

## ***STEM Education for an Innovative Workforce***

**Mar 14, 2012, 12-1:30pm**

Location & Honorary Co-Hosts TBD

Co-Sponsor: Research Corporation for Science Advancement, in its Centennial Year

Recipients of undergraduate degrees in science, technology, engineering, and mathematics (STEM) find a labor market with more availabilities and higher potential earnings. However, OECD numbers indicate that the U.S. ranks near the bottom of 29 developed countries producing STEM graduates: a flat 15-17% of all bachelor's degrees despite rising enrollment. Indeed, surveys in 2005 indicate at least 50% of students who started in biological, physical, or mathematics leave these fields before completing their senior year studies. With innovation ever key to global competitiveness, the U.S. must bolster its workforce with STEM graduates to fully fuel its economic engines. In recent months, American Universities and the President's Council of Advisors on Science and Technology (PCAST) have recommended new methods to improve undergraduate STEM education to produce a more ready workforce. This panel will discuss policies needed to ensure translation of these strategic recommendations into economic success stories instead of shelved ideas.

Moderator:

- **James Gentile, Ph.D.**, President of RCSA

Panel:

- **Shirley Ann Jackson, Ph.D.**, President of Rensselaer Polytechnic Institute
  - Member of PCAST committee involved with STEM undergraduate recommendations report to be released Feb 2012
- **Hunter Rawlings III, Ph.D.**, President of the Association of American Universities, previously President of Cornell University
  - AAU started 5 year project to identify methods to better engage STEM students and incentivize supportive culture change in academic departments
- **Bassam Shakhshiri, Ph.D.**, 2012 President of the American Chemical Society
  - Chemistry/science educator and popularist from K-12 through graduate level