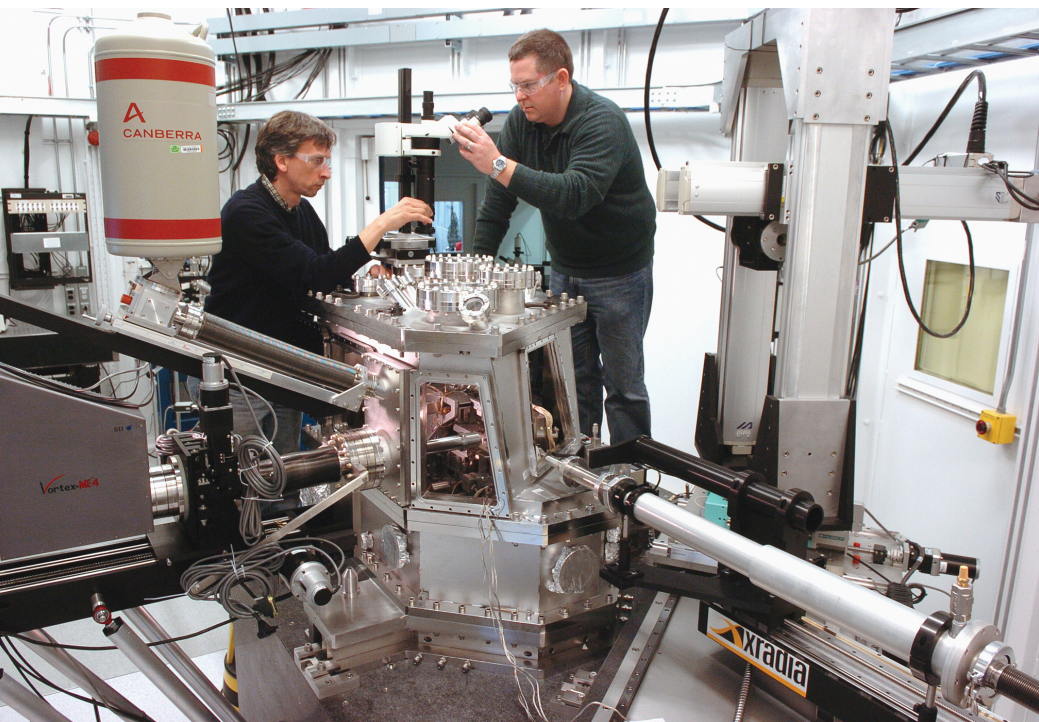


Novel microscopy tool provides highest resolution for hard X-rays



Jörg Maser (left) and Robert Winarski of Argonne's CNM X-Ray Microscopy Group prepare an experiment at the Hard X-Ray Nanoprobe Beamline at the Advanced Photon Source. The nanoprobe uses brilliant X-rays with photon energies from 3 to 30 keV to probe the properties of nanoscale materials with a spatial resolution of 30 nm. The system provides a combination of scanning-probe and full-field transmission imaging.

By Brock Cooper

The Center for Nanoscale Materials' (CNM) newly operational Hard X-Ray Nanoprobe at Argonne is one of the world's most powerful X-ray microscopes.

It has been designed to study novel nanoscale materials and devices aimed at, for example, harvesting solar energy more efficiently, providing more efficient lighting or enabling next-generation computing. The weak interaction of hard X-rays with matter allows researchers to penetrate into materials, look through process gases and study sub-surface phenomena. At the same time, this property also has made fabrication of efficient X-ray optics difficult, limiting the degree to which hard X-rays can be focused.

Using advanced X-ray optics called Fresnel zone plates — similar in appearance to the large Fresnel lenses used to concentrate light in lighthouses — along with a laser-based nanopositioning system, Argonne is able to focus X-rays to the smallest spot yet achieved with this type of illumination source. The microscope combines scanning-probe and full-field transmission imaging to create both three-dimensional visualizations of complex systems and devices, as well as to perform sensitive quantitative analysis of elemental composition, chemical states, crystallographic phase and strain.

"It's the highest resolution microscope of its type in the world right now," acting CNM Division Director Stephen Streiffer said. "The nanoprobe is one of

the tools that make the CNM unique."

The nanoprobe uses X-rays with photon energies between 3 and 30 kiloelectron volts to produce images with initially a 30 nanometer resolution — roughly the size of 100 atoms. As X-ray optics continue to improve and novel X-ray optics are developed, it is anticipated that significantly higher spatial resolution will be reached over the lifetime of the nanoprobe.

The Hard X-Ray Nanoprobe was designed, constructed and is operated in partnership between the CNM and the X-Ray Science Division of the Advanced Photon Source (APS) at Argonne. The CNM pursues the development and characterization of novel nanoscale materials and devices. The capabilities of Argonne's Advanced Photon Source play a key role because their hard X-rays, used by the nanoprobe beamline, provide unprecedented capabilities to characterize very small structures.

"The instrument allows characterization of nanoscale materials and devices in previously unavailable detail and is particularly well-suited for the study of buried structures in real world environments and for dynamics," Nanoprobe Beamline Director Jörg Maser said.

The nanoprobe became operational in October 2007 and is open to all science users based on peer review under the user programs of the APS and the CNM. The CNM is a national user facility, which provides tools and expertise for nanoscience and nanotechnology research.

See "Hard X-rays" on page 4

Supplemental funding eases woes at Fermilab; might lead to additional joint accelerator work

President Bush has signed legislation, previously passed by the House and Senate, that provides \$400 million in supplemental funding for science programs. Of that amount, \$62.5 million will be used by the U.S. Department of Energy's Office of Science to help end layoffs and program cuts at Fermilab, Argonne and other facilities.

During an all-hands meeting at Fermilab Wednesday, July 2, Acting Deputy Secretary of Energy Jeff Kupfer announced that Argonne will receive \$7.5 million in additional funding from the DOE. The money, a one-time allocation for fiscal year 2008, comes from the recently passed supplemental budget bill. The additional funding should stave off any further layoffs at both laboratories.

"This is very welcome news for our friends at Fermilab and for the nation's scientific enterprise," said Argonne Director Robert Rosner. "And given our close working relationship with Fermilab, this could translate into

positive effects on our joint work on accelerator technology."

"Argonne will benefit from the supplemental bill to support continued operations of our user facilities," Rosner added. However, it should be noted that the likelihood of a continuing resolution means the laboratory could still be facing some challenges in the coming year.

The Illinois congressional delegation was instrumental in shepherding this legislation through Congress, said University of Chicago President Robert Zimmer. "In addition, an array of governors, mayors and CEOs, as well as the leaders of the nation's research universities, have spoken out and provided invaluable support," Zimmer said. "This list includes members of the UChicago Argonne, LLC Board of Governors; the Fermi Research Alliance, LLC Board of Directors; and the University of Chicago Board of Trustees." ■

Integrated Safety Management verification team arrives

Starting today, a U.S. Department of Energy Integrated Safety Management (ISM) verification team will visit Argonne to look at the laboratory's safety systems and processes. The DOE team wants to ensure that safety systems are in place, that all employees use them and that they are working properly.

While on site, the ISM verification team will gather information to help them understand Argonne systems and ways that we perform work safely. The verification process will begin with presentations by senior management. It is possible that any employee might be interviewed or observed while working.

Although employees' tasks may be very different within programmatic and support divisions, each worker must be trained, qualified and authorized by their supervisor according to Argonne requirements. Integrating safety into all work performed at Argonne requires that the individuals assigned to do the work have the correct knowledge and skills for their job responsibilities — they must be trained and authorized to do the work at Argonne.

To help employees prepare for the verification, there are things employees should think about and questions they

should be able to answer about their jobs, such as:

- "What have I done that illustrates safety being integrated into my work?"
- "When do I need to stop and ask my supervisor if I can proceed with this job?"
- "Which thing should I do first?"
- "Is my safety protected on this particular job?"

• Argonne leaders and administrators met July 2 to discuss preparations for ISM verification. For more, see page 4.

• Employees recognized for safety initiative, compliance. For more, see page 4.

The ISM verification process gives Argonne employees an opportunity to demonstrate the things they and their organizations do to promote safety.

For the latest ISM verification preparation handouts and information, visit the ISM Web site. ■

www.anl.gov/ISM

INSIDE

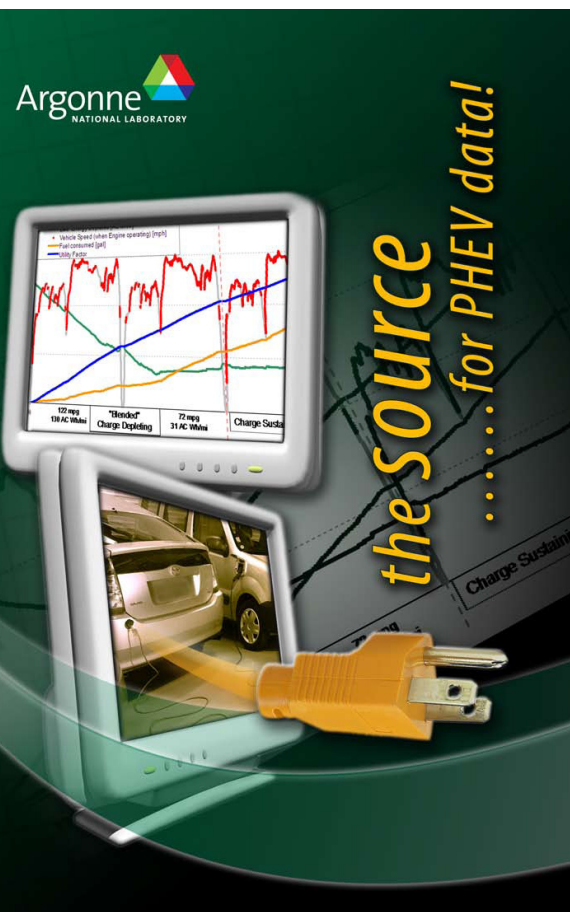
- ARGONNE EMPLOYEES WIN TWO STC INTERNATIONAL AWARDS
- INTEGRATED FUEL TECHNOLOGIES GETS LICENSE FOR ARGONNE-DEVELOPED DeNOx CATALYST
- ARGONNE AND SEVERAL EMPLOYEES RECEIVE POLLUTION PREVENTION AWARDS



UChicago
Argonne LLC

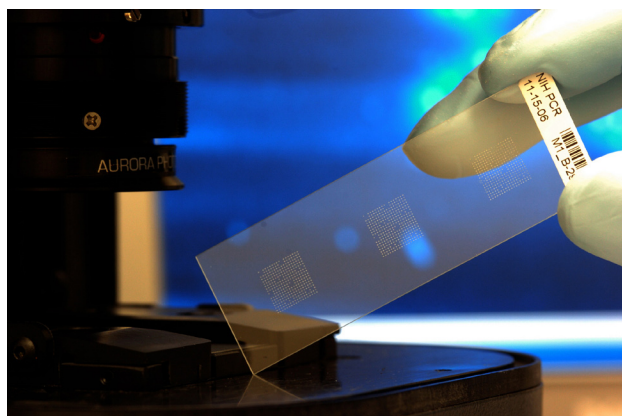


Argonne employees win two STC International awards



Argonne's two entries to the Society for Technical Communication's (STC) 2008 International Competition have been recognized as winning entries. The society's competition recognizes excellence in creating technical art and publications.

The first winner, a photograph titled *Biochip Slide* by George J. Joch (TSD), was shot for Argonne's Communications and Public Affairs office and was intended for use on Argonne's public Web site. Researchers at Argonne have developed a biochip technology that one day might become a standard diagnostic tool for identifying infectious diseases. Each biochip has hundreds to thousands of gel drops on a glass or plastic slide. This photo was commissioned to illustrate biotech research. The challenge was to show the very subtle etchings on the glass slide (each line is the width of a human hair).



▲ *Biochip Slide*, a photograph by TSD's George Joch that illustrates Argonne's biotech research, won a 2008 STC International award.

◀ *One of the brochures that won a 2008 STC International award as part of the Plug-In Hybrid Electric Vehicle Promotional Materials, created by Suzanne D. Williams, Renée M. Nault and Sana Ann Sandler (all TSD).*

The second winner, promotional materials titled *Plug-In Hybrid Electric Vehicle Promotional Materials*, were created by Suzanne D. Williams, Renée M. Nault and Sana Ann Sandler (all TSD). The materials were composed of three closely related pieces — two brochures and one poster — and were used as a series of promotional products in a continuing campaign for Argonne's Center for Transportation Research, recently named the U.S. Department of Energy's lead laboratory for the simulation, validation and laboratory evaluation of plug-in hybrid electric vehicles (PHEVs) and the technologies required for these vehicles.

STC is an individual membership organization dedicated to advancing the arts and sciences of technical communication. It is the largest organization of its type in the world. Its 14,000 members include many professions such as technical writers and editors, content developers, documentation specialists, technical illustrators, instructional designers, academics, information architects, usability and human factors professionals, visual designers, Web designers and developers and translators — anyone whose work makes technical information available to those who need it. ■

www.stc.org/

Integrated Fuel Technologies gets license for Argonne-developed DeNOx Catalyst



Integrated Fuel Technologies has licensed an Argonne-developed catalyst that could help diesel truck manufacturers eliminate harmful nitrogen-oxide emissions from diesel exhausts. Argonne chemist Chris Marshall (foreground) displays a container of the catalyst while Sundar Krishnan, left, and Argonne researcher Steve Ciatti prepare to test it.

By Angela Hardin

A new, patented catalyst developed by scientists at Argonne to reliably and economically reduce 95 to 100 percent of the nitrogen oxide (NOx) emissions from diesel-fueled engines has been licensed to Integrated Fuel Technologies, Inc. (IFT), a start-up company from Kirkland, Wash.

IFT plans to integrate the technology — named Diesel DeNOx Catalyst — into the firm's existing products that reduce emissions of greenhouse gases, said IFT president Robert Firebaugh. The products could be sold to original equipment manufacturers (OEMs).

"OEMs like PACCAR, Cummins, Siemens, BASF, Corning and John Deere have expressed an interest in IFT products enhanced with the Diesel DeNOx Catalyst," Firebaugh said. "These companies want to know if the technology can survive continuous testing."

"The catalyst can also be easily retrofitted for installation on existing diesel engine vehicles," said Christopher Marshall (CSE), the Argonne chemist who led the development of technology. "There is a potentially large pool of customers for this technology, given the 11 million diesel engines currently on the road."

Emissions of NOx are regulated by the U.S. Environmental Protection Agency, which began implementing more stringent regulations last year to reduce releases of the smog-causing pollutant by 2.6 million tons a year on a phased-in basis through 2010. Argonne and IFT aim for the Diesel DeNOx technology to meet standards set by the California Air Resources Board, the strictest in the United States.

IFT is also collaborating with Argonne under a two-year research agreement to test the technology's longevity in real-world use and to demonstrate its real-world applications to determine if it can meet a broad array of transportation applications.

The Diesel DeNOx Catalyst is a coating that is applied to a ceramic brick, like a catalytic converter, which is installed in a vehicle's emissions system. The technology works in conjunction with the particulate matter (PM) trap's filter. The PM trap's filter removes soot

from diesel exhaust, which is then processed by the Diesel DeNOx Catalyst to remove NOx emissions.

"The key to the Diesel DeNOx Catalyst technology is the reductant," Marshall said. "Interestingly, it is the diesel fuel that reduces the NOx to nitrogen, a harmless compound that composes about 72 percent of the Earth's atmosphere. The catalyst achieves such high rates of conversion because of its interactions with the hydrocarbons in the diesel fuel. The reduction in NOx emissions comes as a result of its conversion into nitrogen."

Moreover, the Diesel DeNOx Catalyst shows increased performance in the presence of water vapors. "That characteristic makes it ideal for use in automotive and truck exhaust systems, where water is always present," Marshall said.

Marshall and fellow Argonne researchers have also found the Diesel DeNOx Catalyst to be economical to make and use. The technology uses inexpensive metals — copper and cerium. Using diesel fuel as the reductant eliminates the need for onboard storage of compounds like ammonia or urea that existing technologies use as reductants, he said. Compared to existing technologies, Marshall said, Diesel DeNOx reduces the amount of additional weight a vehicle has to carry, allowing for more efficient use of a vehicle's fuel.

"Furthermore," he said, "the ultra-low sulfur diesel fuel that will soon be required for off-road use and is now mandated for on-highway use actually extends the life of the catalyst technology, which is poisoned by the sulfur."

The Diesel DeNOx Catalyst is a low-cost technology given the usable lifetime of the catalyst, which is about 400,000 miles. A typical semi-tractor trailer or shipping and delivery service truck is driven about 45,000 miles per year, according to the American Trucking Association.

Development of the Diesel DeNOx Catalyst was funded by Argonne's Laboratory-Directed Research and Development program. More information on Integrated Fuel Technologies, Inc., is available on their Web site. ■

www.iftnw.com

Simple security measures can deter thieves, keep homes safe during vacations

Summer vacation season is under way, and when you are getting ready to go on a trip it makes sense to protect what you have left behind.

Thieves look for indications that no one is home, such as a lack of internal lighting or an overflowing mailbox. The more indicators burglars observe, the greater their level of confidence. Eliminating these indicators deters thieves and helps keep your home safe.

- Stop the delivery of newspapers so they do not pile up outside.
- Ask a neighbor or friend to pick up your mail or have the post office

hold it so the mailbox does not fill up.

- Connect porch lights and inside lights to a timer to make it look as though someone is home.
- Leave a vehicle parked in the driveway.
- Connect a radio or television to a timer so that it comes on at various times.
- Make arrangements to have the lawn mowed.

For more information about Argonne's Operations Security (OPSEC) Program, call Pat Berglund (SCD) at ext. 2-2946. ■

Argonne and several employees receive pollution prevention awards



Argonne Director Robert Rosner accepts the Pollution Prevention and Environmental Stewardship Accomplishment Award from Donna Green of the DOE Argonne Site Office.

By Andrea Cipriani

Argonne has received two Pollution Prevention and Environmental Stewardship Accomplishment awards from the U.S. Department of Energy. Four Argonne employees were also presented with Pollution Prevention and Environmental Stewardship certificates for their contributions to pollution prevention.

On behalf of the laboratory, Argonne Director Robert Rosner received a plaque in recognition of the outstanding commitment to pollution prevention and environmental stewardship through the development of the Greenhouse gases, Regulated Emissions, and Energy use in Transportation (GREET) life-cycle model to evaluate emission impacts of advanced vehicle technologies and new transportation fuel combinations. Rosner accepted an additional award in recognition of the outstanding commitment to pollution prevention and environmental stewardship of Argonne through custodial operations efforts to reduce energy costs and greenhouse gases using a lighting efficiency initiative.

In recognition of an outstanding commitment and contribution to pollution prevention and environmental stewardship at Argonne, Michael Wang (ES) was honored for his development of the GREET life-cycle model. The GREET model is a comprehensive transportation analysis tool that allows users to evaluate the energy and environmental

benefits of advanced vehicle technologies and new transportation fuels. GREET includes more than 100 fuel production pathways, more than 70 vehicle/fuel systems and approximately 8,000 users world wide.

Wang was involved in all aspects of the GREET technology transfer process and developed the model in a user-friendly Microsoft® Excel platform. The model is publicly available, free of charge, on the laboratory's Transportation Technology R&D Center Web site.

Anthony Sendra, Paul Vanderwall and

Paul Upshaw (all FMS) were honored in recognition of their outstanding contribution and commitment to pollution prevention and environmental stewardship at Argonne through custodial operations efforts to reduce energy costs and greenhouse gases. Since 2005, the laboratory has been a leader in an effort to eliminate the use of incandescent light bulbs. Over the past several years, Argonne has been replacing incandescent light bulbs with compact fluorescent lamps (CFLs) to lower energy costs and reduce greenhouse gas emissions.

The Argonne lighting efficiency improvement project was implemented by the laboratory's custodial operations department. In 2005, the group began replacing spent incandescent bulbs with CFLs, with the group supervisor achieving cost efficiency in purchasing the bulbs. From fiscal year (FY) 2005 to FY 2008 there have been 8,300 incandescent bulb replacements, which resulted in a greenhouse gas emission reduction of 2,124,400 pounds and an electrical energy cost savings of \$160,000.

Nominations for these awards were submitted to DOE by Gregg Kulma, Argonne's pollution prevention/waste minimization coordinator. Send project information for possible future nominations to gkulma@anl.gov. ▀

www.transportation.anl.gov/



The winners of Pollution Prevention and Environmental Stewardship Awards: (from left to right) Anthony Sendra (FMS), Paul Vanderwall (FMS), Paul Upshaw (FMS) and Michael Wang (ES).

Foreign journalists visit Argonne



Thomas Wallner (ES), a mechanical engineer, explains Argonne's hydrogen engine research at the lab's Transportation Technology R&D Center to a contingent of foreign journalists. The State Department and the Washington Foreign Press Center chose Argonne as a half-day stop for a group of journalists from Asia, Korea and various European countries because of its work in advancing vehicle technology. Argonne paired the 20 foreign journalists with employees who could speak the journalists' native languages, which allowed the scientists to explain their work in an easy-to-understand fashion. As a result of the visit, work performed at the lab is being covered in broadcast and print sources around the world.

Student at Argonne earns spot at prestigious Nobel conference



Kurter

By Jared Sagoff

An Illinois Institute of Technology student working on her doctoral thesis at Argonne's Materials Science Division was given the opportunity

to participate in the 58th Meeting of Nobel Laureates in Lindau, Germany, which was held June 29 - July 4.

Cihan Kurter is one of a small number of students from around the world invited to attend the meeting to hear lectures by Nobel laureates and participate in discussions. The meeting, which has been held since 1953, invites a mere 500 to 700 top students and young researchers from all over the world to attend each year, often as a reward for the quality of their perfor-

mance and research work, according to the Lindau website.

Kurter's work at Argonne has focused on creating sources of terahertz radiation by patterning high-temperature superconductors formed by intrinsic Josephson junctions. These sources of terahertz radiation may soon find their way into devices that could improve both security screening technology and medical diagnostics.

Born in Turkey, where she received both her bachelor's and master's degrees, Kurter is currently pursuing her doctorate in physics at the Illinois Institute of Technology. Kurter said she believes the Lindau meeting will propel her burgeoning academic life. "I believe this meeting will be a great experience for my scientific career," she said. ▀

www.lindau-nobel.de

Hot summer days might bring call to reduce lab's electrical load

The laboratory recently joined the PJM Interconnection Load Curtailment Program. Under this program, Argonne will reduce electrical load demand during specific times after receiving notification from Energy Connect, Inc. In return for reducing demand, Argonne receives compensation for each kilowatt-hour reduction in energy.

Over the past ten years, Argonne has received more than \$1 million for participation in this type of program. Employees' cooperation in turning off

non-essential electric loads contributed greatly to the success of the program in previous years. Support of this program is even more important today, as Argonne's electrical costs have risen approximately 25 percent this year.

As in previous years, site-wide public address system announcements will ask employees to turn off non-essential lighting, computers and equipment. Typically, such curtailments last between two and six hours during very hot summer days. ▀

Employees' safety actions recognized with SPOT Awards

The SPOT Award recognizes employees' contributions to safety and quality at the laboratory. The award recognizes employees "on the spot" who exhibit good safety behavior or initiative.

• **Jose Collazo** (FMS/CU) noticed a leaking box of sodium hydroxide in a remote area. Collazo notified his supervisor, who informed building maintenance, and the problem was immediately corrected.

• **Ron Harris** (FMS) was conducting a walk down for Building 40 demolition and investigating where an overhead 4,000-volt line transitioned to an underground cable. During the investigation, Harris discovered that the underground 4,000-volt insulated energized cable protruded above the ground and that a mower deck from grounds could potentially cut the energized cable, which could cause injury or death. The cable was roped off and grounds was contacted about the hazard associated with this cable.

• **Henry Hoffman** (DIS) participated in a more than 1,400-player Chemical Stockpile Emergency Preparedness Program exercise where extensive telecommunications capability had to be added rapidly to support the player response team. This required large numbers of wires and cables to be laid across entrances and pathways. The players who installed the equipment left dozens of tripping hazards. Despite repeated requests to the safety officer to remedy the situation, nothing was done. Both the players and controllers, who included Argonne staff, were at risk of tripping. Several roles of duct tape were procured and despite other controllers declining to assist, Hoffman took on the task of helping to secure the unsafe wires and cables. Hoffman's willingness to help made the facility safer while simultaneously enabling the exercise to proceed uninterrupted.

• **Brian Kennedy** (FMS) noted

vegetation growing around and into an electrical enclosure in facility 565. Kennedy also noted evidence of wildlife activity inside the enclosure and recognized that both of these conditions had the potential to result in electrical safety issues. Kennedy took prompt action to remove the vegetation and seal the enclosure to keep wildlife out.

• **Mike Gross and Ron Gilbert** (both FMS) were raising an end cover on the absorber in Building 212 when the safety latch on the manually operated hoist popped open. Rather than just put the latch back in place, Gross and Gilbert took the initiative to use calipers and a tape measure to inspect the opening of the lower hook on the hoist and compare it to the measurements of the top hook. Though there were no noticeable signs of damage, they found the lower hook had sprung open more than one-fourth of an inch. Gross and Gilbert took the hoist out of service, notified their immediate supervisor and a replacement hook was ordered.

• **Mark Sreniawski** (EQO/RSO) has demonstrated leadership in Building 200. Over the past year, Sreniawski has been the main force behind maintaining and implementing the radiological safety program in the building. Sreniawski has adapted to three different health physicists assigned as his supervisor and excelled beyond each of their expectations. Sreniawski was also an integral part of helping his supervisor re-post the entire building, without any delays. Sreniawski has continually provided adequate coverage of all ongoing projects on his own, while training the new health physicist in the building.

Any authorized manager or supervisor may give a Spot Award to an employee when safe behavior or initiative is displayed, which gives the employee immediate recognition. Authorization is at the discretion of the division director. ▀

Meeting helps lab leadership prepare for ISM verification

A safety leadership meeting for associate laboratory directors, division directors, department heads, line management teams and safety support staff was held July 2 in preparation for the July 14-23 Integrated Safety Management (ISM) verification.

Argonne Director Robert Rosner led the meeting with a talk that focused on the safety responsibilities of the laboratory's leadership and the need to focus on the larger picture.

"As safety leaders, we not only take responsibility for our own safety but also feel we have an obligation to point out unsafe behaviors and conditions — at all levels, from the student to our colleagues, to the visiting scientist," Rosner said. "We need to create an open and transparent culture that not only accepts this feedback but values it as a critical opportunity to improve. We will then be much closer to achieving our goal."

Argonne Medical Director Jamie Stalker followed Rosner with a presentation that featured employees who had been injured. Stalker interviewed the employees on stage and had them tell their stories: how they were injured, how they could have prevented the incident and how well they have recovered. Stalker also presented images of hand injuries ranging from severe bruising to partial amputations. Although none of the images were of Argonne employees, hand injuries are the leading cause of OSHA-recordable injuries at Argonne. The images helped Stalker drive home the point that hand injuries can include disfiguring damage and life-long impairments in ability.

Stephen Streiffer, acting director of the Center for Nanoscale Materials, presented some of the lessons learned from the June 16-20 review of work practices involving engineered nanomaterials.

Chief Operations Officer Steve Richardson offered closing remarks. ▀

PEP Committee to discuss findings at town hall meeting

At the request of Argonne Director Robert Rosner, the 2008 Performance Evaluation Process (PEP) Committee began meeting in January to re-evaluate the performance appraisal process. The committee has submitted its recommendations to the directorate, the Board of Governors and the U.S. Department of Energy. The final report is available on the PEP Committee Web site on Inside Argonne.

The PEP Committee will hold a town hall meeting Wednesday, July 30, at 11 a.m. in the Building 362 Auditorium for employees to learn about the recommendations, which will take effect this fall for the FY08 performance appraisals.

2008 PEP Committee Members

- Murray Gibson (SUF) – Chair
- Steve Ban (OTT)
- Ed Daniels (ES)
- Seth Darling (CNM)
- Patricia Fernandez (XSD)
- Rusty Lusk (MCS)
- John Mitchell (MSD)
- Yvette Woell (TSD)
- Don Schmitt (HR) – Ex-Officio member
- GERALYN BECKER (HR) – Executive secretary ▀

inside.anl.gov/pep/

Hard X-rays

Continued from page 1

Funding for this research was provided by the U.S. Department of Energy, Office of Science, Office of Basic Energy Sciences. The mission of the Basic Energy Sciences program — a multipurpose, scientific research effort — is to foster and support fundamental research to expand the scientific foundations for new and improved energy technologies and for understanding and mitigating the environmental impacts of energy use. ▀

Classified ads

MISCELLANEOUS

BATHROOM REMODELING – 43" white marble (?) vanity top for 42" vanity, has center round sink, perfect condition. White two-piece toilet (not cracked). \$50 for both. Paula Mann. (708) 974-3662.

MISCELLANEOUS – Two Simmons cribs and mattresses. \$50 per set. Peg Perego double stroller. \$40. Excellent condition. Wah-Keat Lee. (708) 445-7391.

MISCELLANEOUS – Four Jimmy Buffett concert tickets, Saturday, July 26, 8 p.m., Toyota Park. \$108 each. Three-drawer heavy women's dresser, tongue and groove wood drawers, approximately 40 years old, needs some work. Best offer. Elliptical-type glider. \$50. Marjorie A. Brockman. (630) 257-7520.

DEHUMIDIFIER – Removes up to 22 qts. of moisture per day from room air. Auto on/off humidity control, collecting bucket, or direct drain. \$25. Richard Konecny. (630) 964-3660.

LAWN MOWER – Toro Super Recycler, 6.5 HP, self-propelled with "personal pace" feature. Well-maintained, dependable, very good condition. \$75. Dave Jacque. (630) 373-5408 or djacque@wideopenwest.com.

MISCELLANEOUS – Eight-in-one Little Tykes playground set. \$150. Stroller/car seat in good condition. \$50 OBO. Umbrella stroller. \$10. Julie McGillen. (815) 524-3453.

FURNITURE – Pine wood desk. \$60. Pecan wood dresser. \$20. Much more available online (antiques, tools, furniture) at www.sanibelweb.com/furniture. Susan Webster. (630) 963-9604.

HOUSING

HOUSE/SHARE – Fully furnished, nice quiet environment, close to the lab, private bath, utilities included. \$450/month. Rose Lee Pausche. (630) 739-0126.

CONDO/SALE – 2BR/2Bath, fireplace, garage w/storage. Willowbrook, 12 min

to Argonne, 5-7 min to I-55 and I-88. Dominick's, Blockbuster, Whole Foods, gym within walking distance. \$224,000. Yuri Londer. (630) 699-8251.

HOUSE/SALE – Green Trails 3 bedrooms, 2.5 bathrooms, School District 203. Move-in condition. Vaulted living-dining rooms, fireplace, full finished basement. New hardwood and Italian ceramic floors, new brick patio. Lisle. \$399,900. Maria Iavarone. (312) 593-7247.

TOWNHOUSE/FOR SALE – 3 bedroom, 2.5 bath with full basement located off of 159th & Cedar Rd. (Victoria Crossing Subdivision) in Lockport, IL. Booming area a mile to I-355. Great neighborhood, Homer Glen School District and much more. Priced to sell at \$217,000. Judy Benigno. (630) 247-6574.

AUTOMOBILES

1998 PLYMOUTH – Grand Voyager, like new body condition, excellent mechanical condition, orig. owner: AT, PS, PW, PDL, cass. player, rear AC, 78K mi. \$4,295

OBO. Marshall Mendelsohn. (630) 852-7092.

1999 Mazda – 626 LX, white, 95K miles, automatic, A/C, CD, AM/FM, air bags, ABS, cruise control, looks like new, runs great. \$3,800. Yuxiao Pan. (630) 290-2427.

2000 CHRYSLER – Cirrus Lxi with low mileage (51,000). Blue book valued at \$5,495. Asking for \$4,500. Jose Repond. (815) 941-4759.

2005 JAYCO – Granite Ridge Class C Motor home. Sells between \$55,999 and \$79,999 through the NADA online book. Has all the options: cherry wood, electronic awning/jacks/levels/steps and has rear camera. Entertainment system, surround sound and much more. \$62,999. Diana Gierich. (815) 609-8066.

TO BE GIVEN AWAY

GUINEA PIGS - Two, with cage. Guoyin Shen. (630) 778-5946. ▀