CSWP GAZETTE

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

May 1984

Volume 4, Issue 2

FOREWORD TO OUR READERS

A slightly modified questionnaire for collecting data for the Roster of Women in Physics is enclosed. If you have only recently begun to receive the Gazette in the mail (perhaps this is even your first issue) and do not recall sending in a completed questionnaire during the last six months, your personal data, aside from your name and address, are probably outdated or completely absent. If this is the case, please send in the form at your earliest convenience and please supply your mailing address for September, 1984, if it is different from your current address. The next issue of the Gazette will be published in early autumn. Those of you who have not sent in a form for awhile are urged to do so now, especially if you have been promoted, changed employers or fields, or completed an additional degree since your last submission. If you are already on the Roster, your Roster number is on the upper right-hand corner of the mailing label on the Gazette. Supplying this number on the Questionnaire form will help save APS funds by expediting the data processing by the consulting firm which performs the Roster services.

APS is also currently mailing the Gazette to the Chairs of departments which offer a major in physics at the bachelor's (or higher) level. Those receiving the Gazette by virtue of occupying one of said Chairs can greatly assist us in our efforts by duplicating the Questionnaire and encouraging all of your female staff, graduate students, and senior undergraduates to send them in, individually, or in a mass mailing. Only names and mailing addresses are strictly necessary, although the other data are highly desirable. Alternatively, simply send a list of names of your female professional staff and students with your institutions's address. Any such assistance thus offered will be greatly appreciated.

CSWP plans to publish a revised list of woman physicist colloquium speakers in the Fall issue. This list, originally compiled by Pat Cladis of Bell Labs, was updated for Fall of 1983 by Pat's colleague at Bell Labs, Barbara Wilson. Another CSWP member from Bell Labs has assumed the responsibility for the upcoming edition of the list. To have your name and topics added to the list, to amend or delete your listing, or to receive a copy of the list in advance of publication in the Gazette, contact:

Dr. Evelyn L. Hu
Bell Labs 2D 431
600 Mountain Ave.
Murray Hill, NJ 07974
Office Telephone: (201) 582-4273

We received only a very modest response regarding desired child care services in conjunction with APS meetings. However, the Committee will continue working on this issue.

Thank you for all your support and assistance.

Sincerely,
Irene M. Engle, Editor
Physics Department
U.S. Naval Academy
Annapolis, MD 21402
301 + 267-3486 or FTS 930-3486

CORRECTIONS TO THE 1984 CSWP COMMITTEE LIST

The correct telephone number for Evelyn L. Hu is (201) 582-4273.

The new AAPT Liaison person will be Beverley Ann Taylor of the Physics Department of Jackson State University in Mississippi.

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COFFEE/VPW HEAD IN WASHINGTON

Dr. Margrete S. Klein of NSF, who is program director for the Visiting Professorships for Women (VPW), was available for consultation and socializing at a CSWP-sponsored coffee at the Washington APS meeting.

The VPW program provides funding for women scientists engaged in research in any of the areas funded by NSF. 1983 physicist awardees included Dr. Beverly K. Berger of Oakland University, MI, visiting Univ. of Michigan, and Dr. Lina Nakhimovsky of the Univ. of Hartford, CT, visiting Iowa State University. 1984 awardees should be announced in June. Now is a good time to prepare proposals for the 1985 Program. The deadline for submission will be 15 November 1984. The 1984 Program Announcement can be used as a guide to format and requirements until the new Announcement becomes available in May.

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ASTROPHYSICS WORKSHOP IN WASHINGTON

The APS Astrophysics Division organized a workshop on "The Early Universe" for the Washington meeting of APS. Invited speakers for three morning sessions included Margaret Geller of the Center for Astrophysics speaking on "Dynamical Constraints on the Total Mass Density of the Universe" on Monday, 23 April, and Mary K. Gaillard of the Univ. of Calif., Berkeley, speaking on "Baryogenesis" the following morning.

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GORDON CONFERENCES

The 2 March issue of *Science* has the 1984 schedule of the Gordon Conferences. We urge you to take a look at the list and investigate the possibilities of attendance at one which is relevant to your research interest.

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LETTERS TO THE EDITOR

Dear Dr. Engle,

I would like to thank you for your efforts in editing the *CSWP*

Gazette, which I have just received. I find it to be a useful source of information since, as are many other women scientists, I seem to be in demand to talk to various audiences about women in science.

I would like to suggest a topic for study by the CSWP: the fate of husbands of successful women physicists. In particular, it would be interesting to see if they have assumed the former role of obedient wives—following their wives around the country as they rise up the ladder. I suspect that this is not the case, but do feel that some must find it difficult in these trying economic times to find suitable positions where their wives are offered jobs. The mobility aspect has been looked at as a hindrance to women's careers, but I think it can also deter men's.

I would like to wish you continued success with the newsletter.

Sincerely,
Mary Anne White
Assistant Professor (Research)
Department of Chemistry
Dalhousie University
Halifax, Canada B3H 4J3

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Editor's Commentary:

The question raised by Dr. White is yet another aspect relevant to the broader issue of the Two-Career Couple. This issue is receiving increasing attention from the general media and by many professions. The American Geophysical Union, which includes many physicists and astronomers among its membership, sponsored at its 1983 Fall Meeting a symposium "Two-Career Couples: Information Exchange." Apparently, the interest in the issue was far greater than that anticipated by the organizers. Constance Sanchetta of the AGU Education and Human Resources Committee reported on the overwhelming response in the 14 February 1984 issue of the AGU Weekly newsletter *Eos.* Commentary by readers (of any gender) of the *CSWP Gazette* would be most welcome.

Professor Julia Thompson, a CSWP member from the Univ. of Pittsburgh, is currently working on a project to study the effect of various factors upon the careers of physicists, both male and female, who have attained tenure at institutions granting the Ph.D. in physics. Some of her findings may be relevant to the questions raised above.

The following letter addresses itself to a somewhat different aspect of the human condition problem of reconciling professional aspirations and responsibilities with personal life and family commitments. Indeed, for many fortunate women, the choice of commitment to family as a primary profession is yet available. A unilateral decision was made by the Editor to withhold the name of the letter writer, in an effort to encourage response to the questions and issues raised, rather than to personalities.

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Dear Copy Editor:

I would like to inform you that organizations such as the Committee on the Status of Women in Physics do not advance my primary concerns in any way in spite of the fact that I am a woman and that I have a Master of Science Degree in physics with some finite measure of hope, still at the age of 4–, that I will yet get a Ph.D. in physics. In fact, it is my considered opinion that organizations such as the Committee on the Status of Women in Physics are positively detrimental to the future welfare of our nation.

I have come to this conclusion after living in Los Alamos for nine years; I moved here with my husband and three primary-school-age children. As you may know, Los Alamos, NM, is the site of the Los Alamos National Laboratory whose initial and successful mission in the 1940's was to develop the atomic bomb. We still do a lot of work on weapons here, and some people find that appalling, sinister, dangerous, and even evil. But one thing I see in this town that is described by all those adjectives is the on-the-spot observations of the type of women who are active in pursuit of their "professional development," such as I imagine you to be, and I cannot, will not, subscribe to a philosophy like that which says, "career first, family later, maybe," whether a woman already has a family or not.

"Career development" has no place in my life; studying physics does. I fell in love with astronomy when I was 12 and have been ever since, but on my way to learning everything there was to know about astronomy I got diverted to physics—nuclear physics, particle physics, electrodynamics, and relativity. Then, for many years, because I had a growing family, and no opportunity to do so, I couldn't study physics. I almost withered away. Nevertheless, there is no doubt in my mind that I made the right choice, and I violently resent the implications I sense from the simple existence of organizations like yours that careers in science for women should take precedence over raising the next generation.

If you sense a certain bitterness in this letter, you're not mistaken, and the source of the bitterness is my wondering if you care at all for women like me who know the fascination of physics, but, because someone must do it, stayed to help some small people grow and learn while women like you went off to develop your careers. Go sleep with your careers; I have better things to do.

Name withheld by Editorial decision.

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WE HEAR THAT. . .

Professor Mildred S. Dresselhaus of MIT, the current President of the American Physical Society, is the author of a feature article, "Modifying Materials by Intercalation" in the March 1984 issue of *Physics Today.* In it Prof. Dresselhaus describes how compounds with controlled electronic, magnetic, structural, and thermal properties are produced by introducing layers of "guest" molecules into anisotropic materials.

Professor Noemie Benczer Koller of Rutgers University recently attended "Hyperfine Interactions," an international workshop sponsored by the Indian Institute of Technology at Kampur, India.

Dr. Susan G. Neff recently returned to the USA from a post-doc at Radiosterrenwacht Dwingeloo in the Netherlands. She has joined the scientific staff of the Naval Research Laboratory in Washington, DC.

Dr. Neta Bahcall of the Space Telescope Science Institute presented a talk "The Large Scale Structure of the Universe" at a meeting of the Washington Area Astronomers on 22 March.

Dr. Susan Solomon of NOAA, Boulder, CO, presented a colloqui-

um, "NO_2 in the Stratosphere: Chemistry and Dynamics" at the Naval Research Lab this spring.

Dr. Imke de Pater of the Univ. of California, Berkeley, presented an invited paper, "Very Large Array Observations of the Giant Planets" at a symposium of the APS Astrophysics Division at the San Antonio meeting. The session was chaired by Dr. Joan Centrella.

Dr. Jean M. Bennett of the Naval Weapons Center at China Lake, CA, is the President-elect of the Optical Society of America.

Dr. Pamela Surko of Bell Laboratories is currently serving as President of the Association for Women in Science.

Professor Judy Franz of the Univ. of Indiana has recently been elected Councillor-at-Large of the American Physical Society.

Dr. Evelyn Hu of Bell Labs will be Vice-Chairman and a discussion leader at the Gordon Conference "Chemistry and Physics of Microstructure Fabrication," which will be held 9–13 July 1984.

Dr. Patricia Cladis of Bell Laboratories recently participated in an International Workshop, "Colloids," held at Les Houches, France, 13–24 February. While there, she gave two talks, "Introduction to Blue Phases," and "The Elasticity of Blue Phases." Dr. Cladis has also recently been elected to Fellowship of the American Physical Society. She was nominated for Fellowship by the Condensed Matter Physics Division.

Professor Dinah Moche of Queensborough Commun. College was interviewed on a radio talk show at station WNBC on Sunday, 11 March. Viewers called in questions on a wide range of topics in astronomy. Dr. Moche also talked about a number of the activities of CSWP of APS on behalf of improving the participation of women in the sciences.

Mrs. Winifred S. Cameron has recently retired from NASA Goddard Space Flight Center in Greenbelt, MD. She is relocating to Arizona, where she will pursue a variety of astronomy-related activities.

Jeannette D. Adams, a graduate student at the Univ. of Maryland presented a paper, "Distortion of Unobserved Particles in Particle-Nucleus Scattering" at an Intermediate Energy Theory session at the Washington APS meeting.

Dr. Sidney Wolff, recently of the Univ. of Hawaii, is the newly-appointed director of the Kitt Peak National Observatory.

The preceding item as well as the following news about women physicists at Central Michigan University were kindly supplied by the Physics Department Chair, Prof. Wayne Osborn.

Dr. Helen Brewer, physics faculty member at Central Michigan for 18 years, retired in August, 1983.

Ann Keenan is a department instructor teaching methods courses for future physics teachers.

Wanda Sieradzan recently joined the physics faculty on a part-time basis.

Ola Meshref is an MS candidate in the graduate program at CMU.

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Dr. Irene M. Engle, your editor, has been appointed to the American Institute of Physics Advisory Committee on Manpower for a term of three years. She joins Dr. Laura (Pat) Bautz of the NSF Division of Astronomical Sciences on that body.

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ROSSITER AT UNIV. OF MICHIGAN

Dr. Margaret Rossiter, author of "Women Scientists in America: Struggles and Strategies to 1940" spoke at the Univ. of Michigan on 26 March 1984. Her talk, sponsored jointly by the U–M Women in Science Program of the Center for Continuing Education of Women, the Collegiate Institute for Values and Science, the Warner-Lambert Foundation, and the Residential College, was entitled "What's Happened to Women Scientists Since 1940?" She is working on a companion to her earlier book. Her work indicates that this recent period can be divided into 4, perhaps 5 stages:

1. World War II: During this time women were encouraged by government publicity to volunteer for the war effort and were then often underutilized. For example, a professor of chemistry became a librarian in the atom bomb project. Also, nutrition scientists were important in research to define the necessary components for daily rations for soldiers, and many women scientists were hired to replace men who had gone to war. Everyone realized that this situation was temporary, and at the war's end women found their situation no different from before.

2. "Post-war Readjustment," from 1947 to the mid '50's was a highly conservative time of wide-spread antifeminism. The key word was "adjustment", a euphemism for resigning one's self to the status quo. Working wives, especially mothers, were "maladjusted." During this period, women lost ground: Deans of Women were often demoted and replaced by veterans. Women's colleges began hiring men, paying them more than the women already there. In the fall-out of McCarthyism, few dared protest for fear of being labeled disloyal.

3. The Cold War, 1953–1964, brought changes in this picture. It became government policy that this country must be ready to fight communism over the long term. One of the consequences of this viewpoint was that the government was brought into manpower management policy, which included encouraging higher education for women. Although there were no provisions for enforcing this policy women did begin seeking graduate degrees in such numbers that residence halls began to be built for them at some institutions. Jobs were not particularly available for these graduates, and protesting the situation was still not socially acceptable.

4. The path to liberation, 1964–1976. In the early '60's a few rumblings of protest could be heard: for example NASA was criticized for the absence of women astronauts. The American Association of University Women studied the effect of antinepotism rules on women's employment opportunities. By 1968 the first caucuses were held. In 1970 President Nixon revoked universities' exemption from equal opportunity legislation, of great importance for women seeking academic posts. The early to mid '70's saw these laws being enforced: this period was the most productive for women in science. Since then there has been retrenchment, and it is not yet clear whether this period is at an end and a new one has begun.

Author:
E. Irene Newhouse
Chemistry Dept.
University of Michigan

1983 CORPORATE ASSOCIATES MEETING

The 1983 Meeting of the Corporate Associates of the American Institute of Physics was held 25–26 October 1983 at the Xerox Palo Alto Research Center. The Corporate Associate membership is the class of membership in the American Institute of Physics (AIP) open to corporations, institutions, and laboratories wishing to participate and support the Institute in its programs to improve and foster communication among physicists in industry, universities, and government. Organizations with a stake in developments arising from basic physics research benefit significantly from this effort. These organizations include not only those companies employing physicists, but also those that seek to sell to the physics community and those in related disciplines that thrive in a science-oriented climate. In 1983, 115 corporations and laboratories were Corporate Associates of the Institute.

The annual meetings of the Corporate Associates, hosted by a different laboratory each year, bring together leaders of industry, heads of graduate physics departments, and government officials in an effort to improve and foster communications among all segments of the physics community. This year the Xerox Corporation, an AIP Corporate Associate, made its facilities at Palo Alto, California available for the meeting. The theme of the meeting was the Physics of Information Technology and speakers included John J. Hopfield (California Institute of Technology), E. Scott Kirkpatrick (IBM), Michael Kriss (Eastman Kodak Company), Bela Julesz (Bell Laboratories), John Crowley (Association of American Universities), Cecily Selby (NSB Commission on Pre-College Education), Luis Alvarez (University of California, Berkeley), Mildred S. Dresselhaus (Massachusetts Institute of Technology), Arthur Schawlow (Stanford University), Paul Lauterbur (SUNY–Stony Brook), Douglas J. Scalapino (University of California, Santa Barbara), and Robert R. Wilson (Cornell and Columbia Universities). In addition, there were a series of demonstrations, lectures, and tours concerned with the Physics of Information Technology at the Xerox Palo Alto Research Center. At the meeting, the AIP prize for Industrial Applications of Physics was presented to Joseph E. Killpatrick of Honeywell Systems and Research Center, and Frederick Aronowitz of Raytheon Co., and the AIP–U.S. Steel Foundation Science Writing Award in Physics and Astronomy was presented to Abraham Pais, Rockefeller University.

Laura Eisenstein, 1983 Chair of CSWP, attended the 1983 Corporate Associates Meeting. Also attending were Lois Elliott (Audiology and Otolaryngology Departments, Northwestern University), Judy R. Franz (Indiana University), Gloria Lubkin (Senior Editor, *Physics Today*), Mary Shoaf (Princeton Plasma Physics Laboratory), Mary Beth Stearns (Arizona State University), and Ann E. Wright (Radiation Oncology Department, Univ. of Texas at Galveston). Your reporter, Laura Eisenstein, talked informally with a number of chairs of Physics Departments, discussing the desirability of being alert to qualified female applicants, particularly publicizing the CSWP Roster Mailing Service. The interactions were positive and a number of requests were subsequently received. CSWP will attempt to have a representative at future Corporate Associates Annual Meetings.

ASTRONOMICAL SOCIETY OF THE PACIFIC AWARDS

Helen Sawyer Hogg, Professor Emerita of the University of Toronto, was awarded the 1983 Klumpke-Roberts Award for her contributions to public understanding of astronomy.

Monique Spite, with her husband, Francois, shared the first Muhlmann Prize for research at Mauna Kea in Hawaii. The prize was recently endowed by Eric and Maria Muhlmann of Hawaii.

See *Physics Today* of March, 1984, pp. 110–112 for details.

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ERNEST F. FULLAM AWARD

The Ernest F. Fullam Award is made in support of a research project in astronomy or astrophysics undertaken by a staff member or post-doctoral research student associated with a college, university, or observatory located in New York State or New England. The award consists of $5000, to be paid during the academic year in which work will be in progress. An additional grant is possible for publication expenses associated with the results of the research. The deadline for applications for this year's program is 1 June 1984, with the recipient expected to be named by mid-July. To learn more about the application procedure, potential applicants should immediately contact:

Fullam Award Committee
Dudley University
69 Union Avenue
Schenectady, NY 12308

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QUESTIONNAIRE FOR THE ROSTER OF WOMEN IN PHYSICS
COMMITTEE ON THE STATUS OF WOMEN IN PHYSICS
THE AMERICAN PHYSICAL SOCIETY

The information from this questionnaire will be used to compile rosters of women in physics, 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. This information will not be made available to commercial or political organizations as a mailing list. Being listed on the roster only identifies the woman as a physicist and does not imply agreement with or support for the activities of the Committee on the Status of Women in Physics.
INSTRUCTIONS: Please indicate your responses to the following by printing one character within each pair of tick marks. Abbreviate as necessary.

NAME: 1 (last) 16 1 (first) 14
1 (middle) 14 1 optional: (maiden) 16

My Roster of Women in Physics data provided is:

☐ A new entry ☐ A revised/updated entry ☐ I don't know which

If this is a revised/updated entry, please provide your Roster Registration number, if known _____

(Your Roster Registration number appears in the upper right hand of mailing labels produced from the Roster.)

On the following line, please enter your full name and title exactly as you wish it to appear on your mailing label.

1 30

Please enter the address and phone number at which you prefer to be contacted and indicate whether: ☐ Home or ☐ Business

ADDRESS line 1: 1 28

Address line 2: 1 28

Address line 3: 1 28

City/State/Zip: 1 (city) 19 (state) (zip)

Primary phone: (area) / (number) Alternate phone: (area) / (number)

DEGREES	YEAR received or expected	INSTITUTION
BA/BS		1 28
MA/MS		1 28
PhD		1 28

THESIS TOPIC (highest degree) 1 28

(continue if necessary) 1 28

EMPLOYER NAME: 1 28

DEPT/DIV ETC: 1 28

POSITION TITLE: 1 28

COMMENTS: _____ 28

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Highest Degree (check one) / Current Interest (check one)

FIELD OF PHYSICS

1 ___ 1 ___ Astronomy & Astrophysics
2 ___ 2 ___ Acoustics
3 ___ 3 ___ Atomic & Molecular Physics
4 ___ 4 ___ Biophysics
5 ___ 5 ___ Chemical Physics
6 ___ 6 ___ Education
7 ___ 7 ___ Electromagnetism
8 ___ 8 ___ Electronics
9 ___ 9 ___ Elementary Particles & Fields
10 ___ 10 ___ Geophysics
11 ___ 11 ___ High Polymer Physics
12 ___ 12 ___ Low Temperature Physics
13 ___ 13 ___ Mathematical Physics
14 ___ 14 ___ Mechanics
15 ___ 15 ___ Medical Physics
16 ___ 16 ___ Nuclear Physics
17 ___ 17 ___ Optics
18 ___ 18 ___ Plasma Physics
19 ___ 19 ___ Physics of Fluids
20 ___ 20 ___ Thermal Physics
21 ___ 21 ___ Solid State Physics
22 ___ 22 ___ General
23 ___ 23 ___ Condensed Matter Physics
24 ___ 24 ___ Space Physics
25 ___ 25 ___ Other (please specify below)

_____
_____

CURRENT WORK STATUS
(Please check one or more as applicable)

1 ___ Student
2 ___ Post Doc/Res Assoc
3 ___ Unemployed
4 ___ Retired
5 ___ Employed
6 ___ Self-employed
7 ___ Full time
8 ___ Part time

FOR HIGHEST DEGREE (Please check one)

1 ___ Theoretical
2 ___ Experimental
3 ___ Both
4 ___ Neither (please explain below)

_____
_____

TYPE OF WORKPLACE FOR CURRENT OR LAST WORK (Please check one or more)

1 ___ University
2 ___ College—4 year
3 ___ College—2 year
4 ___ Secondary School
5 ___ Government
6 ___ National Laboratory
7 ___ Industry
8 ___ Non-Profit Institution
9 ___ Consultant
10 ___ Other (please specify below)

_____
_____

TYPE OF ACTIVITY
(Please enter a 1 for the activity in which you engage most frequently, 2 for the second most frequent, etc. for all significant aspects of your current or last work)

1 ___ Basic Research
2 ___ Applied Research
3 ___ Development and/or Design
4 ___ Engineering
5 ___ Manufacturing
6 ___ Technical Sales
7 ___ Administration/Management
8 ___ Writing/Editing
9 ___ Teaching—Undergraduate
10 ___ Teaching—Graduate
11 ___ Teaching—Secondary School
12 ___ Committees/Professional Org.
13 ___ Proposal Preparation
14 ___ Other (please specify below)

_____
_____

Thank you for your participation.
Please return the questionnaire to:

Dr. Irene Engle
Physics Dept., U.S. Naval Academy
Annapolis, MD 21402

Are you interested in receiving information on employment opportunities? _____Yes _____No