

## **“Powering Up: Women as Leaders in the Scientific Enterprise”**

*Geraldine Richmond*

*Richard M. and Patricia H. Noyes Professor of Chemistry  
University of Oregon, USA*

Women face barriers to success in every field of science and engineering; obstacles that deprive the world of an important source of talent. The MIT report of 1998<sup>1</sup> served as a catalyst for a public dialogue on this issue. It also served as a reminder that although we are achieving gender parity in some science disciplines at the undergraduate level, at the university level from which we draw most of our leaders in research, education and science policy, women are woefully underrepresented and undervalued. Progress towards gender equity in science and engineering is a difficult uphill battle, as evidenced by MIT's recent slump back to previous low female faculty hiring levels. In the meantime however, numerous new initiatives and programs have been started in the United States that show promise for change. This talk will focus on three different initiatives that exemplify these efforts. The first is the newly released National Academy Study entitled “Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering.”<sup>2</sup> This report explains that eliminating gender bias in academia requires immediate overarching reform, including decisive action by university administrators, professional societies, federal funding agencies and foundations, government agencies, and Congress. It provides recommended actions that will help to improve workplace environments for all employees while strengthening the foundations of the nation's scientific enterprise. I will focus on several initiatives motivated by this study that are showing particularly promise. The second is an innovative initiative to educate department chairs in the top US research universities on issues of gender inequities in the sciences and to set goals and benchmarks for increasing the faculty diversity in these departments.<sup>3</sup> This effort has been largely driven by the primary federal research funding agencies. The third is focused directly at increasing the number and effectiveness of women faculty scientists and engineers as leaders in their research fields, departments, academic institutions, professional organizations and national policy organizations.<sup>4</sup> COACH,<sup>5</sup> the organization heading this effort, initially started in the field of chemistry and has rapidly spread to other science and engineering disciplines in the US. The program has impacted the careers of over 1500 women science and engineering faculty in the US with measureable positive results.

1. See for example: <http://web.mit.edu/fnl/women/women.html>
2. "Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering", Committee on Maximizing the Potential of Women in Academic Science and Engineering, National Academy of Sciences, National Academy of Engineering, and Institute of Medicine, September 2006. ([http://www.nap.edu/catalog.php?record\\_id=11741](http://www.nap.edu/catalog.php?record_id=11741))
3. "Building Strong Academic Chemistry Department through Gender Equity". The workshop report can be downloaded from the website at: <http://www.chem.harvard.edu/groups/friend/GenderEquityWorkshop/>.
4. “Redressing the Balance: Training Series for Women Scientists Expands”, G. L. Richmond, *Nature*, 437 (592) 2005.
5. COACH Website: <http://coach.uoregon.edu/>