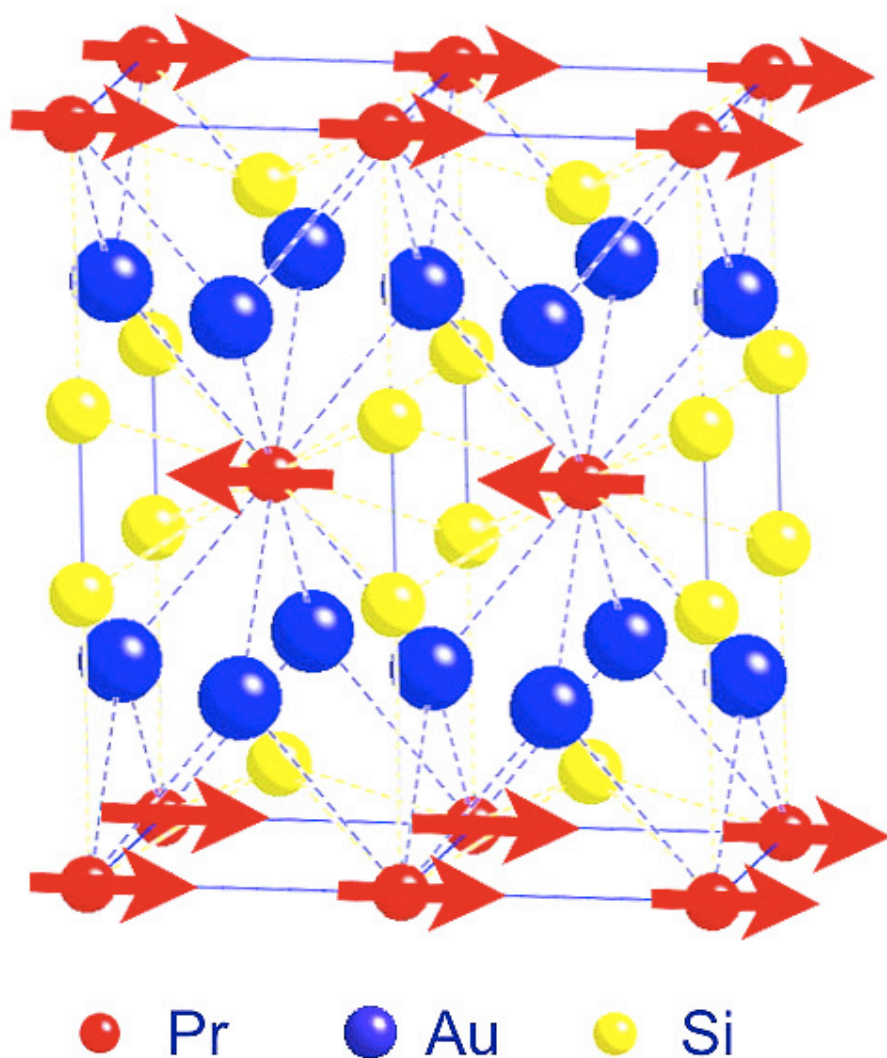


Argonne scientists discover new class of glassy material



The red arrows show the directions that the magnetic moments would point if dynamic frustration did not prevent them from ordering the crystal structure of PrAu_2Si_2 , which is a spin glass below 3 degrees Kelvin.

By Brock Cooper

Argonne scientists are dealing with an entirely new type of frustration, but it's not stressing them out. "Dynamic frustration" has been found to be the cause of glassy behavior in materials that previously had none of the features of a normal glass.

"This has been a puzzle for 10 years now," said Argonne physicist Raymond Osborn (MSD).

Conventional wisdom states that glassy materials, such as common window glass, result when frustration prevents the atoms from forming a well-ordered crystal structure and the material freezes into a disordered state like a frozen liquid.

In spin glasses, it is the magnetic moments of each atom, rather than the atoms themselves, that freeze into a disordered state at low temperatures, so that they point in random directions. However, there has to be some disorder in the atomic structure and some frustration in the magnetic interactions which prevents the magnetic moments from ordering so that they can freeze into spin glasses.

Scientists have struggled for more than a decade to understand why PrAu_2Si_2 is a spin glass. There is no sign of atomic disorder in the compound and no reason for the magnetic interactions to be frustrated.

Using the results of neutron scattering experiments, Osborn and his collaborators concluded the frustration results from temporal or dynamic frustration rather than static frustration.

Although PrAu_2Si_2 seems to have an ordered structure, by delving deeper, Osborn found that the magnetic moments are continually fluctuating in magnitude, which causes the equivalent of temporal potholes that appear and then disappear long enough to disrupt the magnetic alignment.

These fluctuations occur because the magnetic moments in this material are unstable and can be destroyed temporarily by electrons scattering off the atoms.

"The discovery of dynamic frustration reveals a whole new class of glassy materials whose behavior is governed by dynamic rather than static disorder," Osborn said.

See "Dynamic frustration" on page 3

Lights out: how Argonne is reducing energy costs

By Rachel Lichtenfeld

"Everyone's worried about the energy crisis. Everyone wants to help. And there are countless ways we can — at home, on the job, and in getting from one place to another."

This passage from *Argonne News* came on the heels of an urgent memo entreating employees to conserve energy in any way possible, as the cost of oil had quadrupled in the last year. It was 1973, and the oil embargo had driven energy prices up and reduced gasoline supply to the point where many gas stations were forced to close.

The article, titled "The Energy Problem — How we at Argonne will meet it" made some grim yet accurate assertions about the importance of oil: "(Oil) is at this time the single most vital ingredient in our energy supply, which in turn is the essence of our economy and way of life."

Thirty-five years later, as the price of oil soars, the effects of the energy cost surge impact Argonne once more

— from the price of cafeteria food to changes in landscaping. And once again, Facilities Management and Services (FMS) is taking a hard look at operations in an effort to minimize the financial impact of the recent spike in energy costs and encourages employees to help conserve costs.

"Early on we realized the need to cut energy costs," Gail Stine, FMS division director, said. "I think we've done a great job so far, and we're looking at ways to do even better in the future."

Initiatives aimed at reducing the lab's energy footprint have been in place for years; as a result, the lab's energy needs have been reduced by 20 percent since 2003. Thousands of lighting fixtures were replaced, energy-efficient windows installed, heating, ventilating and air-conditioning controls upgraded and new chillers installed in an effort to minimize energy usage. The laboratory plans to enter into a third Energy Savings Performance Contract this fall, which will result in significant energy savings. See "energy costs" on page 2

Argonne scientist to become ATLAS physics coordinator for CERN

By Brock Cooper



LeCompte

Argonne scientist Tom LeCompte (HEP) has been tapped to be the physics coordinator for the ATLAS experiment at the Large Hadron Collider (LHC)

at European Organization for Nuclear Research (CERN) in Geneva, Switzerland.

"It's obviously very exciting. The Large Hadron Collider is at the energy frontier," LeCompte said. "I'm grateful to the ATLAS experiment for showing such confidence in me, and I am grateful to the laboratory for being so supportive."

The ATLAS Collaboration Board recently approved the appointment of LeCompte as deputy physics coordinator of the ATLAS experiment. He will be deputy for one year starting Oct. 1 and then become physics coordinator on Oct. 1, 2009.

LeCompte began as an assistant

physicist at Argonne in 1995 and became a physicist in 2000. He has been involved with the Collider Detector at Fermilab since 1992 and STAR since 1995. At ATLAS, he has worked with the tile calorimeter and software and computer efforts and later as co-convenor of the standard-model working group. ATLAS is one of two large collider detectors at CERN and LeCompte will oversee the physics program for the experiment. The Argonne High Energy Physics Division has played a leading role in the design, installation and commissioning of the LHC tile calorimeter for ATLAS, as well as the trigger system and the software infrastructure.

"ATLAS will record about two million gigabytes of data every year," LeCompte said. "I joined Argonne's ATLAS effort about 10 years ago, and in that time have worked on a number of activities within ATLAS."

Experiments at the LHC will allow physicists to take a leap in their exploration of the universe. The ATLAS detector may help scientists unravel some of the deepest mysteries in physics. See "LeCompte" on page 3

INSIDE

- WESTGATE ROAD CLOSURE TO REQUIRE ROAD RESURFACING, AFFECT COMMUTERS
- PEP COMMITTEE PRESENTS RESULTS
- ANNUAL ARGONNE COMBINED APPEAL NOW UNDERWAY
- ALCF TO HOST OPEN HOUSE FOR ARGONNE, DOE, UNIVERSITY OF CHICAGO EMPLOYEES



UChicago
Argonne LLC



Veil named distinguished lecturer by Society of Petroleum Engineers



Veil

John Veil (EVS) has been named one of the Society of Petroleum Engineers' Distinguished Lecturers for the next year. Between September 2008 and May 2009,

Veil will deliver his lecture "Produced Water Management Options: One Size Does Not Fit All" to 21 different regional sections of the society in 12 countries.

Veil, manager of the Environmental Science Division's Water Policy Program, is one of the 29 speakers selected this year for the program. His selection was announced in the June 2008 issue of the *Journal of Petroleum Technology*.

Produced water is water trapped in

underground formations that is brought to the surface along with oil or gas. Produced water is by far the largest volume byproduct stream associated with oil and gas exploration and production. The cost of managing produced water is an important factor in assessing the economic viability of a well. Veil's lecture describes many produced water options using the concept of a three-tiered water management/pollution prevention hierarchy: minimize water production, recycle or reuse, or treat and dispose. The lecture offers guidance for company managers who select the management options most appropriate for a particular site.

Veil is also the lead developer of Argonne's Produced Water Management Information System Web site that has been viewed by nearly 20,000 unique visitors since opening in June 2007. ■

web.evs.anl.gov

Westgate road resurfacing to require road closure, affect commuters

Beginning today, road maintenance along the Westgate entrance will require road closures that will impact some Argonne commuters.

During the construction, which is expected to take less than two weeks (depending on weather conditions), Westgate will be open only to incoming traffic from 6 - 9 a.m., and only for outgoing traffic from 4 - 7 p.m. Westgate will be closed to all traffic between 9 a.m. and 4 p.m. The construction zone speed limit will be reduced to 20 mph.

Other Argonne gates will remain open as normal.

During the construction period, no pedestrians, bicycles or motorcycles

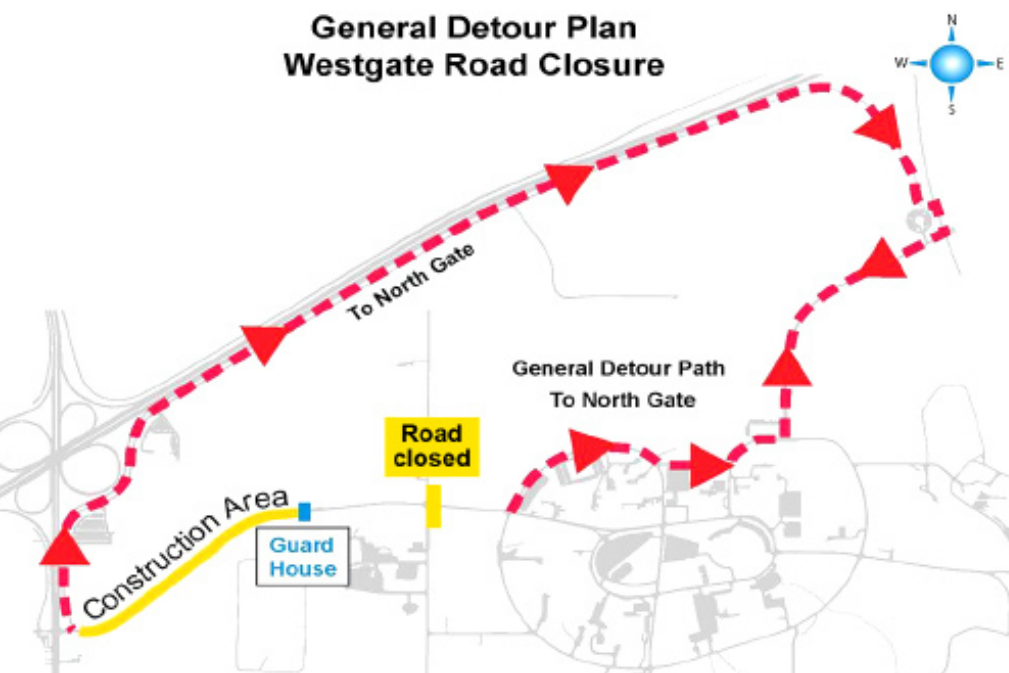
will be allowed to go through Westgate at any time.

In order to accommodate bicyclists who use Westgate to enter the lab, an alternate route using one of the business entrances and a foot path will be opened to bicycle traffic.

The construction work will include grinding off the surface layer of asphalt, repaving a new layer of asphalt and striping the road.

For more information about the road maintenance being performed or alternate entry routes, contact Phil Rash (FMS) at ext. 2-8114 or (630) 330-3534. ■

General Detour Plan Westgate Road Closure



A map of the detour plan during the approximately two-week road construction project along Westgate that will affect operating hours. The construction is set to begin today. The construction work will include grinding off the surface layer of asphalt, repaving a new layer of asphalt and striping the road.

Energy costs

Continued from page 1

savings at the Advanced Photon Source. Additional money-saving lighting and controls projects are planned for the 2009 fiscal year.

A huge contributing factor to the recent financial impact of energy consumption is that Argonne has experienced the same energy price increases that plague the rest of the nation. Argonne's electricity contract expired in June 2008; the best price the lab could obtain through a competitive bidding process still involved an increase of 26 percent.

"The impact of that rate alone is about \$2.6 million per year," Stine said.

Natural gas and coal prices are at all-time highs, increasing the cost of producing steam heat at Argonne's boiler house.

In an effort to transition to greener practices, Fleet Management, along with Vehicle Maintenance, is in the process of researching the use of biodiesel vs. diesel fuel for vehicles and equipment. Biodiesel is a clean-burning alternative fuel produced from renewable domestic resources. Biodiesel contains no petroleum, but it can be blended at any level with petroleum diesel to create a biodiesel blend such as

B20 (a blend of 20 percent biodiesel with 80 percent petroleum diesel).

In the Grounds Department, Casey Sullivan (FMS) has reduced the frequency of mowing — a practice he estimates saves 10 to 15 percent in fuel consumption; in certain low-profile areas of the laboratory, the grounds crew has altered the mowing cycle to every two weeks instead of every week.

Argonne has joined the PJM Interconnection Load Curtailment Program. Under this program, the lab will reduce energy consumption during peak hot weather periods through use of on-site generators. Employees will be also notified via the public address system that they especially need to conserve power by shutting off non-essential equipment. Argonne has received more than a million dollars for its participation in such programs over the past decade.

Stine said simple measures can go a long way to reducing the lab's energy use.

"It's really easy for folks to help," she said. "Most of it is common sense — turn off lights, printers and computers when you're not using them. It might not seem like a lot, but it makes a huge difference in the long-term." ■

What employees can do to help:

- Turn out lights whenever possible
- Shut down computers when going home for the night
- Turn off printers when not using them
- Minimize use of vehicles by walking or carpooling
- Avoid excessive vehicle idling



Argonne celebrated 60 years of on-site softball at this season's end of the year tournament. The Marauders (12-3, top) won the Argonne Softball League championship for best record in the season and took home the Dick Cash Memorial Trophy. The Predators (11-4, bottom) won this year's tournament, defeating the Marauders in an exciting 15-14 game.

PEP committee presents results

After a thorough review of Argonne's performance appraisal systems, the Performance Evaluation Process (PEP) Committee has submitted its recommendations to Argonne Director Robert Rosner. Those recommendations, which will take effect October 1 for the upcoming performance appraisal cycle, were summarized at a "town hall" meeting July 30 by committee chair and Associate Laboratory Director for Scientific User Facilities Murray Gibson.

The current system has been in place for about five years, Gibson said, which is the design life for most appraisal systems. Laboratory Director Robert Rosner charged the PEP Committee in early 2008 to review Argonne's performance appraisal process and its implementation. The committee looked at a variety of concerns expressed by employees, division directors, and the Board of Governors' Subcommittee on Compensation. The committee also looked at the requirements of the Prime Contract, performance appraisal systems at other organizations and laboratories, and data from past Argonne performance appraisal systems.

The biggest change for the upcoming performance appraisal cycle will be an increase in the number of overall performance ratings levels, to five ratings, which will provide clearer feedback than the previous three-rating system. The new ratings are:

- "Far Exceeds Expectations"
- "Exceeds Expectations"
- "Achieves Expectations"
- "Meets Most Expectations"
- "Fails to Meet Expectations"

There will be three ratings for each position description goal in the accomplishments section of the appraisal: "exceeds," "achieves" and "fails to meet" to provide more specific feedback to employees.

The PEP Committee also recommended caps on the two highest overall ratings. "Caps are essential to ensure integrity of top rating levels and consistent application of ratings across the lab," Gibson said. Also, to ensure fairness the caps will be applied at the associate laboratory director and lab director level, but not pushed down rigidly to the division level.

"Far exceeds expectations" will be capped at no more than five percent of employees. "Exceeds expectations" can be no more than 35 percent. There are no limits on the number of employees who can be rated "achieves expectations." Five percent or more must be rated "meets most expectations." "Fails to meet expectations," which requires a performance improvement plan, and disqualifies the employee for a merit increase or bonus, will be applied as required.

For details, see the PEP Committee's Executive Summary and Final Report, available on the PEP Website on Inside Argonne. ▀

inside.anl.gov/pep/

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

LeCompte

Continued from page 1

particle physics such as the origin of mass or the identification of dark matter. The ATLAS collaboration will now focus on commissioning the detector in preparation for the start-up of the LHC later this summer.

CERN, the European Organization for Nuclear Research, is the world's leading laboratory for particle physics. It has its headquarters in Geneva. ▀

TSD employee garners recognition

A Technical Services Division employee has received national recognition for contributions to her professional society.

Carol Lepzelter Berry was awarded the Chair's Recognition Award from the Special Libraries Association (SLA)'s Biomedical and Life Sciences Division.

"Over the years Carol has been our faithful webmaster and worked diligently to see that the Web site was accurate and up to date ... I would like to recognize Carol for her years of outstanding services to the Division," said John Tebo, chair of SLA's Biological and Life

Dynamic frustration

Continued from page 1

This discovery may allow scientists to tune the degree of frustration and therefore develop a better understanding of how glasses are formed in nature.

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 (BES) program — a multi-purpose, 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.

A paper on Osborn's work can be seen in the upcoming edition of *Nature Physics*. ▀

sciences division.

Berry joined TSD's Library Services group in 1996 as a reference librarian in the Building 202 library; since that time, she has undertaken additional responsibilities and now works in both the Building 202 and 203 libraries. Berry joined the SLA in the mid 90s while pursuing a master's degree in library science. ▀

Annual Argonne Combined Appeal now underway

Through Aug. 31, the 2008 Argonne Combined Appeal (ACA) campaign will give Argonne employees the opportunity to donate to programs that provide food for the hungry, shelter for the homeless, sanctuary for the abused, education and training for the disadvantaged, living assistance for the physically challenged, treatment for the ill and research toward cures for a host of debilitating diseases.

Argonne employees have given millions of dollars to community programs since the ACA was established in 1977. The continuing generosity of Argonne employees is part of the

laboratory's reputation for leadership, excellence and community support.

A complete explanation of the ACA program, including changes for 2008, can be found on the ACA Web site. The electronic pledge system introduced last year will be used again; employees without computer access will receive paper pledge forms.

Questions and comments should be directed to the ACA co-chairs, Bryan Schmidt (ext. 2-4122) and Sheila Trznadel (ext. 2-0662). ▀

inside.anl.gov/community/aca/

ALCF to host open house for Argonne, DOE, University of Chicago employees

The Argonne Leadership Computing Facility (ALCF) will host an open house for Argonne, U.S. Department of Energy and University of Chicago employees Thursday, Aug. 14, from 9 a.m. to noon in Building 369.

The ALCF provides world-leading computing capability to a global community of researchers working to solve our most pressing scientific problems and is home to Intrepid, IBM's next-generation Blue Gene/P system, with a peak speed of 557 Teraflops. The open

house will provide an overview of the ALCF and a tour of the supercomputing support facility.

Shuttles will depart from and return to the Building 213 Cafeteria continuously throughout the morning, and limited parking will be available in the Building 360 parking lot. Guests should plan on a 45-minute visit.

Refreshments will be provided and cameras are welcomed. Guests are asked to not wear high heels. ▀

Search begins for next lab director

A search committee has been formed to find the laboratory's next chief executive in the wake of Argonne Director Robert Rosner's recent announcement that he will step down June 30, 2009, at the conclusion of his term. Donald H. Levy, University of Chicago vice president for research and for national laboratories and chief executive officer of UChicago-Argonne LLC, will chair a search committee charged with conducting an international search to identify the next director.

Members of the search committee are:

- George Crabtree, associate division director, Argonne Materials Science Division
- Ian Foster, Arthur Holly Compton distinguished service professor in the Computational Science Department, director, senior fellow and executive committee member of the Computation Institute, University of Chicago
- Beth Harris, vice president and general counsel, Office of Legal Counsel, University of Chicago
- Young-Kee Kim, deputy director, Fermi National Accelerator Laboratory, professor, Department of Physics and The Enrico Fermi Institute, University of Chicago
- Jim Madara, Sara and Harold Lincoln Thompson distinguished service professor, dean of the Biological Sciences Division and Pritzker School of Medicine, vice president for medical affairs, University of Chicago, and CEO of the University of Chicago Medical Center
- Walter Massey, president of Morehouse College (retired) and former director of Argonne

- Mark Peters, deputy associate laboratory director, Energy Sciences and Engineering, Argonne

- Harvey Plotnick, president and CEO (retired), Paradigm Holdings, Inc.

- John Rowe, chairman and chief executive officer, Exelon Corporation

- Noel Watson, chairman, Jacobs Engineering Group, Inc.

- Linda Young, Argonne distinguished fellow, Chemical Sciences and Engineering

- Laurence Hill, associate vice president, Office of the Vice President for Research and for National Laboratories, University of Chicago

- Maryfrances Miley, director, programmatic reviews, Office of the Vice President for Research and for National Laboratories, University of Chicago

The search committee is selecting an executive search firm to assist in its efforts. The committee's goal is to recommend highly qualified candidates to University of Chicago President Robert Zimmer for final selection before the end of this calendar year with an anticipated start date no later than July 1, 2009. The search will be conducted in close collaboration with the governing boards for Argonne and the University of Chicago as well as senior officials from the Department of Energy.

A new Web site for the director search will be online by the end of August at www.UChicagoArgonneLLC.org. The Web site will present the latest search news and developments, and provide a mechanism for asking questions and offering feedback and suggestions.

Comments and suggestions on the director search can be sent to Levy at directorsearch@listhost.uchicago.edu. ▀

Safety actions recognized with SPOT Awards

SPOT Awards recognize contributions to safety and quality at the laboratory. The award is given to employees "on the spot" for demonstrating good safety behavior or initiative.

• **Tony Rodriguez** (FMS/US) was performing a pre-entry equipment inspection prior to a confined space entry into a boiler steam drum when he found a frayed power cord for an air mover. Rodriguez immediately took the equipment out of service and informed his supervisor. Rodriguez's attention to detail possibly prevented life-threatening injuries to himself or a co-worker.

• **Sharon Coyle** (HR) noticed an extension cord in the hallway outside her office that also ran in front of the office door of a co-worker. The cord was inadvertently left in the hallway by a worker who had been abruptly called away. Coyle recognized the potential tripping hazard and took the initiative to move the cord away from the doorways and secure it in a safe location.

Other SPOT Award winners include:

- **Kathy Horkey** (CELS/MCS)
- **Joseph Sutton** (ASD)
- **Carol Berry** (TSD/TIS)
- **John Quinn** and **Robert Van Lonkhuyzen** (both EVS)
- **Michael Pape** and **Timothy Smith** (both XSD/CEP)
- **Therese Huml** (OTT)
- **Michael Davis** (CSE)
- **Donald Walko** (XSD/TRR)

- **Maria Chondroudi** (MSD)
- **June Saragossa** (FMS/Custodial)
- **Jeff Darnell** (FMS/Building Maintenance)
- **Dominick Bruno** (FMS/Building Maintenance)
- **Linda Lubben** (LEG)
- **Jane Pransky** (AES/ADM)
- **Bruno Fieramosca** (AES/UES)
- **Wayne Michalek** (AES/VS) and **Ken Raffanetti** (MCS)
- **John Valdes** (MCS)
- **Kevin Battaile** (SUF/USR)
- **John Rohrer** (PHY)
- **Mary Walker** (FMS/CU)
- **Sharon Ryan** (DIS)
- **Robert Keithley** (SUF/AES/DD)
- **Chris Sawatski** (AES/SI)
- **Willie Campbell** (FMS/MAT)
- **John Krebs** (CSE)
- **Marge Collins** (HR)
- **William Bedford** (FMS/CU)
- **Judy Benigno** (OCF)
- **Roger Ranay** (XSD/MC)
- **Evan Maxey** and **Peter Chupas** (both XSD/CEP)
- **Vickie Klosowski** and **Marilyn Smejkal** (both FMS/CU)
- **Kay Sitarz** (DIS/IAC)
- **Dave Jacqué** (C&PA)
- **Dan Preuss** and **Greg Fletcher** (both CSE)
- **Mary Lynn Hodshire** (PMS/PPM)
- **Larry Bersano** and **James Brenzing** (FMS/CU)
- **Van Nguyen** (APS/AES/SI) ▀

Heartbreaker

Carmen Lopez (CSE) brought down the house with her energetic rendition of Pat Benatar's "Heartbreaker" at the Argonne Music Club's open mic July 17. On guitar is Gene Schafer III (EQO). Below, Wes Kendall (MCS), on piano, and Teng Jian Khoo (HEP) perform a pair of compositions written by Kendall. The club's monthly open-mic nights are held at the Building 617 Lower Level. Open mics give musicians and vocalists of all genres and skill levels — from novices to virtuosos — a way to perform in a low-pressure, informal setting. Audience members are welcome and appreciated by the performers. Performances at open-mic nights have included classical guitar, country, blues, jazz and classic rock. There is no charge for admission, and the Lower Level has comfortable table seating. Beverages and snacks are available for purchase. Doors open at 4:30 p.m.; music starts at 5:30 p.m. The next open mic will be held Thursday, Aug. 21. For more information, see the club's Web site. Photos by Dave Jacqué.

www.argonneclub.anl.gov/



Classified ads

MISCELLANEOUS

COMPUTER - HP Pavilion, 192 MB RAM, Celeron processor (564 MHz), ethernet 10/100 NIC installed, Windows OS installed, also some software installed. Capable of running Windows XP SP2 and Microsoft Office XP, includes mouse, keyboard and speakers. Great as backup or learning computer. \$100 OBO. Marshall Mendelsohn. (630) 852-7092.

MISCELLANEOUS - Two Mesinger cushy bicycle seats, excellent condition. \$5 each. Kalart custom 8-splicer for 8 mm movies, used once, includes two 200 ft reels in cans and one 100 ft reel with can. \$5. Remington Quiet-riter portable typewriter, good condition. \$10. Brass table lamp, heavy base, three-way bulb, good condition. \$5. Sleeping bag, clean, pet- and smoke-free, zippered both sides, 4 lb polyester fill, with stuff-bag. \$5. Electric typewriter/wordprocessor/spreadsheet, Brother model WP-760D, good condition, has extra ribbon. \$15. Albert K. Fischer. (708) 246-4389.

LAWN EQUIPMENT - Small rototiller. \$100. Craftsman lawnmower. \$100. Simplicity riding mower, 36" cut, hydrostatic drive. \$400. Scott Gildo. (630) 834-1550.

SOFA SET - Beautiful, merlot-colored leather sofa, loveseat, chair and ottoman set. All four pieces are in excellent condition, about three years old.

Originally \$4,500 from Marshall Field's, asking \$2,400, negotiable. John Krummel. (630) 416-1633.

MISCELLANEOUS - Coleman generator, 6,250 watts initial, 5,000 watts continuous, includes wheel cart, used 12 hours. \$250 OBO. 8 HP Craftsman chipper/shredder, used 15 hours. \$200 OBO. Tim Larson. (630) 969-5702.

POND/WATERGARDEN - Kayak model form, new. 70" x 49" x 18." Photo available. Buyer must pick up. \$50 OBO. P. Jurgovan. (630) 369-5078.

ORGAN - Beautiful Hammond Organ with bench, model #K-111, about 1974-1976. Like new, works and sounds great. 5 minutes from lab. \$450. Jerry Staroba. (630) 985-2416.

DINING ROOM SET - Traditional style, dark wood. Dining table w/six chairs, buffet table and china cabinet. Pictures available. \$900 OBO. Lori O'Connor. (708) 257-0176.

BOAT AND ACCESSORIES - Boat, motor and trailer in like-new condition. Larson 20-ft speedboat with all new upholstery, Evinrude 1400 Outboard motor, and boat trailer, valued at more than \$5,000. All for \$2,700. Sandra Tolaksen. (630) 661-0906.

MINI FRIDGE - General Electric mini-fridge, good for college dorm. \$50. Bob Wagner. (630) 739-2343.

AUTOMOBILES

2000 TOYOTA - 4runner SR5, 10.9K miles, Red, Dual air bags, ABS, A/C, Cruise Control, KBB \$6,740. Asking \$6,200. Kwi-Seok Ha. (630) 272-5439.

1999 BMW - 540i 6-speed, blue, tan leather, sport package, 17" alloy wheels, power everything, sunroof, CD-changer, excellent condition, meticulous maintenance records, 133k miles. \$12,700 OBO. Panos Prezas. (312) 420-1839.

1995 CHEVY - Astro Van, 8 passenger, V6, 199,000 miles, no rust, well taken care of, excellent shape. \$1,800 OBO. Karen Liptak. (815) 467-4515.

1999 OLDSMOBILE - Intrigue GL V-6 4 door White, power windows and door locks 142,700 miles. \$ 2,775. Craig Patterson. (815) 478-3653.

1999 BMW - 323is, silver over black with only 70K miles. Sport and premium packages with heated seats, new Pirelli PZero Nero tires and new battery, factory Harmon Kardon sound system with 6 disc changer, sunroof. Garage-kept and in amazing condition. Manual 5 speed. NADA Guide \$10,800 - \$12,000. Asking \$10,300. R. Martello. (630) 728-1935.

1995 JEEP - Grand Cherokee Laredo 4x4, 6 cyl, 242 cu. in., 141K miles, moss green color, AC, AT, PS, ABS, power windows, partial 4WD, new radiator, 4 new radial tires, 60,000 mile warranty. Best offer. Ken Natesan. (630) 835-7611.

HOUSING

HOUSE/SALE - Downers Grove, 3 bedroom, 2 bath, cul-de-sac location near McCollum Park, 7 miles from Argonne. Screened porch, large yard, new HVAC and carpets. MLS 06915272. \$315,000. David Ayres. (630) 969-0192.

HOUSE/SALE - 3 bedroom, 2 bath, ranch on quiet cul-de-sac in Bolingbrook. Close to the Promenade. \$229,000. Rose Lee Pausche. (630) 739-0952.

APARTMENT/RENT - One upper bedroom, downtown Morris, no pets. Short term available. Water, stove and refrigerator furnished. Background check and security deposit required. \$525/month. Loren Knoblich. (815) 942-9815.

HOUSE/RENT - Unfurnished, 3 bed, 2 bath, finished basement. 2 1/2 car detached garage, large backyard, appliances included. 1.8 miles from Argonne. One month rent + \$1800 security deposit required. Available Sept. 1. \$1800/month. Ron Shepard. (630) 312-8506 or peggy-shepard@comcast.net.

WANTED

CARPPOOL - Looking for someone to share the ride a couple of days a week if possible to reduce my carbon footprint. Live in Glen Ellyn (northside). Enter I-355 at North Avenue (from the west side). Tried carpool connection, but no luck. Regular lab hours. Michael Rose-nov. (630) 430-7362. ▀