

editorial

Helping women in physics succeed

Recent followup reports on the status of women in physics (see article by Vera Kistiakowsky, February, page 32 and the report by Carol Jo Crannell, chair of the APS Committee on the Status of Women in Physics, Forum Newsletter, September) paint a picture of some progress made but much more to be achieved. Most notably Kistiakowsky reports that there has been roughly a factor-of-two increase (from around 25 per year to 50 per year) in the number of women receiving physics doctorates over the last decade. There is evidence that this gain may be attributed to efforts to provide supportive environments that alleviate the feelings of isolation and inappropriateness often experienced by women and other minorities. Crannell concludes that there is reason to be encouraged that "a framework for making improvements, in the number of women in physics and in their career opportunities, has been established and is being utilized."

However, Crannell cautions that improvement in *entry-level* opportunities, while certainly necessary, is not sufficient to ensure that we will eventually realize the full benefit of the physics talent now largely dormant in the female half of the population. Opportunities must be opened up, in addition, for the midcareer women in physics. It is still true that only 3 out of 100 PhD physicists are women and that these approximately 700 women at midcareer still receive lower salaries, serve in positions of lesser rank, and experience five times higher rates of unemployment than their male counterparts. It is important that these women succeed in spite of the obstacles and realize their full potential in their physics careers not only for themselves but to help ensure the success of the younger women just entering physics. Women in positions of responsibility and authority are required as both examples and mentors to foster the careers of younger women. We need to identify appropriate mid-career women in physics and offer them opportunities previously denied them to enter the mainstream of physics teaching and research. (Charles Bush, chairman of the APS Committee on Minorities has mentioned to us that he believes

there is a similar need for other minorities in physics.)

In recognition of the whole spectrum of needs Senator Kennedy has introduced a bill (Women in Science and Technology Equal Opportunity Act, S. 568) that would allow the NSF to fund a variety of educational programs and to provide research fellowships to women within five years after receiving the doctorate or within five years after returning to the field. We sincerely hope that this legislation, now awaiting conference action in the Congress, will become law. But more is needed. The physics community as a whole must experience a second level of consciousness raising. We have become aware of the need to encourage women to enter physics. Now we must become aware of the need to encourage women already in physics to succeed.

Harold L. Davis