

**APPOINTMENT OF DISTINGUISHED PROFESSOR**

**A Recommendation**

1. **Division and Department:** Office of the Senior Vice President for Academic Affairs and Provost.

2. **Introduction:** In 1988 the Board of Trustees (Board) created the faculty rank of Distinguished Professor. Upon recommendation of the President and Provost, the Board may appoint individuals to the rank of Distinguished Professor for the duration of the individual's active service at Oakland University. Appointments to distinguished professorships are based on the candidate's efforts and accomplishments in the areas of teaching, intellectual contributions and service, giving consideration to the programmatic and institutional setting of the candidate's work at Oakland and the nature of the candidate's assignments and responsibilities, the quality of the candidate's accomplishments and the relation of all the foregoing factors to the objectives of the area or departments, the goals of the college or school, and the mission and long-range vision of the University.

Andrei Slavin, Professor of Physics, is recommended for the appointment of Distinguished Professor.

3. **Previous Board Action:** The Board has periodically appointed individuals to the rank of Distinguished Professor at Formal Sessions of the Board.

4. **Budget Implications:** A one-time salary stipend of \$2,500 plus an annual supplies and services allocation of \$1,500, up to five years, for the Distinguished Professor will be paid from the Provost's Discretionary Fund.

5. **Educational Implications:** Recognition of a distinguished faculty member's long-standing dedication to the mission of the institution reinforces a culture that is devoted to excellence in teaching, research, creative endeavor, and service.

6. **Personnel Implications:** None.

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Oakland University  
Board of Trustees Formal Session  
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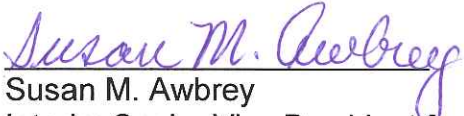
7. **University Reviews/Approvals:** A selection committee of his peers recommended Andrei Slavin, Professor of Physics, for approval to Dr. Susan M. Awbrey, Interim Senior Vice President for Academic Affairs and Provost, to the appointment of Distinguished Professor.

8. **Recommendation:**

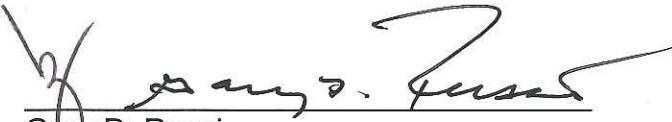
RESOLVED, that the Board of Trustees approves the appointment of Andrei Slavin, Professor of Physics, to the rank of Distinguished Professor, effective August 15, 2013.

9. **Attachments:** A. Biography of Andrei Slavin.

Submitted to the President  
on 3/26/, 2013 by

  
Susan M. Awbrey  
Interim Senior Vice President for  
Academic Affairs and Provost

Recommendation on 3/26 2013  
to the Board for Approval by

  
Gary D. Russi  
President

## Biography

Dr. Andrei Slavin is an outstanding candidate for Distinguished Professor because of his internationally acclaimed preeminence in scholarship. Dr. Slavin is a Professor in the Department of Physics. He obtained his Ph.D. in 1977 from Leningrad Polytechnic Institute, and was recruited by Oakland University as an Assistant Professor in 1991. He was promoted to Associate Professor with tenure in 1994, and then to Professor in 1998.

Dr. Slavin's research has focused on a growing field of physics called "spintronics," an emerging technology based on the intrinsic spin of the electron and its magnetic moment. In particular, Dr. Slavin studies nonlinear excitations in magnetic films called spin waves, which have potential applications in microwave signal processing.

Dr. Slavin has five publications with over 100 citations each. Some of these are from his early work in Russia (Kalinikos and Slavin, Theory of Dipole-Exchange Spin-Wave Spectrum for Ferromagnetic-Films with Mixed Exchange Boundary-Conditions, *J. Physics C-Solid State Physics*, 1986; 248 Citations). But others are more recent, such as a paper in the leading journal *Nature* (Demokritov, Demidov, Dzyapko, Melkow, Serga, Hillebrands, and Slavin, Bose-Einstein Condensation of Quasi-Equilibrium Magnons at Room Temperature Under Pumping, *Nature*, 142 citations in less than 7 years). Note that in physics, the first author listed is usually the researcher who does most of the work, but the last author listed is typically the team leader. Another highly influential paper was published in *Physical Review Letters*, widely considered the premier journal in physics (Jorzick, Demokritov, Hillebrands, Bailleul, Fermon, Guslienko, Slavin, Berkov, and Gorn, Spin Wave Wells in Nonellipsoidal Micrometer Size Magnetic Elements, *Phys. Rev. Lett.*, 176 Citations).

To obtain a snapshot of Dr. Slavin's recent impact, search the Web of Science for all papers from the last five years written by authors with "Oakland Univ" listed as in their address, and then order them by number of citations. The most cited paper was by Distinguished Professor Michael Chopp. The second in the list was Dr. Slavin's (Slavin and Tiberkevich, Nonlinear Auto-Oscillator Theory of Microwave Generation by Spin-Polarized Current, *IEEE Trans. Magnetics*, 2009; 87 citations). The third paper was by Distinguished Professor Gopal Srinivasan. In fact, the top eight publications in this list all included a Distinguished Professor among the co-authors (either Chopp, Srinivasan, or Sevilla) except Slavin's paper and a paper by Libin Rong. Dr. Slavin remains prolific, with papers coming out in late 2012 in the prestigious journals *Nature Materials* and *Nature Communication*. Over his career, he has published over 180 articles in peer-reviewed professional journals, with 16 of those appearing in the last two years.

Besides citation data, another objective measure of Dr. Slavin's research productivity is his success in obtaining external funding for his research. He currently has two active awards

from the National Science Foundation: Collaborative Research: Signal Processing Devices Based on Spin-Torque Nano-Oscillators, for \$270,000, in 2010, and Material World Network: Dynamically Controlled Artificial Magnonic Materials Based on Arrays of Nano-Sized Magnetic Dots, for \$330,000, in 2010. During his years at Oakland, Dr. Slavin has been awarded six NSF grants for a total of over \$1,000,000 in funding, all as Principal Investigator.

One Hallmark of Dr. Slavin's success in supporting his research is his ability to find a variety of funding sources. He has been awarded well over \$1,000,000 from the Department of Defense, including grants from the Army Research Office, from the U.S. Army Tank, Automotive Research, Development, and Engineering Center (TARDEC), and from the Defense Advanced Research Projects Agency (DARPA). He also has obtained funding from Research Corporation, and from several foreign countries supporting his international collaborations. The total amount of external funding that Dr. Slavin has brought to OU is over \$3,000,000.

Dr. Slavin's work is well known internationally. He has worked with an array of collaborators across Europe. He has held visiting positions in Germany, France, Italy, Portugal, Sweden, and Australia. Senior researchers from throughout the world visit Oakland University to work with him. He has active collaborations with researchers from Ukraine, Russia, and South Korea. He has given invited talks at scientific meetings throughout the world.

In 2010, Dr. Slavin was elected as a fellow of the American Physical Society, the largest professional organization for physicists in the United States. Only one half of one percent of APS members can be elected as fellows annually. Dr. Slavin's election was for "*contributions to the understanding of linear of nonlinear spin wave dynamics in magnetic films and nanostructures, microwave magnetic envelope solitons and magnetization dynamics induced by spin momentum transfer.*" In 2012 he was inducted as a fellow of the IEEE, the main professional organization for electrical engineers in the U.S. The Magnetics Society of the IEEE chose him "*for contributions to magnetic excitations and magnetization dynamics induced by spin transfer.*"

Dr. Slavin's ground-breaking research, outstanding productivity, preeminence in scholarship and commitment to mentoring students has brought distinction to Oakland University and merit the rank of Distinguished Professor.