



SOURCE

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Women Issues Report



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APS TASK FORCE ON WOMEN ISSUES REPORT

"You cannot hope to build a better world without improving the individuals. To that end, each of us must work for our own improvement and, at the same time, share a general responsibility for all humanity." — *Marie Sklodowska Curie*



Marie Sklodowska Curie is best known as the discoverer of the radioactive elements polonium and radium and as the first person to win two Nobel prizes. Together with her husband, Pierre, she was awarded half of the Nobel Prize for Physics in 1903, for their study into the spontaneous radiation discovered by Becquerel, who was awarded the other half of the prize. In 1911 she received a second Nobel Prize, this time in Chemistry, in recognition of her work in radioactivity. Her radium studies were key to a basic change in our understanding of matter and energy. Her work not only influenced the development of fundamental science but also ushered in a new era in medical research and treatment.

Source: <http://www.aip.org/history/curie/>
(Photo: ©2000-2003 American Institute of Physics)

A chain of reports on the working conditions for women at Argonne has culminated with the first-ever in-depth look at "Improving the Work Environment at the Advanced Photon Source." This summary report from the "Task Force on Improving the Work Climate for Women at the APS," and APS management responses to the issues it raises, promise to better the lot of all APS employees.

This sequence of events began with a January 2002 visit to Argonne by the Committee on the Status of Women in Physics of the American Physical Society (CSWPAPS). The CSWPAPS had as its charter the "review (of) the status of Women in Physics at the Argonne National Laboratory." Soon after the American Physical Society committee issued its report (available at <http://inside.anl.gov/community/apsreanl.pdf>), APS ALD Murray Gibson formed the "APS Task Force on Women's Issues." This group was empowered to delve into the concerns raised by the CSWPAPS visit as they specifically applied to the APS, as well as other matters the committee encountered, and to issue a report that would help management formulate solutions. The task force comprised APS employees Trudy Bolin (XFD), Mark Erdmann (XFD), Kelly Jaje (ASD), Liz Moog (XFD, Chair), Susan Strasser (AOD), and Judi Yaeger (XFD). The committee's report and APS management's response to the findings can be found [on the APS Web site](#).

In summing up her experience leading to the report, Liz Moog said, "I really appreciate the openness of upper management in encouraging the airing and discussion of these issues. And I'm impressed that we were seeing changes, such as those in the performance evaluation process and the explanations about how raises and promotions are determined, even before the report was completed. The change in the family-leave policy, which now allows a new parent to preserve some accrued vacation time during the leave, will make it easier to stay home with a sick baby."

Task Force member Kelly Jaje (ASD) found herself particularly interested to hear the opinions and viewpoints of other women at APS, many of whom she had never met. "The Task force held a series of informal lunches for 100- and

Task Force cont'd. on page 2



Dorothy Crowfoot Hodgkin (left in photo) was awarded the 1964 Nobel Prize in Chemistry for her determinations by x-ray techniques of the structures of several important biochemical substances. She was only the third woman to win the chemistry prize throughout the 63-year history of the award. The other two women were Marie Curie in 1911 and her daughter, Irene Joliet-Curie, in 1935. Among Hodgkin's greatest works were the determination of the structures of penicillin; of vitamin B12, the essential vitamin that prevents pernicious anemia (1957); and of insulin, a puzzle on which she worked from 1934 to 1972.

(Photo: Chemical Achievers, ©2000, The Chemical Heritage Foundation)



The members of the APS Task Force on Women's Issues meet with APS ALD Murray Gibson to present their report. Left to right: Gibson, Judith Yaeger (XFD), Mark Erdmann (XFD), Susan Barr Strasser (AOD), Elizabeth Moog (XFD); Trudy Bolin (XFD), and Kelly Jaje (ASD).

Task Force *cont'd. from page 1*

600-level women and women technicians and union members at the APS," she said. "We basically listened to people talk about their work experience. As you can see from the Task Force recommendations, we found that all grade levels had common issues and concerns. Those conversations were the basis for most of the report content."

Judi Yaeger (XFD) came away from her time on the task force encouraged. "This was a good thing to do for a number of reasons, and not every organization would be responsive enough to do it. Developing this report gave women an opportunity to express their concerns about their jobs and roles at the APS."

The APS task force report pinpoints seven areas of concern, each of which is addressed by an APS management response that either notes a remedy already in the works or proposes proactive solutions. The seven include:

- Establish fairness in job classification and salary;
- Assure quality supervision;
- Provide clear definitions on Human Resources (HR) policies, procedures, and benefits;
- Improve communication;
- Establish an APS Committee on Diversity, with clear support from senior management;
- Change the culture at APS; and
- Work with ANL to improve the service provided by the Argonne Child Development Center.

In the foreword to its response, APS management notes that, "We sincerely believe that our efforts will not only be rewarded by a better work environment for women, but for all our employees. And a better work environment will help APS succeed in its goal to be the best synchrotron source in the world, as it will bolster our efforts to attract and retain the best employees... We must lead the way in creating an outstanding work environment for users as well, one which embraces science and nurtures scientists, no matter who they are."

The response addresses each task force concern in detail. For instance, the task force report identifies several issues related to fairness in job classification and salary. These are: clearer definitions on career paths; more disclosure on job classifications, promotions, salary, and bonuses; more information on statistics of external salary surveys; clearer definition of promotion guidelines; perceived disparity of number and speed of promotions (female vs. male); and ambiguities in the merit and compensation system. The management response calls this last "one of the biggest areas of concern" and details current and proposed initiatives,

"This task force was a good thing to do for a number of reasons, and not every organization would be responsive enough to do it."

including the sweeping changes resulting from recommendations of the Lab-wide committee on Performance Evaluation Process improvement. Also offered are an analysis of gender equity in pay and performance evaluation within APS, and data from ANL-HR market surveys, which show that the Laboratory's pay rates for secretaries are in line with those of employers in this area and that APS secretarial salaries are generally in line with the rest of ANL. These data notwithstanding, the response calls for the use of the 108 level to give promotion opportunities to 106-level staff, through increasing responsibilities at the divisional and APS levels.

APS management has accepted as sound advice the task force recommendation that a standing "APS Committee on Diversity" be formed to provide ongoing information on these and other related issues. "I hope, said Moog, "that this new committee will help to make the APS an even better place to work for women and for all employees." ○

PERSONNEL...

APS OPERATIONS DIVISION: WILLIAM KLIMOWYCH has joined the MCR Operations Group as a new Operator. Prior to coming to the APS, Bill worked at the ANL Energy Systems Division pilot plant facility • DIANE WILKINSON is now the secretary under the Diagnostics and Information Systems Support Group. Diane had been working in the Temporary Service Provider program and was assigned to the ANL-OTD •

ACCELERATOR SYSTEMS DIVISION: JOHN CARWARDINE has accepted the position of Associate Division Director for Electrical Systems in ASD effective immediately. John has extensive electrical engineering experience on accelerator systems. Most recently, he served as the Group Leader of the Electrical Systems Group. In his new role, he will oversee the activities of the Electrical Systems Group, the Controls Group, and the RF Group and will serve as a point of contact for electrical and electronic issues for the APS as a whole. JOHN NOONAN remains Associate Division Director for



Mechanical Systems, overseeing the Mechanical Engineering, Vacuum, Survey and Alignment, and Design and Drafting groups. The Accelerator Physics Group will report directly to ASD Division Director ROD GERIG.

PERSONAL...

Congratulations to DAWN and ALI MASHAYEKHI (both XFD) on the birth of ERIK EVENTINE on August 8, 2003. Erik weighed 7 lb, 8 oz, and was 21 in. long • Congratulations to LAURA and DARRYL REIGLE (AOD) on the birth of EMILY LYNN, who was 8 lb, 2 oz, and 21 in. long when she came into this world on August 14, 2003.

The next APS Colloquium will take place

MEETINGS, ETC...

on Wednesday, October 1, 2003, in the APS auditorium (Bldg. 402). NIGEL GOLDENFELD, Professor of Physics at the University of Illinois at Urbana-Champaign, will speak on "My Manhattan Project: A Physicist's Adventures on Wall St."

ASD's Kim Appointed Senior Scientist, Promotes Accelerator Physics Collaborations

Kwang-Je Kim (ASD-ADM) has been appointed Senior Scientist (710), the highest technical grade at ANL.

Kim originally trained as a theorist in elementary particle physics, but switched to accelerator physics in 1978 when he joined the Bevatron group at Lawrence Berkeley Laboratory (working under a group leader by the name of Hermann Gruner). He

Kwang-Je Kim

was soon swept up by the excitement in an emerging area of accelerator physics dealing with synchrotron radiation and free-electron lasers, and the excitement continues to this day. Kim's research resulted in several papers that became basic references in this field. He also made significant contributions to major laboratory projects, such as the Advanced Light Source.

Kim came to Argonne in 1998, attracted by the huge opportuni-



ty for free-electron laser development and other forefront accelerator physics at the APS, as well as the intellectual depth of The University of Chicago, where he is a part-time professor of physics.

Last year, he initiated an effort to coordinate accelerator research at Argonne, known as CARA, which received wide support from scientists and managers at ANL and beyond. This year he is expanding the coordination effort outside Argonne to include institutions in the greater Chicago area (a unique venue, with two leading national laboratories within 30 miles of each other) and universities interested in accelerator physics. By formalizing the collaboration under the name of the Institute of Advanced Accelerator Physics, he is hoping that in future decades, the Chicago area will be a strong contender for multibillion-dollar accelerator projects, such as a linear collider for high-energy physics and/or a fourth-generation x-ray facility. ○



JOHN VACCA, JON LILGE, MIKE O'CONNOR, BRAD STACY, ERIC PETERSON, and PAUL NIQUETTE (all AOD) were awarded 2002 Argonne Director's Awards for outstanding achievement and invaluable contributions to the Laboratory. The award recognizes their positive impact on the APS radiation safety program through the creation of a complete shielding configuration database for all of the APS accelerators. Called the "Health Physics Technician's Database," it monitors nearly 500 pieces of shielding in the APS accelerators that are digitally photographed when they are removed, modified, or redesigned. Pictured at left are: (standing) Murray Gibson (APS ALD); the late Tony Rauchas (AOD DD), Peterson, O'Connor, Vacca, Richard Hislop (AOD ADD); (seated) Lilge, Niquette, and Stacy, at the time the six received Pacesetter awards for the same accomplishment. The Director's Awards recipients are selected from the best of the previous year's Pacesetter Awards.

Spectrum Club Surveys the Scene

The form and content of future APS-wide social events is becoming clearer, thanks to a survey of 695 employees and resident users conducted by the APS Spectrum Club steering committee (APS SC²). The APS SC² is the all-volunteer organization that management has empowered to fund and organize parties that are open to all APS employees and users (excluding milestone parties, which are sponsored directly by management).

In recent years, the social schedule has included a summer picnic at Argonne Park and a winter holiday luncheon at the Argonne Guest House. While the Argonne Park picnic has been a longtime mainstay, the winter holiday party began as an off-site dinner dance, then morphed into an off-site cocktail party, an on-site cocktail party, and lastly into the current luncheon buffet. Reasons for the holiday-party evolution were many, the primary ones being the costs associated with an evening out and difficulties scheduling a suitable venue months in advance.

"Steering committee members have heard comments that people were tired of the holiday buffet," said Patty Cameli (ASD), who is the APS SC² treasurer, "and attendance at the picnic has been dropping off. We want to be sure that we're organizing the kinds of events that people will attend." The last survey of employee sentiment on this subject was carried out several years ago. So, Cameli and the other members of the steering committee (see the list at the end of this article) drew up the survey questions. "For instance, someone suggested that an Oktoberfest might be a nice alternative to the picnic, so we included that in the survey," she said.

Of the 695 surveys sent out, 99 were returned either partially or completely filled out. The numbers break down as follows:

To the question, "Would you attend an APS Oktoberfest held in the fall," 80 respondents voted "yes," 17 "no." A plurality of 41 voters chose as the Oktoberfest location the patio outside the 402 gallery (over Argonne Park: 19; 617

lower level: 13; the Guest House: 9; and off site: 4). Fifty-five votes were cast for the ever-popular Friday as the Oktoberfest day of choice (Monday through Thursday pulled 30 votes total). "Immediately after work" was the time selected by 53 voters (33 preferred lunchtime). As to the question of mixing children with festing, 63 said "no" and 16 voted "yes." (See item on page 6.)

Survey results on the central issues related to the holiday party were covered in the last issue of *The Source* (<http://www.aps.anl.gov/apsnews/source11.pdf>). A quick recap of the winning plan: a Friday lunchtime buffet at the Guest House.

Other holiday-party-related issues settled by the survey were: the question of attending any APS holiday party in December (83 will, 13 won't, 1 offered an ambivalent "yes and no," and 1 was an undecided "probably"); and choice of musical entertainment ("Encore musical performance by APS personnel": 33; holiday music via CD: 24; DJ: 23; no music: 4; ANL choir: 1).

Because ANL funds cannot be used to support social events, the Spectrum Club holds APS clothing sales, raffles, and other types of fundraisers to subsidize ticket prices for the parties they organize. The survey also sought guidance on these important activities.

Gift-basket fund raisers proved to be a popular item, with 59 yeas to 23 nays, although one person had "no interest in it," while another felt the subject "doesn't matter."

Clothing sales drew a lot of interest. Sixty-nine respondents felt that the clothing sale should be held twice a year, 21 opted for once a year, and 6 said "No sale." Write-in votes were also cast for "... one or two stock items...year round," "Ongoing," and "Once a month would be better!" The survey also solicited suggestions for APS-logo-festooned items to be sold, and there were many. They ranged from the standard t-shirts, golf shirts, caps, and other clothing items usually offered at Spectrum

Spectrum Club cont'd. on page 6

APS SCIENCE

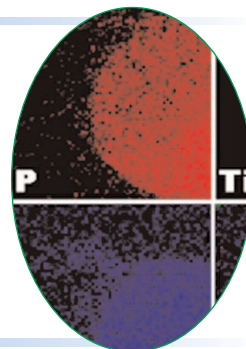
Research at the ADVANCED PHOTON SOURCE

If you haven't visited the "APS Research Highlights" page, located at the URL below, here are some examples of the information that can be found there (be sure to bookmark the page for future visits).

<http://www.aps.anl.gov/highlights/hilitesarchive.html>

SHINING LIGHT ON A NEW GENE THERAPY

A novel, light-activated hybrid "nanodevice" composed of titanium oxide nanocrystals and carefully selected segments of DNA could one day be used to target the defective genes that play a role in cancer, neurological diseases, and other conditions. The work that has opened this possibility was performed by scientists from Argonne National Laboratory and Northwestern University.



(LEVITATING MATERIALS 1): DEMONSTRATION OF THE INFLUENCE OF LOCAL ICOSAHEDRAL ORDER ON THE NUCLEATION BARRIER OF METALLIC LIQUIDS

It has been known for over 50 years that, under carefully controlled conditions, metallic liquids can be cooled far below their equilibrium melting temperatures (undercooled) before crystallization takes place. This suggests that the homogeneous nucleation mechanism responsible for formation of the solid phase must present a large barrier to phase change. To explain this surprising result, F. C. Frank theorized that as metallic liquids cool, local structures develop in the liquid phase containing icosahedral short-range order, which is incompatible with the long-range periodicity of the crystalline phase, and that this incompatibility creates a barrier to the formation of the crystalline phase. The first direct experimental confirmation of Frank's hypothesis took place at MU-CAT's 6ID-D beamline at the Advanced Photon Source. (This work was featured on the cover of the May 2003 issue of Physics Today.)



(LEVITATING MATERIALS 2): INELASTIC X-RAY SCATTERING REVEALS MICROSCOPIC TRANSPORT PROPERTIES OF MOLTEN ALUMINUM OXIDE

The transport properties of high-temperature oxide melts are of considerable interest for a variety of applications, including modeling the Earth's mantle, optimizing aluminum production, confining nuclear waste, and investigating the use of aluminum in aerospace propulsion. Researchers from three French research centers, Spain's University of the Basque Country, and Argonne studied molten aluminum oxide using high-resolution inelastic x-ray scattering (IXS) at X-ray Operations and Research beamline 3-ID-C at the APS. The measurements were performed in a containerless environment.



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Argonne National Laboratory is operated by The University of Chicago for the U.S. Department of Energy, Office of Science



Oktoberfest Comes to the APS

The brats will sizzle and the barrels will roll at 5:00 p.m. on Friday, October 10, when the APS Spectrum Club kicks off Oktoberfest 2003.

Bratwurst, sauerkraut, German potato salad, apple strudel, soft drinks, beer, and wine (cash bar) - you'll think you're in Bavaria, not the 402 Gallery, where the food will be served beginning at 5:30 p.m. and the *Kameradschaft** and the *Festlichkeit** will carry on until 9:00 p.m.

The cost is \$8.00 per person (sorry, no refunds). Tickets can be purchased from September 22 through October 8 from these *hilfsbereit** volunteers:

Cyndi Salbego	(436-E006)
Laura Morisco	(438-A003)
Michelle Leighton	(401-C1239C)
Karen Kucer	(401-C2258)
Barbara Meurer	(401-B3163A)
Barb Dalton	(401-B4163C)
Sara Hahn	(401-B4205)
Cathy Eyberger	(401-C4249)
Anne Owens	(401-B4148C)
Jane Pransky	(401-B4148D)

Don't forget to buy *das Lotterielos* (raffle tickets, that is) for the "50/50 Raffle" from these same volunteers (these tickets are on sale from September 22 through October 9). Tickets are \$1.00 each, with 50 cents from each ticket going to subsidize the cost of Oktoberfest 2003, and the other 50 cents going into a prize pool. The name of the winner of this prize will be drawn during Oktoberfest. The winner need not be present, but you'll be missing *der Heidenspaß** if you're not there!

*Need a translation? See <http://dlct.leo.org/>

Spectrum Club *cont'd. from page 4*

Club sales, to new ideas, including pens, sunglasses, cases for sunglasses, visors, APS note cards, commemorative APS photos, framed slices of vacuum chamber, magnets, magnetic frames, coffee cups, bumper stickers, key chains, blankets, and crystal cubes laser-etched with 3-D APS and ANL logos.

And what other types of fund-raisers did the resourceful respondents suggest? Raffles for a turkey, tickets to a play, restaurant and/or department store gift certificates, the honor of throwing a pie in the face of selected members of management, a weekend stay at a hotel, a dinner at "a fancy restaurant," and larger prizes (TV, DVD player, etc.). Suggested activities included a craft fair, a used book sale, a bake sale, a candy sale, a plant sale (in the spring), detailing cars, washing cars, a white elephant auction, and an interdivisional volleyball (or softball or tennis) tournament with entrance fees.

For now, we'll have to look forward to the next APS clothing (etc.) sale, which will be held in the fall, and the APS Oktoberfest.

The APS SC² is always in need of volunteers. If you'd like to be one of them, or if you have more ideas about Spectrum Club-sponsored activities, contact any of the steering committee members listed below:

Yeldez Amer (AOD, yga@aps.anl.gov), Patty Cameli (ASD, cameli@aps.anl.gov), Barb Dalton (AOD, dalton@aps.anl.gov), Cathy Eyberger (ASD, cee@aps.anl.gov), Sara Hahn (XFD, hahn@aps.anl.gov), Julie Hlavacik (AOD, jh@aps.anl.gov), Marvin Kirshenbaum (AOD, kirshen@aps.anl.gov), Barb Meurer (XFD, bmeurer@aps.anl.gov), Anne Owens (AOD, aowens@aps.anl.gov), Jane Pransky (AOD, pransky@aps.anl.gov), and Cyndi Salbego (NE-CAT, csalbego@aps.anl.gov). ○

APS Annual Report (*APS Science 2002*) Available on CD

APS Science 2002 — *The Annual Report of the Advanced Photon Source* (ANL-03/15) is now available in .pdf format on a CD. The CD is enclosed in a plastic case that can be clipped into a 3-ring binder. To request one or more copies, send an email to apsinfo@aps.anl.gov.

Printed copies of this year's annual report (as well as the latest CD compendium of activity reports) are also available via requests to apsinfo@aps.anl.gov.

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The Source is a vehicle for enhancing communications within the APS community on matters of employee and user interest, technical progress, ES&H, research programs, and management news.

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