Short Bio

The Honorable Shirley Ann Jackson, Ph.D.

The Honorable Shirley Ann Jackson, Ph.D., is President of Rensselaer Polytechnic Institute, in Troy, New York and Hartford, CT, the oldest technological research university in the United States. She has held senior leadership positions in government, industry, research, and academe.

Her research and policy focus includes energy security and the national capacity for innovation, including addressing the "Quiet Crisis" of looming gaps in the science, technology, and engineering workforce and reduced support for basic research.

A theoretical physicist, she was chairman of the U.S. Nuclear Regulatory Commission (1995-1999), and conducted basic research at the former AT&T Bell Laboratories. Her research specialty was in theoretical condensed matter physics, especially layered systems, and the physics of opto-electronic materials.

Dr. Jackson serves on the President's Council of Advisors on Science and Technology (PCAST), appointed by President Obama in 2009. She is co-chair of the President's Innovation and Technology Advisory Committee (PITAC), part of the PCAST. In 2011 she co-authored the *Report to the President on Ensuring American Leadership in Advanced Manufacturing*, which provided an overarching strategy as well as specific recommendations for revitalizing the Nation's leadership in advanced manufacturing.

President of Rensselaer since 1999, Dr. Jackson has led an extraordinary transformation of the institute with an ambitious strategic effort known as *The Rensselaer Plan*. Under her leadership, new faculty members have been hired, research awards have nearly tripled and scholarships have increased. There have been innovations in curriculum, expansion of undergraduate research, and new award winning student life initiatives. Nearly $1.25 billion has been invested in *The Rensselaer Plan*, including in new construction, new equipment, technology and infrastructure, and renovations. Guided by her vision, Rensselaer is now home to the Center for Biotechnology and Interdisciplinary Studies, the Computational Center for Nanotechnology Innovations, the Curtis R. Priem Experimental Media and Performing Arts Center, and the East Campus Athletic Village.

Dr. Jackson was elected as an International Fellow of the British Royal Academy of Engineering in 2012. She is a member of the U.S. National Academy of Engineering, the American Philosophical Society, and a Fellow of the American Academy of Arts and Sciences, the American Physical Society, and the American Association for the Advancement of Science (AAAS). She is a Regent of the Smithsonian Institution, and a member of the Board of the Council on Foreign Relations and The Brookings Institution. She is past President (2004) and Chairman of the Board (2005) of the AAAS. She is a vice-chair of the Council on Competitiveness and co-chaired its Energy Security, Innovation and Sustainability initiative. She is a member of the Board of Directors of global companies including IBM, FedEx, Medtronic, Marathon Oil, and PSEG.

Dr. Jackson holds a S.B. in physics and a Ph.D. in theoretical elementary particle physics, both from M.I.T., and 51 Honorary Degrees. *(as of December 2012)*