



## Women in Science

AAAS Symposium • 27 December 1970 • Chicago

This is the year of the 50th anniversary of the amendment that gave women the vote; of marches and "strikes"; of a myriad of books and articles on women and their position in society; of organizations dedicated to the advancement of women's causes; of charges and countercharges; and of terms like "oppressed majority" and "patriarchal bias." After 47 years in committee, the Equal Rights Amendment which states "Equality of rights under the law shall not be denied or abridged by the United States or by any State on account of sex" has been passed by a vote of 346 to 15 in the House of Representatives. It goes now to the Senate, and perhaps finally for ratification to the state legislatures.

This is the year of the filing by the Justice Department of its first suit based on discrimination against women under the Equal Opportunities Act, Title VII of the Civil Rights Act of 1964. The Equal Employment Opportunity Commission reports more than 12,000 charges received since the Act's inception. This is the year of the drive for permanent part-time positions for women and for day-care centers—the year even of the female karate teams.

Fact-finding agencies report on salary disparities based on sex. The statistics are dismal. Only 3 percent of women who work full time earn more than \$10,000 per year as compared with 28 percent of the men. The Labor and Public Welfare Committee tells us that in 1968 male professional and technical workers had average salaries of \$10,151, while the salaries of women professional and technical workers averaged \$6,691. The 31 August 1970 issue of *Chemical and Engineering News* summarizes part of the recent survey by the National Register of Scientific and Technical Personnel, a special program of the National Science Foundation. (Chemistry is a male-dominated profession with 94 percent of its chemists and chemical engineers men.) Women chemists and chemical engineers with the B.S. degree receive salaries 36 percent lower than those received by men, with the M.S. 35 percent lower, and with the Ph.D. 27 per-

cent lower. Similar reports come from other fields of science.

How are these differences to be explained? What *are* the advantages and the disadvantages of being a woman scientist? How do the expectations of American society for women differ from those for men? Why is there often a reversal of values and views concerning women in war or widowhood? What are the difficulties of combining a scientific career with marriage and children? Are women who have established noteworthy careers or who have made outstanding contributions in science being held up as exemplary models to the young? Why are there so few women scientists and so very few women science administrators? Executive Director Donald G. Hertzberg of the Eagleton Institute of Politics of Rutgers, the State University of New Jersey, states in the fall (1970) *Newsletter* of the New Jersey Academy of Science: ". . . they are nurses but not doctors, secretaries but not writers . . . workers but not managers . . . they almost never hold policy or decision-making positions. One does not have to be a feminist to acknowledge these facts or to realize the importance of examining their significance."

Are there effects of indoctrination throughout the school years? Virginia Kidd, Department of Speech-Communication, Sacramento State College, quotes in the 3 September 1970 issue of *The New York Review of Books* from textbooks intended for extensive use for 4 to 8 year olds throughout California.

"She cannot skate," said Mark.

"She is just like a girl.  
She gives up."

"Now you can skate.  
But just with me to help you."

A government employee reports that her little girl, along with all the other little girls at kindergarten, is given a play nurse's cap, while all the little boys are given toy stethoscopes. "Little girls," says teacher, "can grow up to be nurses, and little boys to be doctors."

Or the directive given in a high school known for its academic excellence. The assistant principal is speak-

ing to the senior class assembled for guidance or registration procedures. "You boys interested in science be sure to sign up for chemistry. Only those girls who plan to go to schools of nursing should sign up for chemistry."

Why are there so few women scientists in the academic world? Why does promotion come to them more slowly? And even if it comes, what is the effect of a statement such as this (reported by a Sigma Delta Epsilon member): "We're appointing you chairman of the department—even though you are a woman." Try that out substituting for woman the name of a minority group and see how it sounds.

Are such incidents perhaps infrequent? Exaggerated? Do the really talented, the hardworking, the creative women scientists find their paths no more difficult than do men of equal abilities?

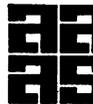
Certainly this time of special consideration of women's causes is an appropriate one for a survey of the experiences and the points of view of women in science. There is an added suitability in a year when the American Association for the Advancement of Science has its first woman president, Mina Rees. A symposium on Women in Science is therefore being sponsored by an affiliate of the American Association for the Advancement of Science, Sigma Delta Epsilon, organization of graduate women in science.

The morning session of the symposium will consist of autobiographical accounts of their scientific careers by a number of women scientists, with opportunity for discussion. The afternoon session will feature a panel discussion and a question-and-answer period with audience participation. The panel will consider in broad spectrum what women have accomplished in science; imposed limitations, if any, on their roles, direct and indirect; and the future of women in science. Special insights will be sought from psychology and anthropology.

Speakers and panel members will come from a variety of scientific disciplines, from a variety of age groups, backgrounds, and outlooks, and will include representatives of students, industrial scientists, government workers, teachers, and administrators. Sigma Delta Epsilon's own 50th anniversary celebration opens with this event.

JEAN E. SIMMONS

*Upsala College,  
East Orange, New Jersey 07019*





# Science

## Women in Science

Jean E. Simmons

*Science* **170** (3954), 201-202.  
DOI: 10.1126/science.170.3954.201

### ARTICLE TOOLS

<http://science.sciencemag.org/content/170/3954/201.citation>

### PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

---

*Science* (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. The title *Science* is a registered trademark of AAAS.

Copyright © 1970 The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works.