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CSWP

Gazette

A Newsletter of the Committee on the Status of Women in Physics of the American Physical Society

THE BIOLOGICAL CLOCK AND THE TENURE CLOCK

One of the most stressful conflicts encountered by a professional woman is that between career and family responsibilities. The problem is particularly difficult for women physicists in academia because of the enormous commitment of time that their institutions expect from tenure-track faculty. Male colleagues are generally much freer to spend long hours at the workplace. Situations and priorities vary, but some women physicists with children are faced with very difficult choices.

Deborah Watson, a physicist at the University of Oklahoma, has high praise for

The editor for this issue is Patricia Dehmer; assistant editor is Amy Halsted.

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her own institution's policies for accommodating child-bearing and childrearing faculty. However, she has expressed concern for her colleagues whose institutions are not so affirmative. In some cases, a woman may be under such pressure to return to work that she may do so before she is emotionally or physically ready. As Watson put it: ". . . faculty women who are caught between the biological clock and the tenure clock are in untenable positions—afraid to speak out and ask for time off or reduced load appointments since such requests can be viewed as a lack of commitment to their professions thus jeopardizing their tenure and careers.'

Watson points out to *Gazette* readers that the American Association of University Professors (AAUP) and the Association of American Colleges have issued joint policy statements on principles on leaves of absence in general, and particularly child-bearing, childrearing, and family emergency leaves. The statement is reprinted here, with the permission of AAUP, in the hope that it may provide support and options for women (and men) faculty who are both professionals and parents.

AAUP and AAC Joint Statement on Leaves of Absence for Child-bearing, Child-rearing, and Family Emergencies

(Reprinted from Summer 1973 AAUP Bulletin)

The joint Statement of Principles on Leaves of Absence, adopted in 1972 by the American Association of University Professors and the Association of American Colleges, recommends that leaves of absence be granted for professional growth and intellectual achievement, for public or private service out-

side the institution, and for "illness, recovery of health, and maternity." The following statement on leaves of absence for child-bearing, child-rearing, and family emergencies, prepared by Committee W on the Status of Women in the Academic Profession, supplements and amplifies this last provision of the Statement of Principles on Leaves of Absence.

Committee W recommends that colleges and universities provide leaves of absence to faculty members for child-bearing, child-rearing, and family emergencies. Such leaves are to assist faculty members with parental responsibilities in meeting their obligations both to their professional careers and to their families, and to prevent the loss to the institution and to the academic community of substantial professional skills.

Career patterns of academic men and women vary. Academic women differ in their desire to continue or to interrupt their professional careers during the child-bearing and child-rearing years. Couples differ in the extent to which they wish to share family responsibilities. Some faculty members may wish to take a leave of absence from their professional positions to care for their children, others wish to combine parental and professional responsibilities, while still others prefer to retain their professional affiliation on a fulltime basis throughout their childbearing and child-rearing years.

An institution's policies on faculty appointments should be sufficiently flexible to permit faculty members to combine family and career responsibilities in the manner best suited to them as professionals and parents. This flexibility requires the availability of such alternatives as longer-term leaves of absence, temporary reductions in workload with no loss of professional status, and retention of full-time affiliation

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The "CSWP GAZETTE," a quarterly newsletter of the American Physical Society Committee on the Status of Women in Physics (CSWP), is mailed free of charge to all women listed on the computerized "Roster of Women in Physics," all US physics department chairs, and others on request. Because editorial responsibility rotates among CSWP members, please address all correspondence to: "CSWP Gazette," The American Physical Society, 335 East 45 St., New York, NY 10017.

throughout the child-bearing and childrearing years.

Institutional policies which require the termination of the appointment of a woman faculty member because she becomes pregnant penalize the individual unfairly. Moreover, policies which mandate the timing and duration of a leave of absence for pregnancy and childbirth do not take cognizance of particular medical needs or individual circumstances. Institutions which customarily or by policy allow paid absences for illness or temporary disability, but which deny equivalent absences for disabilities resulting from pregnancy or childbirth, discriminate against women.1 Allowing leaves of absence for illness or temporary disability only in cases where faculty members are themselves ill or temporarily disabled disregards the need to provide short-term care for family members in serious emergencies. In addition, it may prevent fathers from assuming responsibilities in connection with the birth of children.

Most colleges and universities provide for paid short-term leaves of absence, through formal or informal arrangement, for faculty members who are ill or temporarily disabled. The conditions and duration of compensation for short-term leaves for pregnancy, childbirth, or family emergencies involving spouse, parents, or children, should be analogous to those for leaves granted for temporary disability or personal emergencies. The timing and duration of absence in such cases would be determined by mutual agreement between the faculty member and the institution, and should be based on medical need, the requirements of the educational program, and individual circumstances. Compensation during short-term leaves of absence for child-bearing or the serious illness of a family member should be consistent with customary institutional practices in cases of illness or temporary disability.

The rearing of children should be considered appropriate grounds for a leave of absence of a semester or more, and such leaves should be available to both men and women faculty members. The timing and duration of such leaves should be determined by mutual agreement between the faculty member and the institution. Family members on child-rearing leaves should receive the same considerations with respect to salary increments, insurance coverage, retirement annuities and the like, as are received by faculty members on leave for public or private service outside the institution.

The alternative of a temporarily reduced workload should be available to faculty members with child-rearing responsibilities (see Committee W's Statement on Senior Appointments with Reduced Loads).²

Individual and institutional obligations in connection with such leaves, including the timing of a tenure decision, should be those set forth in applicable provisions of the Statement of Principles on Leaves of Absence.3

¹See the 1972 Sex Discrimination Guidelines of the Equal Employment Opportunity Commission.

^{2,3}For copies of the above-mentioned statements, contact the AAUP, 1012 14th Street, N.W., Suite 500, Washington, DC 20005.

SEEP AND PACE: PROGRAMS THAT TURN STUDENTS ON TO PHYSICS

With a finger on the pulse of the physics workforce, Beverly Citrynell, Manager of the Career Placement Division of the American Institute of Physics, is particularly aware of the underrepresentation of women and minorities in physics, and of the dwindling percentage of young Americans entering science and engineering fields. Citrynell has decided to do something about the problems she sees. Project SEEP (Students to Explore and Experience Physics) and PACE (Physics and Career Enlightenment) are Citrynell's brainchildren, and she hopes that Gazette readers will help in these efforts.

SEEP brings local middle school students to the site of an APS general and provides activities meeting, designed to stimulate their interest in physics and science. The first SEEP program was held at the APS/AAPT joint meeting in San Francisco last January. Citrynell had contacted Dr. Laura Alvarenga, Assistant Superintendent of the San Francisco Unified School District. This district has 16 schools of sixth to eighth grade students and a predominantly minority population. When Dr. Alvarenga approached the school principals about participating in the program, the "response was more than enthusiastic"; all wanted their schools to be selected. Due to limited space, only 125 students could be accommodated, so selection was made by drawing lots, with 25 students from each of five schools attending.

The students arrived promptly and were well behaved, Citrynell says. In the morning the whole group was addressed by Jack Wilson, Executive Officer of AAPT, and by William W. Havens, Jr., Executive Secretary of APS. There were also two demonstrators, John Taylor of the University of

Colorado, Boulder, and Joseph Meyer of Triton College in Illinois. During an intermission, students had access to a Van de Graaff generator and other equipment, provided by City College of San Francisco.

In the afternoon the group circulated in three rooms, in which a total of six physicist/demonstrators provided hands-on activities for the students. Acids and bases, thin films, and superconductivity were among the demonstrators' topics. Students seemed most excited and interested in this portion of the program, judging from their rapt expressions in Citrynell's photos.

Students and teachers who participated were very enthusiastic, and Citrynell plans to repeat the program at the APS/AAPT meeting in Atlanta. She is seeking demonstrators, and hopes to include several women who can relate well to children of that age, and who can convey that science is fun and interesting and that it is a good career too.

Citrynell's PACE program is an effort to develop a list of women physicists willing to speak at career-day programs given by local middle schools. She decided to develop such a list in response to the requests she receives from schools in the New York metropolitan area. The list will be expanded and will eventually cover more states. Citrynell emphasizes that a speaker would be un-



Rebecca Olien from the Randall Elementary School, Eau Claire, WI, experimented with thin film in "Bubbles—Shapes, Surfaces, Colors."

der no obligation to participate more often than she wished.

If Gazette readers are interested in participating in PACE or SEEP, they should fill out the Colloquium Speakers List form in this issue, following the directions which accompany it. Ms. Citrynell may be contacted directly at the American Institute of Physics, 335 East 45th Street, New York, NY 10017, or by phone at (212) 661-9404.

THE CSL FORM HAS A NEW LOOK

The enrollment/revision form for the

Colloquium Speakers List (CSL) is contained in this issue of the Gazette. There are two changes of which readers should be aware. First, a subfield of accelerator physics has been added to the form. It is indicated in the form as simply "Accelerators." The second change, which will affect more people, is the addition of a new box on the top part of the form where the respondent can indicate a willingness to participate in Career-Day or similar programs at the middle school or high school levels (see related article in this issue on SEEP and PACE). This willingness will be indicated in the list by a dagger beside the name in the geographical listing section of the CSL. Anyone wishing to send in the form with this information only may do so, and the listing will appear only in the geographical section of the CSL.

Those of you who responded to the recent survey of all current CSL listees are invited to resubmit this form if you wish to indicate interest in Career-Day talks. If you have already responded to that survey with your update, please simply fill in your name, check the appropriate box(es) in the new section of the form, and send it in. If you have any other changes, you may indicate them on the resubmitted form. The CSL will be printed in early August this year, so you should have your corrections in by that time. You may send electronic mail to KBL@OPTIX.ATT.COM instead of using the form.



Susan Hulsey from Lawrence Livermore National Laboratories demonstrated "Acids and Bases—What they are and how we use them in daily life," at the SEEP program presented at the San Francisco APS/AAPT meeting last January.

COLLOQUIUM SPEAKERS LIST ENROLLMENT/MODIFICATION FORM

The PHYSICS COLLOQUIUM SPEAKERS LIST is compiled annually by the American Physical Society Committee on the Status of Women in Physics. Comments or questions, as well as modifications or new entries for the 1989/90 CSL should be addressed to

Ken Lyons, 1A126 AT&T Bell Laboratories 600 Mountain Ave. Murray Hill, NJ 07974

To modify an existing entry, or to make a new one, please fill out a copy of the form below and return it to the address above. PLEASE PRINT CLEARLY OR TYPE! Check whether this is a modification of an existing entry (_____) or a new entry (_____). Phone: Name: Short name of institution (for use in second section of CSL):____ Please check the box(es) below if you would be available for occasional "Career-Day" presentations Address: (please use no more than three lines of about 38 char maximum per line) to students in ☐ Middle Schools ☐ High Schools zipcode_ CSWP Roster registration number, if known: _____ To cancel a listed talk, give the title as it appears in the list and the section(s) where it is to be cancelled. If you wish to delete all old entries, just enter "ALL", and register the new titles in the next section. Use an additional sheet if necessary: To register a new title, give the title as you want it to appear (first word and proper nouns capitalized) in the left column below. Then check the section(s) where it is to be inserted. Also check the top box if this is a CORRECTION of an existing title. If more than 4 talks are registered, please use an additional copy of this form, stapling them together. □ CORRECTION Title ☐ Bio/Medical □ Chem/Statistical □ Astrophysics 1. ☐ Fluid/Plasma □ Env/Energy □ Cond. Matter ☐ Interface/Device ☐ Molec/Polymer ☐ Geophysics ☐ Nuclear/Particle ☐ Accelerators □ Optics/Opt.Phys. □ Talks for General Audiences □ CORRECTION Title ☐ Chem/Statistical ☐ Bio/Medical □ Astrophysics ☐ Cond. Matter ☐ Env/Energy □ Fluid/Plasma ☐ Interface/Device ☐ Molec/Polymer □ Geophysics □ Nuclear/Particle □ Accelerators □ Optics/Opt.Phys. □ Talks for General Audiences □ CORRECTION Title □ Bio/Medical □ Chem/Statistical □ Astrophysics Cond. Matter ☐ Env/Energy □ Fluid/Plasma ☐ Geophysics ☐ Interface/Device ☐ Molec/Polymer □ Nuclear/Particle □ Accelerators □ Optics/Opt.Phys. □ Talks for General Audiences □ CORRECTION □ Bio/Medical □ Chem/Statistical ☐ Astrophysics □ Env/Energy □ Fluid/Plasma Cond. Matter ☐ Interface/Device ☐ Molec/Polymer □ Geophysics □ Nuclear/Particle □ Accelerators □ Optics/Opt.Phys. □ Talks for General Audiences

QUESTIONNAIRE FOR THE ROSTER OF WOMEN IN PHYSICS

The Roster of Women in Physics is a data base compiled by the American Physical Society Committee on the Status of Women in Physics. It is used to form a mailing list for the CSWP Gazette, to select women to receive announcements of probable interest to them, and to compile demographic data on women physicists. The Roster will not be made available to commercial or political organizations as a mailing list, and all information provided will be kept strictly confidential. Being listed in the Roster only identifies you as a physicist, and does not imply agreement with or support for the activities of CSWP. Please give a copy of this form to other women who work as physicists and/or have a degree in physics if you think they may not be listed in the Roster.

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The Roster of Women in Physics is compiled by the American Physical Society Committee on the Status of Women in Physics. (KBL for CSWP 8/5/88)

1989 LAURA EISENSTEIN AWARD TO IRENE YU

The Laura Eisenstein Award was established in 1986 by the Department of Physics at the University of Illinois at Urbana-Champaign in cooperation with the CSWP, to encourage women to undertake studies leading toward a degree in physics. To that end the award recognizes that woman at the University who has achieved the highest academic excellence in her undergraduate studies or who has distinguished herself in teaching or research while pursuing a graduate degree.

The 1989 Laura Eisenstein recipient is Irene Yu. Ms. Yu has distinguished herself in her undergraduate studies and in her research. She has attained a grade point average of 4.9, out of 5.0, and is conducting research on magnetic polymers with Prof. M.B. Salamon.

The CSWP congratulates Ms. Yu on her accomplishments, and looks forward to the fulfillment of her demonstrated potential to become an outstanding physicist.

CHERRY A. MURRAY IS 1989 WINNER OF MARIA GOEPPERT-MAYER AWARD

APS Fellow Cherry A. Murray of AT&T Bell Laboratories has received the 1989 Maria Goeppert-Mayer Award, and the CSWP extends its congratulations to her. Her citation reads: "For the elegant and direct experimental methods she used to discover 'two stage' melting in two-dimensional arrays of polystyrene spheres, her elucidation of the role defects play in this phenomenon and for pointing out the connection between her discovery and recent theories of melting in two dimensions."

The Maria Goeppert-Mayer Award was established in 1986. The award's purpose is to recognize and enhance outstanding achievement by a woman physicist in the early years of her career, and to provide opportunities for her to present these achievements to others through public lectures. In this way the award not only acknowledges the achievements of an individual, but it in-

creases her visibility and provides inspiration and a role model for students who hear her speak.

The award consists of \$2,000 plus a \$3,000 travel allowance to provide opportunities for the recipient to give lectures in her field of physics at four institutions of her choice and at the meeting of the Society at which the award is bestowed. The award is supported by a generous grant from the General Electric Foundation.

LETTER TO THE EDITOR

To the Editor

The Academic Senate of the University of Bremen has decided to establish a professorship for feminist research/women's studies in the natural sciences. I am writing this letter as a member of a planning committee which is to develop a description of this position as well as to decide upon its institutional form.

discussions Preliminary among members of the committee have led to two major questions which are currently being explored with "experts" in Germany and Austria. The first question concerns the meaning of "feminist research" in the natural sciences: Does the feminist perspective concern the genuine research activity of natural scientists, that is, does it touch or perhaps change in any way the usual research procedures or does it refer "only" to the metatheoretical level of the scientific process (cf., the discourse on subject-object split, value neutrality, "domination of nature," etc.)?

The second question, flowing from the first, is whether the job description should require both laboratory research and feminist research. Would this combination be at all realistic and/or feasible? Can anybody be at the same time a good neurobiologist, for example, or a nuclear physicist, and a feminist scholar? Which area(s) of the natural sciences lend themselves best to such a combination?

It would be most helpful for our committee to learn about the experience of your readers where they have fulfilled dual roles as natural scientists and feminist researchers. Unfortunately, as

far as feminist research in the natural sciences is concerned, there is no "model case" in the German speaking countries which we could study and analyze. Hence we are anxious to learn from the American experience. I invite your readers to write to me about their own experiences as feminist natural scientists. Letters may be sent to me at the Department of Social Sciences/SB9, Univ. of Bremen, 2800 Bremen 33, West Germany.

Sincerely, Dr. Marlis Krueger Professor of Sociology and Philosophy of (Social) Science

THREE WOMEN PHYSICISTS RECEIVE ALFRED SLOAN RESEARCH FELLOWSHIPS

Among the 91 outstanding young scholars and researchers selected to receive Sloan Research Fellowships are three women working in physics. The three are: Elise Knittle, University of California, Santa Cruz; Patricia Rankin, University of Colorado; and Katherine Freese, MIT.

The average age of the 1989 Sloan Fellows is just under 32 years. They were selected from among hundreds of highly qualified scientists in the early stages of their careers on the basis of their exceptional promise to contribute to the advancement of knowledge. Candidates for the fellowships are nominated by senior scholars familiar with their talents.

Albert Rees, president of the Foundation, said in announcing the awards, "We were most pleased that there are twelve women among the new fellows, the largest number in more than a decade. We hope that this indicates a longer-run increase in the number of outstanding women attracted to academic careers in science."

The Sloan Research Fellowships were established by the Alfred P. Sloan Foundation in 1955 as a means of stimulating fundamental research by young scholars at a time in their careers when government and other support is difficult to obtain. The grants of \$25,000 each for a two-year period are administered by each fellow's institution and are designed to permit the

greatest possible freedom and flexibility for the researchers. Fellows need not pursue a specified research project and are free to shift the direction of their research at any time. The fellowship funds may be used for such purposes as equipment, technical assistance, professional travel, trainee support, or any other activity directly related to the fellow's research.

WOMEN IN SCIENCE CENTER AT BRIGHAM YOUNG UNIVERSITY

In June of 1985, Brigham Young University (BYU) opened a Women in Science Center, which serves women at the University as well as high school girls

throughout Utah and surrounding states. The Center disseminates information on career choices for women interested in disciplines in mathematics, science, and engineering. As an example of the interest that has been shown, the Center assisted in sponsoring a science day for high school girls, and received 100 more applications than they were able to accommodate.

Located in the main library at BYU, the Women in Science Center was established with funds from the National Science Foundation and the University. This year the three science-related colleges have provided funds to staff the Center with student interns. The interns are women who are completing majors in mathematics, science, or engineering.

The Center is currently being directed by a committee of science faculty appointed by the University's president. Books, journals, and magazines that provide information about career opportunities are available, and an inventory of scholarships in mathematics, science, and engineering has been assembled. The Center is also collecting biographies of outstanding women scientists from printed sources and direct solicitation.

For further information about the Women in Science Center, write to Dr. Kay B. Franz, Chair, Women in Science Center, 4090 Harold B. Lee Library, Brigham Young University, Provo, Utah 84602.

A small percentage of the last issue of the *Gazette* (March 1989) was printed with pages 3 and 10 blank. If your copy had blank pages, write to Amy Halsted at APS (address on page 2) and you will receive a complete copy.

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