



February 25, 2019

President Timothy D. Sands
Virginia Polytechnic Institute and State University
Blacksburg, VA 24061

Dear President Sands:

As presidents of the American Physical Society (APS) and the American Association of Physics Teachers (AAPT), we write you to commend your institution on its outstanding contributions to the education of future physics teachers. Virginia Polytechnic Institute and State University graduated 8 highly qualified physics teachers in the academic year 2017-18. To put this number into perspective, only 5 institutions in the United States were recognized for graduating 5 or more highly qualified physics teachers during 2017-18. To recognize this achievement, your institution will receive "The 5+ Club" award from the Physics Teacher Education Coalition (PhysTEC), a joint project of APS and AAPT.

The United States has a severe, long-term shortage of qualified physics teachers. In fact, in 2013 the National Task Force on Teacher Education in Physics reported, "the need for qualified teachers is greater now than at any previous time in history." Of the approximately 1400 new teachers who are hired to teach physics each year, only 35% have a degree in physics or physics education. Virginia Tech's efforts are an essential part of helping to address the critical shortage of qualified physics teachers.

In their 2014 report, the American Association for Employment in Education found that the teacher shortage in physics is number one among 59 education fields. Physics teacher shortages are considerable in every region in the United States, and Virginia Tech's excellent physics teacher preparation program is a service to the state of Virginia.

APS and AAPT launched PhysTEC out of concern over the severe shortage of qualified physics teachers. Since 2001, PhysTEC has supported over 40 universities to transform their physics teacher education programs into national models and established a coalition of over 300 institutions committed to improving physics teacher education. PhysTEC receives funding from the National Science Foundation and from private and foundation gifts to the APS.

Again, we congratulate Virginia Tech for its excellence in physics teacher education, and for serving as a national model for STEM teacher preparation.

Sincerely,

Roger Falcone
APS President
University of California, Berkeley

Gordon P. Ramsey
AAPT President
Loyola University, Chicago