

CSWP GAZETTE

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

December 1987

Volume 7, Issue 4

THE MATH/SCIENCE NETWORK

The Math/Science Network is a non-profit membership organization of scientists, educators, mathematicians, parents, and government and corporate representatives. Our mission is to encourage and promote the continued development of all people in mathematics

and science, with particular emphasis on the needs of women and girls. The Network was formed in 1974 by women scientists and educators in the San Francisco Bay area who were concerned about the underrepresentation of girls and women in mathematics courses. The Math/Science Network still has its headquarters and Resource Center at Mills College in Oakland, but our activities and membership are now nationwide. Funding for Math/Science Network activities comes from membership fees and from corporate, foundation, and government sponsorship.

Ultimately, our goal is equity of participation, retention, and advancement of girls and women in mathematics, science, and technology. To achieve this goal there must be a larger pool of women prepared to enter those fields, and preparation must start with math and science courses in high school. Intervention strategies are crucial to getting more girls into those classrooms. One such strategy is our conference for sixth through twelfth grade girls, called "Expanding Your Horizons in Science and Mathematics™" or EYH. The EYH conferences have been replicated all over the United States since 1976, and more than 122,000 girls have attended.

In 1987 there were over 70 EYH conferences in 16 states, attended by more than 15,000 students. A typical conference is held at a college or university and is attended by 200 to 500 girls aged 12 to 18. Usually held on a Saturday, the conference begins with a keynote address by an inspiring woman speaker, and is followed by several hour-long workshops led by women scientists, mathematicians, and engineers. The students do experiments with apparatus provided by each workshop leader, who relates these activities to what she does at work. The conference provides girls with pleasant and rewarding experiences in science and math, and they meet women who

can serve as role models. An evaluation of the program has shown that girls who attend an EYH conference take more mathematics classes after the conference than those who do not attend. The comparison group were girls who had signed up for the conference but who did not attend.

The EYH workshop leaders can directly influence the career aspirations of the next generation of young women. If you would like to become a workshop leader, or if you are interested in organizing an EYH conference in your community, contact the EYH National Coordinator (address below).

The EYH is the Math/Science Network's best known program, but other of our activities deserve attention. The Network organizes conferences for adults at the career decision-making level and the mid-career level. In November 1986 the Network presented "Beyond Equity: The Influence of Women in Science and Technology." The personal, historical, social, philosophical, and political context in which women work in science was examined by conference speakers and discussed in small groups by participants. In January 1984 we produced the "Investment in Women: Turning Issues into Action" conference in which Network members and other community members met with California legislators and their staffs to increase awareness of and commitment to the issue of gender equity in science and math.

The Network's Resource Center is a library of printed, audiovisual, and computerized information on gender equity in math, science, and technology. Publications, films, and videotapes produced by the Network are available from the Resource Center, such as "Nothing But Options," an award-winning videotape that shows five women working in a wide range of science and engineering jobs. Information

The editor for this issue is Ellen Zweibel.

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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.

BOOK REVIEW

***Feminist Approaches to Science*,
edited by Ruth Bleier (Athene
Series, Pergamon Press, 1986).
Reviewed by Bonnie Shulman**

In the provocative and wide-ranging book, *Feminist Approaches to Science*, editor Ruth Bleier asks,

"What is it about science—or about women—or about feminists—that explains the virtual absence of a feminist voice in the natural sciences, as an integral part of the sciences, with the single exception of primatology?"

The reader eager for a precise answer to this question may be disappointed. I was. Another question whose answer I sought but never really found, is exactly what *is* a feminist voice in the natural sciences? I am a graduate level mathematical physicist and a woman. I identify with feminist issues (almost everywhere) and have often been active in feminist politics. I also consider myself an integral part of the sciences. Does this make mine a feminist voice in the natural sciences? Is there a distinctly feminist mode of scientific thought (not necessarily feminine)?

Feminist Approaches to Science is a collection of essays by nine women, and tries to see science through a "feminist prism." But I was sorry no writings by women physicists were included. Global issues that concern all women scientists are discussed (e.g., why so few women achieve prominence in science, the prevalence of male-gendered metaphors in scientific language, the implications of sex-differences research) and this makes the book worth reading. However I think it is important to distinguish and even draw attention to the *differences* in our experiences and roles as women in various sciences.

In primatology (the discipline most often cited by the authors), there are many gender-related issues in the practice of the scientific discipline that women in the so-called "hard" sciences do not face. For example, in reconstructing the *meanings* of behaviors (especially of female primates), men and women scientists draw very different conclusions from the same data. Here one may identify and define a genuine

"feminist science" in the sense that I think is meant, where gender is a valid category of analysis. But I do not agree that in all (or even most) cases gender is an "unavoidable category of analysis."

In fact, it can be a very divisive issue, especially when feminist science is touted as *better* science. Clearly many feminist values need to be integrated into the scientific community. (One author asks, "How do we justify working on research whose applications have been and threaten to be profoundly destructive of natural resources, human life, and the dignity and self-respect of racial, ethnic, or gender groups?") However to see "feminist" as the antidote to "patriarchal," women as the "fix" for what is wrong with men, is to think in the "same old ways" we are invited at every turn of the page to abandon. Is it true that all feminist values and "ways of knowing" are essentially good and will yield a "truer knowledge" of nature? The value of personal values in science is their fruitfulness in producing better scientific explanations, and the true test of a good theory has to be which explanation is best, which is better, not *right*, but rather least wrong.

The authors are astute in emphasizing the disastrous results of the separation of science from social reform and the subsequent institutionalization of science. However the cure is not a re-institutionalization along feminist lines. I think the analysis stops short when it fails to stress that it is precisely the collusion between science and state power (at least as deadly as that between church and state) that must be questioned and criticized. Power itself corrupts (absolutely) and I am not convinced that if women had it they'd use it any better.

How are one's scientific ideas related to one's politics? Primatology illustrates very well how the (sexist) biases of scientists can influence the direction, content, form, and results of the research being conducted. This is surely a valid and valuable insight of feminist analysis. But *any* biases (including feminist ones) create their own context. The best we can do is to recognize and articulate our biases (whenever possible) *as part of* our research.

The role of women in science is changing. It will be some time before we can

and referral services of the Resource Center are free.

Membership in the Network is \$25 per year, and includes a subscription to the "Broadcast," our quarterly newsletter, announcements of Network programs and services, and discounts on Network publications and videos. Memberships run from January to December, so now is the time to join for a full year's benefit. For further information contact the Math/Science Network Resource Center, c/o Mills College, Oakland, CA 94613. Phone: (415) 562-3454.

Contributed by Cherrill Spencer, an experimental physicist presently designing electromagnets for magnetic resonance imaging at Resonex, Inc., Sunnyvale, CA. She is 1987/88 President of the Math/Science Network, and has been on its Board of Directors since 1982.

answer the question as to how science might be different if as many women as men were scientists. I do not believe anything in science itself excludes women (I am my own favorite counterexample). Of course there is much in education, the "old boys" employment network, outmoded cultural values, etc., that prevents most women from ever considering technical courses of study.

Those of us who have somehow penetrated the filters must do our best to be the scientists we want to be *and* remain the women we are. That is how we can discover our value as women scientists.

Whatever contributions we make, they will not be simply *because* we are female and not male. Rather our struggles as women in the existing world will teach us all how to think, create, feel, and live as fuller beings. Human beings are rationally one and women scientists can best prove this by doing well what scientists do and (aggressively at times) encouraging and supporting others to do the same.

Bonnie Shulman
2 November 1987

Bonnie Shulman is an NSF Predoctoral Fellow in Mathematical Physics at the University of Colorado, Boulder.

LETTER TO THE EDITOR

9 November 1987

Dear Editor:

As a mid-Atlantic woman¹ I was very interested in the discussions of the July *CSWP Gazette* about international perspectives of women in physics. The statistics supported my general impression that the Mediterranean countries fare much better than the rest of Europe. This baffles my British and German male colleagues who like to think they are far superior in their "treatment of women." Although the reasons for such differences are manifold I would like to mention two possible factors contributing to the advances of Mediterranean (as well as Latin American) women scientists that are perhaps, gained at the expense of other, less-privileged women: (i) the availability of cheaper child-care labor; (ii) elitist, single-sex education. Thus, although I firmly believe comparisons of the pro-

gress of women in physics in different countries are valuable, I would urge that such comparisons be kept in the context of the society as a whole.

When considered in this wider context the U.S. fares much better than suggested by the low ranking for women in prestigious professional positions. I would suggest that the average woman on the street is more knowledgeable and less scared of science and technology than elsewhere (though I have no statistics) and, certainly, U.S. society more readily accepts change. Whenever I return to England I am appalled by the persistent, dogged reluctance to accept that women are capable in male-dominated fields and to accept that their careers should not be sacrificed to husband and children. It almost makes me proud to be accused of becoming "an aggressive American woman"!

Nevertheless, the puzzling slow progress at the higher professional levels in the U.S. needs to be addressed. Those of us in academia must rise to the challenge of Cole and Zuckerman² who claim that family burdens are not responsible for the lower publication record of women in science (since quantity of publications remains the main criterion for promotion). We must band together and systematically eradicate the many micro-inequalities³ that permeate academia. For practical suggestions and examples of how to promote changes from personal to institutional levels, I recommend the publications of the Project on the Status and Education of Women.⁴ My personal experience has led me to ration the amount of energy I put into the subject of women in science for two reasons: (i) I want to save some energy for actually doing the science; (ii) too much "grumbling" leads to feeling a victim and hence rapid rejection by colleagues. The topic of women in science comes up frequently but if there is a group of more than 2 to 3 (men) I find that little real communication takes place. I now try to reserve my energy for one-to-one discussions and when the other person is actually listening or when I really want to hear the other person's opinion.

Finally, the current shortage of academic positions has put pressure on affirmative action. Male colleagues know institutions are looking for "good women"

and often resent it. But we must stand firm. Although we are seeking equality of opportunity, we are not pretending to be the same. Women have special attributes to offer male-dominated environments, particularly in teaching but also generally, in diffusing stereotypes, perhaps changing emphases, and broadening styles and approaches. Rather than denying that the issue of gender exists, I believe we must grasp the difficult task of keeping it *in* where it is important and keeping it *out* where it is irrelevant.

Fran Bagenal
National Center
for Atmospheric Research,
Boulder, Colorado

¹ "Mid-Atlantic Man" by Tom Wolfe (1968), is an amusing look at Englishmen who have "gone American."

² "Marriage, Motherhood & Research Performance in Science," Jonathan R. Cole and Harriet Zuckerman, *Scientific American* (January 1987).

³ Micro-inequalities is a term coined by Mary Rowe (who has achieved major improvements in the environment at MIT for women) to encompass small behaviors that occur in the course of everyday interchanges, such as those in which individuals are either singled out or ignored and discounted because of gender, race, or age.

⁴ "Toward Equity: An action manual for women in Academe," Karen Bogaert (1984), and other publications from the Project on the Status and Education of Women, Association of American Colleges, 1818 R Street, N.W., Washington, DC 20009 (202-387-1300).

2 November 1987

APS CONGRESSIONAL SCIENTIST FELLOWSHIP PROGRAM

Dear Colleague:

The fifteenth annual competition for The American Physical Society Congressional Scientist Fellowship Program is now underway. This Program, which has always enjoyed the unanimous support of the Council, offers physicists the opportunity to spend a year in Washington working in support of the activities of a Congressional Office.

CONGRESSIONAL SCIENTIST FELLOWSHIP PROGRAM

1988-1989

THE AMERICAN PHYSICAL SOCIETY

Fifteenth Annual Competition

PURPOSE	Fellows will spend one year as a member of the staff of a Congressman or of a Congressional committee, thereby contributing an assessment of the technical aspects of public policy issues to the political process.
QUALITIES SOUGHT IN APPLICANTS	Prospective Fellows are expected to have demonstrated competence in some area of physics, have a background in science and technology, and have a strong interest and some experience in applying scientific knowledge toward the solution of social problems. Candidates are expected to be articulate and literate, willing to work on a variety of problems with a variety of people and to have some experience in or be willing to learn the governmental process.
TERM OF APPOINTMENT	Fellows serve for one year, beginning 1 January 1989. APS Fellows will join the Fellows selected by other scientific and engineering societies in Washington in September for a two-week orientation program organized by the American Association for the Advancement of Science. During the orientation, Fellows meet Senators, Representatives, and Congressional committee staff members, visit a number of government agencies, and receive detailed information about opportunities in Congressional offices. The choice of an assignment is unrestricted and reserved to the Fellows.
STIPEND ALLOWANCES	The maximum fellowship stipend is \$40,000. An appropriate allowance is made for vouchered relocation expenses and for vouchered travel expenses incurred during the fellowship year.
APPLICATION PROCEDURE	Applicants should submit a letter of intent and a resume and arrange to have three letters of reference sent directly to the program administrator. Candidates should include in the letter of intent a statement which tells why they have applied to the program and a brief description of their public service experience. Letters of reference should be solicited from people who can discuss not only the candidate's competence as a physicist but also the candidate's education and experience which would make the candidate particularly qualified to serve in a Congressional office.
FOR FURTHER INFORMATION	<p>Completed applications, including all letters of reference, must be received by 12 February 1988.</p> <p>Please Contact: Dr. Mary L. Shoaf, Administrator Congressional Scientist Fellowship Program P.O. Box 451 Plasma Physics Lab Princeton University Princeton, NJ 08544 (609) 683-2104</p>

22 September 1987

Dear Madam or Sir:

I am a Senior Physics major at Earlham College in Richmond, Indiana. I am currently considering my plans for work or graduate school after I receive my Bachelor's degree this June. Please send me any information which you have concerning opportunities for careers in the field of Physics.

I am also very concerned about moral issues involved in work in physics. I have become discouraged because it seems that the majority of jobs in the field are either related to war production or are unjustifiable in terms of cost. I am considering moving out of the main stream of physics and into a related field for this reason. I would appreciate any encouragement, information, or opportunity for discussion of the issue which you could provide.

Sincerely yours,

Laura M. Hinkelman

WORKING PARENTS

Does your workplace have particularly favorable arrangements for parental leave, child care, or other issues involving raising a family? Do these provisions apply equally to mothers and fathers? Would you like to air complaints?

The *Gazette* will publish your comments, signed or anonymous, in a future issue. We'd like to know which employers have the best arrangements and provisions for those balancing a career and care of young children. Address your response to Dr. Miriam Forman at the APS.

US TASK FORCE HOLDS HEARINGS

The Task Force on Women, Minorities, and the Handicapped in Science and Technology was mandated by Congress to work on ways to encourage these three groups to prepare for occupations in science and technology. Its goal is the employment of all human resources to ensure a vigorous economy, a high quality of life, and a furthering of national goals. Membership of the Task Force is comprised of representatives from universities, research institutions, federal agencies, and industry. CSWP

member Frank McDonald of NASA/Goddard Space Flight Center is a Task Force member.

The Task Force has been charged by Congress to: (1) examine the current status of women, minorities, and disabled persons in science and engineering positions in the federal government and in federally assisted research programs; (2) coordinate existing federal programs which promote the employment of these groups; (3) suggest cooperative interagency programs; (4) identify exemplary programs in state, local, or private sectors; and (5) develop a long-range plan to advance women, minorities, and the disabled in science and technology.

The first stage of the project is a series of public hearings around the United States. To date, hearings have been held in Albuquerque, Chicago, and Kansas City. In 1988 hearings will be held in Los Angeles (January), Atlanta (March), Boston (April), and Baltimore (May). CSWP hopes to testify at the Boston hearing. Testimony can be in the form of a ten-minute statement, or a longer written testimony, which can be mailed or brought in person.

For further information and to reserve time at a hearing, contact the Task Force offices at 330 C Street, S.W., Room 2014, Washington, DC 20201, or call (202) 245-7477.

RECEPTION FOR WOMEN AT THE APS DPP MEETING

For several years, the Division of Plasma Physics (DPP) has held a reception for women and their guests during its annual meeting. These receptions are held late one afternoon and are a pleasant place to talk with other women over wine and cheese. We learned recently that the cost of this event is borne by the DPP through a line item in its budget. Other Divisions might be encouraged to sponsor similar activities.

SYMPOSIUM: THE MIDLIFE PHYSICIST IN TRANSITION

In January at the Joint Meeting of the APS and the AAPT (American Association of Physics Teachers) in Crystal City, Virginia, CSWP and the Committee on Opportunities in Physics will

The search for candidates has begun. The deadline for completion of application files for the 1988-89 competition is 12 February 1988 so that Fellowships can be awarded in 1988. The stipend has been increased to a maximum of \$40,000 for the Fellowship year which will run from 1 January 1989 to 31 December 1989 because 1988 is a general election year. A modest benefit program is available, if required, and appropriate allowances for vouchered relocation expenses and travel costs incurred in conjunction with Fellowship activities have been continued.

Please help! We need an adequate pool of well-qualified candidates. APS Fellows have provided valuable service to the Congressional offices in which they have served. Their own lives have been enriched by the experience. The institutions to which they have returned have found them an enhanced resource. Those who have remained in Washington have established themselves in new careers. The Society, the Physics community, and society have all benefited from their contributions to the assessment of the technical aspects of political issues. Please encourage those of your colleagues who qualify to apply to the program.

A poster describing the current program appears for your use in this issue of the *Gazette*.

If you have any further questions or require any help, please contact me through the Society's New York office or directly at 609-683-2104.

Sincerely,

Mary L. Shoaf, Administrator
Congressional Scientist
Fellowship Program

CAREERS IN PHYSICS: ETHICAL CHOICES

The CSWP recently received the following letter from a woman majoring in Physics. Although the issues raised in this letter are not "women's issues" per se, we think it is appropriate to invite the response of the *Gazette* readership. Address your replies to Dr. Miriam Forman at the APS.

present a symposium entitled, "Career Re-entry/Retraining: Opportunities for the Midlife Physicist in Transition."

The 1987 CSWP Chair Joan S. Kowalski of George Mason University will preside, and will begin the symposium by providing an overview of the topic. This will be followed by a presentation by Israel S. Jacobs of General Electric of workforce data, and then by a report from Marie Machacek of Northeastern University on the services Northeastern has provided to assist in the reentry/retraining process of several females and males. Then Jean Toth-Allen of George Mason University and Margo Durrett, AT&T Bell Laboratories, will describe their particular experiences in reentering or retraining in the field of physics.

The symposium will be held Monday afternoon, 25 January 1988, at the Regency E & F Ballroom of the Crystal City Hyatt Regency, at 2:00. A reception and tea will follow the symposium, and CSWP members will be there. Come and listen, and air your views!

APS HONORS WOMEN IN FELLOWSHIP, ELECTIONS, GOEPPERT-MAYER AWARD

It was observed at November's Council meeting that the percentage of women elected to Fellowship this year is much lower than the overall percentage of women in the APS. Fellows are indeed an elite group; in any one year the number elected may not exceed 0.5% of APS total membership. To be elected to Fellowship, a member must have contributed to the advancement of physics by independent, original research, or some special service to the cause of science. Eligibility is usually determined by an examination of the candidate's published works. The three women who received Fellowship in 1987 and their citations follow:

Louise Ann Dolan, *Rockefeller University*, "For fundamental contributions to field theory at finite temperature, quantization of the non-linear Schrodinger equation, the $1/N$ expansion and for pioneering the use of Kac-Moody algebras in particle physics";

Cherry Ann Murray, *AT&T Bell Labs*, "For her studies of the surface-

enhanced Raman effect and of two-dimensional melting";

Barbara Ann Wilson, *AT&T Bell Labs*, "For her spectroscopic studies of semiconductors, including luminescence in amorphous semiconductors, resonance modes in Si inversion layers, and band offsets in heterostructures."

Five percent of APS members are women but only 1.5% of the new Fellows are women. Are we publishing enough?

Fellowship nominees must be of current APS membership status, and are sponsored by two members who prepare the nomination and *send it to W. W. Havens, Jr., Executive Secretary of APS*. Then the nominations go to appropriate Divisional Fellowship Committees for consideration. These Committees pass their recommendations to the APS Fellowship committee, headed by the Vice-President. The 15 January deadline on the Fellowship Nomination form does not apply to nominations in every division.

Please see Fellowship Nomination Form, page 7.

In the 1987 APS elections, Shirley A. Jackson of AT&T Bell Laboratories was elected one of the three new APS Councillors-at-Large. Jackson is an APS Fellow, a CSWP member, and was a member of the AIP advisory committee on education and employment statistics and career placement.

This year's winner of the Maria Goeppert-Mayer Award is Bonny L. Schumaker, of the Jet Propulsion Laboratory at CalTech. Her citation read, "For her frontier contributions to the theory of quantum optics, particularly for showing that multifrequency pumping of nonlinear materials can produce 'ultrasqueezed light,' i.e., beams with an exceptionally high signal-to-noise ratio."

The Goeppert-Mayer Award seeks to recognize and enhance outstanding achievement by a woman physicist in the early years of her career, and to provide her with opportunities to present these achievements to others through public lectures. The award consists of \$2,000 plus a \$3,000 travel allowance

for the recipient to give four lectures on her work at institutions of her choice.

NATIONAL WOMEN'S HISTORY MONTH: MARCH 1988

The month of March is designated Women's History Month, and this year's theme is "Reclaiming the Past, Rewriting the Future." Many communities and academic institutions celebrate Women's History Month by commemorating often neglected historically important contributions by women, examining the historical roles of women, or discussing the treatment of gender issues by historians. Any one of these aspects can be usefully applied to the study of women in physics.

If you wish to become involved in Women's History Month, contact the National Women's History Project, PO Box 3716, Santa Rosa, CA 95402, or phone (707) 526-5974. A catalog of materials is available for \$1. For information on Women's History Month activities in New York City, contact the New York City Commission on the Status of Women, 52 Chambers Street, Suite 207, New York, NY 10007, or phone (212) 566-3830.

1988 COLLOQUIUM SPEAKERS LIST

CSWP compiles a DIRECTORY OF COLLOQUIUM SPEAKERS which we mail to all Ph.D.-granting physics departments in the U.S. each year. The goal, obviously, is to encourage departments to invite more women to give department colloquia, thus enhancing the visibility of women physicists and providing more female role models for physics students of both genders. We also provide this list to other professional organizations such as the Society of Physics Students (SPS). If you are involved in research which would be appropriate to report on at a physics department colloquium, and would like to be included in next year's Directory, please complete the form and return it to Dr. Miriam Forman at APS.

Note that being included in the Directory in no way obligates you to agree to any particular request.

NOMINATION FOR FELLOWSHIP

To be sent to: Executive Secretary—The American Physical Society,
335 E. 45 Street, New York, New York 10017

If space is inadequate, please use separate sheet to answer and attach to form.

Name in full of person nominated
(First name) (Middle name) (Last name)

Address
.....
.....

Date nominee became a member of the APS

Appropriate Division(s) to Assess Nomination

SUPPORTING DATA:

Nominee's academic background

<i>College or University</i>	<i>Location</i>	<i>Major Field</i>	<i>Degree</i>	<i>Year Awarded</i>
.....
.....
.....

Professional honors

.....
.....

Nominee's employment background

(Please specify under "Duties" whether academic, administrative, or research.)

<i>Position</i>	<i>Employed by</i>	<i>Duties</i>	<i>Dates</i>
.....

Nominee's most significant contributions and principal publications (list four publications)

Suggested citation to appear on Fellowship Certificate if nomination is approved:
(30 words or less)

Supporting paragraph enlarging on the citation and indicating the originality and significance of the contributions cited.

SPONSOR'S DATA (Each nominee must have two sponsors who are members of the APS.)

1. Sponsor's name: Sponsor's signature:
(PLEASE PRINT)

Sponsor's recommendation on nominee's qualifications for Fellowship:

.....
.....

2. Sponsor's name: Sponsor's signature:
(PLEASE PRINT)

Sponsor's recommendation on nominee's qualifications for Fellowship:

.....
.....

DATE.....19

**Please Note: To facilitate this nomination, be sure you have answered every question.
Nominations *not* received by Jan. 15 will be considered for the following year.**

CSWP also receives a number of requests each year to provide names of people who are prepared to give talks to a more general audience, such as to high school or university students. The last space on the form has been set aside for talks of this nature.

If you know of other women who have appropriate backgrounds to be invited to give physics department colloquia, please let us know.

'TIS THE SEASON TO SEARCH THE ROSTER

There has been quite a flurry of activity surrounding the CSWP Roster of Women in Physics. Universities are searching now to fill physics faculty openings for fall 1988. We also have had a number of search requests to fill dean positions.

As of 7 December 1987, searches of the

Roster have been conducted for the following institutions: University of Idaho, American University, University of Pittsburgh, Washington University, University of Delaware, Case Western Reserve University, Iowa State University, Oakland University, University of Nebraska, Emory University, Montclair (NJ) State College, Florida Atlantic University.

Job announcements coming to you as a result of a roster search will have a label

TO BE INCLUDED IN THE 1988 DIRECTORY OF COLLOQUIUM SPEAKERS, PLEASE COMPLETE THIS FORM AND RETURN IT TO THE ADDRESS BELOW:

NAME: _____

ADDRESS: _____

PHONE: _____

RETURN TO:

Dr. Miriam Forman
American Physical Society
335 East 45th St.
New York, NY 10017

TITLE(S) AND SUBFIELD(S) FOR PHYSICS DEPARTMENT COLLOQUIA:

TITLE(S)

SUBFIELD
OF PHYSICS

(1)

(2)

(3)

TITLES (IF ANY) OF LECTURES FOR GENERAL AUDIENCES:

like the one appearing on your *Gazette*. Your roster number appears on the upper right-hand corner. CSWP wants to know if rosters are applying for and being offered positions they hear of through the Roster searches. This information can help CSWP to serve those listed on the Roster, and to promote the Roster to institutions who may want to do a search. So if you apply or are hired for any of these positions, please drop us a line, so we can get an idea of the effectiveness of Roster searches. Write to: Amy Halsted,

CSWP Roster Administrator, at APS Headquarters in New York.

**1988 CALENDAR OFFERED:
"WOMEN SCIENTISTS AND
THE NOBEL PRIZE"**

The Detroit area chapter of the Association for Women in Science is offering a commemorative calendar for 1988, entitled "Women Scientists and the Nobel Prize." The 14-month calendar features fourteen women scientists who either received a Nobel Prize or contributed to

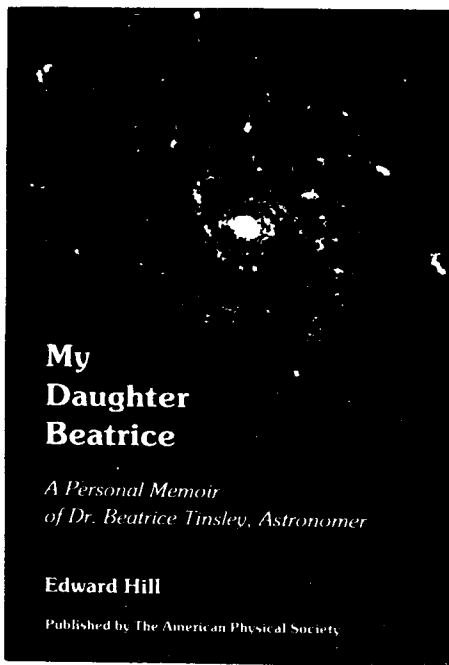
research that led to one. Pictures, biographical sketches, and a bibliography are included. The calendar is a great gift idea, especially for a young woman considering a career in science.

To order send \$6.95 plus \$1.00 postage for each calendar (please include your name, address, and zip code), to Association for Women in Science, Detroit Area Chapter, P.O. Box 1072, Berkley, MI 48072. Make checks payable to AWIS-DAC.

New from the American Physical Society

My Daughter Beatrice

A Personal Memoir of Dr. Beatrice Tinsley, Astronomer
by Edward Hill



Reprinted from *Physics Today*, November 1986:

APS PUBLISHES MEMOIR OF BEATRICE HILL TINSLEY

APS has published a memoir of Beatrice Tinsley (1941–81), who was an astrophysicist and professor of astronomy at Yale University. The book, *My Daughter Beatrice*, is by her father, Edward O. E. Hill. Hill says in the foreword that he decided to write this memoir when Sandra Faber of Lick Observatory informed him of the medal and prize that had been established in Tinsley's honor by the American Astronomical Society. He realized that his daughter would be widely remembered as a scientist and that many people would want to know more about her as a person.

In 1984 Hill circulated photocopies of his typescript to a few of Tinsley's friends in astronomy and astrophysics, who in turn shared it with their friends. Last fall the APS Committee on the Status of Women in Physics recommended that APS publish the book as part of the society's program to encourage young people, particularly women, to choose careers in physics and to help their families and teachers understand the preparation and struggles, risks and rewards, such a choice involves.

APS Deputy Executive Secretary Miriam A. Forman, an

astrophysicist at the State University of New York at Stony Brook, says that Tinsley is remembered as a brilliant astrophysicist and professor of astronomy. "In her tragically brief career she revolutionized the study of the evolution of galaxies. She was famous among astronomers for her prodigious creativity, and also as a gracious friend, dedicated teacher, mentor and colleague," Forman says.

In the book's introduction Faber writes, "Fatally afflicted in mid-career by melanoma, she had by that time already produced a body of research worthy of a full lifetime's effort. Her influence extended far beyond the halls of Yale and was felt, literally, wherever galaxy evolution was an active subject."

In the book, her father gives a parent's view of his daughter's growth from a bright and sensitive child into a world-famous astronomer. Hill quotes extensively from letters Tinsley wrote from the age of seven until just before her death. Her own words to her family give an intimate look into all stages of the development of a scientist, including a very candid view of her struggles between home and career.

The introduction by Faber and obituary by Richard B. Larson (Yale) and Linda L. Stryker (Arizona State University, Tempe) put Tinsley's life and personal contributions into the context of her scientific achievements.

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