Statement on Increasing Diversity in the Earth, Ocean, Atmospheric, Space, and Physical Sciences

Increased participation and retention of women, minorities, and persons with disabilities is an essential component of maintaining a robust and productive scientific workforce in the Earth, ocean, atmospheric, space, and related physical sciences. The future health of these disciplines in the U.S. is threatened by declining undergraduate and graduate enrollments, loss of degree-granting geosciences programs, and ageing of the current scientific workforce. Globalization of the geosciences enterprise has partially compensated for these losses and fostered a rich, multi-cultural scientific community. Yet, reliance on international talent is increasingly uncertain, as the number and quality of opportunities available to scientists in their native countries increase and security restrictions are enhanced. By increasing the diversity of the talent pool, the community can ensure that the workforce is not only sufficient to meet future demand in these fields, but also enriched with the variety of perspectives that are essential for effective operation in our global society.

Failure to attract and retain women and minorities in the geosciences is not well understood. Although rapid growth has occurred in the proportion of women entering these scientific fields during the past decade, it has been highly discipline-specific. Importantly, this proportional growth is largely due to loss of males, as the number of females entering these fields has remained relatively constant. Many women doctoral recipients do not pursue careers in academe. In the U.S., ethnic and cultural minorities are a largely untapped resource for the geosciences, which has the poorest diversity record of all science and engineering disciplines. In the year 2000, only 1.3% of geosciences bachelor's degrees awarded went to African Americans and 3.1% went to Hispanic Americans. As the largest growing population sector in the U.S., minorities are projected to comprise nearly half of the college-age population within the next decade. Collectively, these groups offer a significant resource for the geosciences community, but only if more productive methods of attracting and retaining them can be established.

The scientific societies and organizations listed below commit to take an active leadership role in efforts to increase participation of women, minorities, and persons with disabilities in the Earth, ocean, atmospheric, space, and physical sciences workforce. Specifically, these groups agree to:

- Make diversity a priority in the use of their organizational resources, educate their members about the need to become more involved in promoting diversity, and provide access to resources that will enable their members to work productively on this issue.

- Endorse and help to implement key recommendations outlined in the Task Force on National Workforce Policies for Science and Engineering report [National Science Board, 2003]. This report advocates for: improving undergraduate success in science and engineering for all demographic groups; developing better options for addressing the economic needs of students pursuing graduate education and research in science and engineering disciplines; and, attracting and retaining an adequate cadre of well-qualified pre-college teachers of mathematics, science and technology. Advancing the state of knowledge on international science and education workforce dynamics and considering

policy implications for the international mobility and vitality of the science and engineering workforce are also recommended in this report.

- Coordinate efforts to foster diversity in the Earth, ocean, atmospheric, space and physical sciences and work in partnership on: increasing the visibility of education, research, and career opportunities in these fields within underrepresented communities; promoting greater and more effective teaching of these fields, especially in settings that serve minority students; and, advocating for supportive, mentoring environments and more inclusive attitudes within academic institutions, government laboratories, and corporations. Initial efforts of this partnership will focus on two specific activities: (1) developing and promoting a centralized web-based portal with comprehensive, culturally tailored information and profiles about careers in these disciplines, and (2) developing a central web-based repository that provides detailed demographic and statistical information to substantiate the importance of the diversity issue and examples of effective diversity programs.

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