-Atlantic Micro/Nano Alliance will take place on October 19, 2010 at the Kossiakoff Center at the Johns Hopkins University Applied Physics Laboratory in Laurel, Maryland.

We are soliciting technical poster presentations from researchers in fields related to micro- and nano-scale science and engineering.

Poster topics are not restricted to the conference theme of commercialization.

Prospective participants should submit an abstract through the MAM/NA website (<http://www.midatlanticmana.com/>).

Abstracts must be received by September 20.

EARLY BIRD DISCOUNT— poster presenters who submit their abstract by **August 23** will receive a discount on registration to the symposium .



**News bites from the
Region**

A CLOSER LOOK.

Join the Maryland Stem Cell Research Fund, along with its partners, the National Institute of Standards and Technology and the National Institutes of Health for this full-day scientific research symposium. Don't miss the opportunity to view the research

supported by the Maryland Stem Cell Research Fund and in-state Federal Agencies.

The agenda includes an opening keynote address, presentations, poster sessions and more.

DATE: Wednesday, September 22, 2010 // 8 a.m. - 6 p.m.

LOCATION:

NIST Main Campus // 100 Bureau Drive // Gaithersburg, MD 20899

COST:

\$100 per person

REGISTRATION/INFORMATION:

www.mscref.org

Registration closes Wednesday, September 15, 2010



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If you need to speak to a live person try emailing keith.rebello@jhuapl.edu.