Commission on Professionals in Science and Technology

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Press Release

FOR IMMEDIATE RELEASE

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US Talent Pool for STEM: Deep But Not Fully Tapped

The 17th edition of ***Professional Women and Minorities: A Total Human Resources Data Compendium*** shows that even with some minor gains, the whole human resources potential for science, technology, engineering and mathematics (STEM) in the United States is not being fully utilized. Women have made some impressive gains in various professional fields, yet women's progress in STEM fields has been uneven. Members of key U.S. minority groups—most notably African Americans, Hispanics, and American Indians (the under-represented minorities)—have barely gained any ground in moving into scientific and professional fields, both in education and in the workplace.

According to Lisa Frehill, Executive Director of the Commission on Professionals in Science and Technology and one of the report's authors: "Maintaining the U.S. technological edge depends on our ability to recruit and retain engineers from our deep talent pool. While we have seen incredible progress in women's participation in some key areas, women's low level of representation in computer science and engineering needs to be a matter of national concern. The dismal representation of Hispanics in the STEM workforce will also a big problem for the U.S. in the future, because of the projected growth for this group."

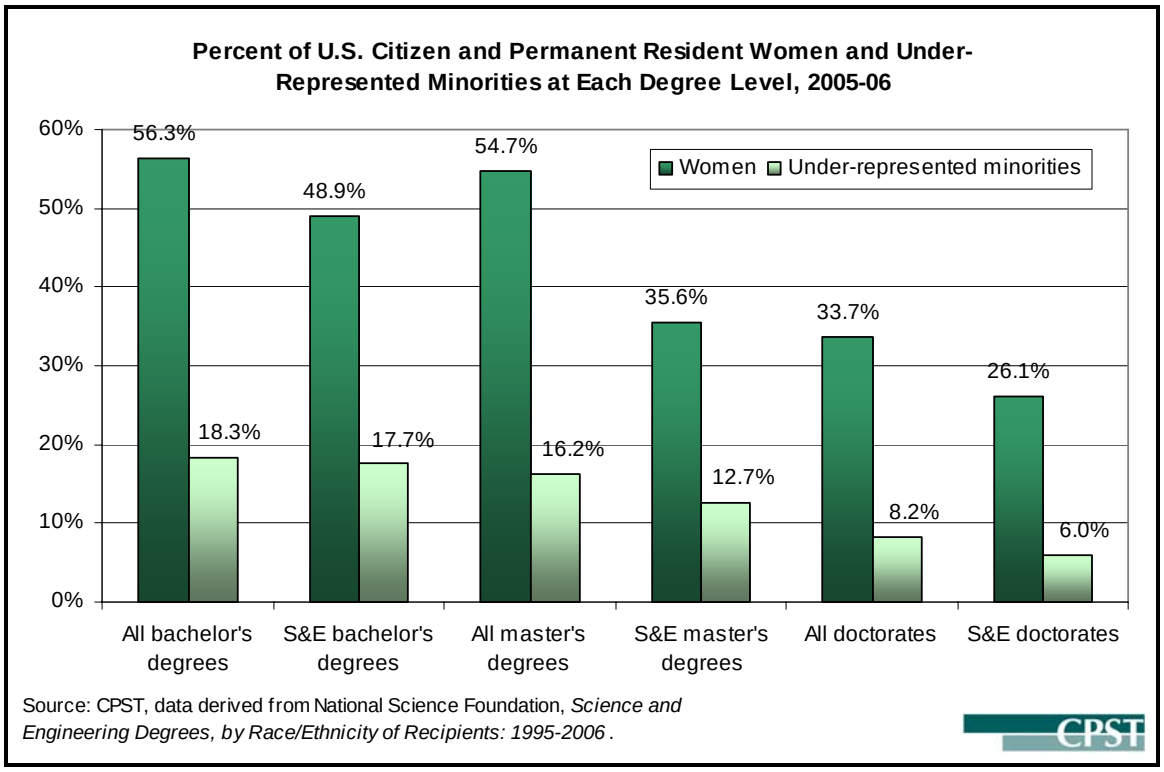
Nicole Di Fabio, CPST Research Associate and co-author of the volume said: "It's heartening to see the numbers of women and minorities in both higher education and the workforce increase. However, since representation of women and minorities in STEM disciplines at master's and PhD levels is considerably lower than at the bachelor's level, women will still face disparities in these fields. STEM jobs pay well, but many women still often work in low-paying jobs; therefore, 27 million women and children live in poverty."

Key findings shown in the report:

- Under-represented minorities account for an increasing share of the U.S. population, currently accounting for 34% of the 18-24 year old population.
- Despite gains, one in four Hispanic males fail to complete high school, the highest rate of non-completion of any U.S. group.
- The percentage of U.S. female high school graduates who went on to college increased from 45% in 1965 to 70% in 2005.
- A steady, downward trend in women among first-time engineering college enrollees continued in 2006 – women accounted for less than one-in-five engineering college graduates at the bachelor's degree level.
- For both women and under-represented minorities, representation declines as the degree level increases:
    - Only 26% of STEM doctoral degrees were awarded to women and 6% to under-represented minorities in 2006.

- Women's participation in STEM fields varied greatly across disciplines with the lowest levels of participation in engineering and the highest in psychology.
- Under-represented minorities are far from parity (i.e., 34%) in ANY STEM field.

- Temporary residents (foreign students) earned 60% or more of U.S. doctoral degrees in computer science and engineering. Foreign students earned more than half of the doctoral degrees in mathematics and 44% in the physical sciences.
- U.S. faculty in STEM is predominantly white (78%) and Asian (14%).
- Women constitute 46% of the U.S. labor force but account for only 37% of the 10.1 million STEM workers.
- The United States confers more bachelor's-level degrees than any other OECD nation (about 1.4 million in 2004), but the relative proportion of STEM degrees is lower than other nations. Japan confers far fewer first degrees but nearly equals the United States in the number of STEM degrees: there were 455,848 STEM bachelor's-level degrees in the United States and 444,267 in Japan in 2004.



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The 17th edition of ***Professional Women and Minorities: A Total Human Resources Data Compendium*** is available for $135 (nonmember) or $100 (member) from CPST, 1200 New York Avenue, NW, Suite 113, Washington, DC 20005, (202) 326-7080, http://www.cpst.org. The 427-page publication contains more than 350 data tables and charts with current and historical data from over 200 sources. Six chapters cover the general population and pre-college education, enrollment in higher education, degrees earned in higher education, science and engineering employment (general, academic and federal), and international education and employment. PowerPoint slides of the volume's graphics are available.

About CPST: The **Commission on Professionals in Science and Technology (CPST)**, founded in 1953 as the Scientific Manpower Commission, is a nonprofit membership research organization. CPST is a participating organization with the American Association for the Advancement of Science. Members include leading scientific and engineering professional societies, corporations, academic institutions, and individuals concerned with the education and employment of scientists and engineers. For more information, visit http://www.cpst.org.