

SUMMARY

New Appointments to Endowed Chairs, Professorships, or Fellowships (3)

August 27, 2018

College of Engineering (3)

Alan Druschitz	Thomas G. Digges and Thomas G. Digges, Jr. Faculty Fellow of Materials Science and Engineering
Matthew Eatherton	Raymond G. and Madelyn Ann Curry Faculty Fellow in Structural Engineering
Michael von Spakovsky	Robert E. Hord, Jr. Professorship in Mechanical Engineering

ENDOWED FACULTY FELLOWSHIP**Thomas G. Digges and Thomas G. Digges, Jr. Faculty Fellow of
Materials Science and Engineering**

The Thomas G. Digges and Thomas G. Digges, Jr. Faculty Fellow of Materials Science and Engineering was established with a generous gift from the estate of Robert H. Digges '59. Mr. Digges created this fund to honor his father Thomas G. Digges Class of 1920 and his brother Thomas G. Digges Jr., Class of 1960 in order to enable the Department of Materials Science and Engineering to recruit and retain outstanding faculty. Dean Julia Ross has nominated Dr. Alan Druschitz for this prestigious fellowship based on the recommendation of the Department of Materials Science and Engineering and the College of Engineering Honorifics Committees. Dr. Druschitz has excelled in all areas relevant to the mission of Virginia Tech: teaching, scholarship, service, and outreach.

Professor Druschitz's primary focus is metallurgy and metal casting, and he serves as the Director of the Virginia Tech Foundry Institute for Research and Education (VT-FIRE). VT-FIRE is a hands-on learning environment utilized by academic programs, senior design teams, engineering teams, undergraduate and graduate research, student societies, and outreach programs. Under Dr. Druschitz's leadership, Virginia Tech has gained national recognition as one of twenty Foundry Educational Foundation (FEF) certified schools. During the last two years, ten Virginia Tech students attended the FEF College Industry Conference and four of these students were awarded national scholarships worth \$9,000. Students participating in the Virginia Tech metal casting program have been awarded \$83,750 in scholarships. Since 2016, one of Dr. Druschitz's senior design teams was awarded first place in the FEF/American Foundry Society (AFS) Student Technology Contest, and three teams presented and published their projects at professional conferences.

Professor Druschitz and his students devote considerable time and effort to outreach activities that introduce students, prospective students, and the local community to metal casting. In the last two years, these activities have reached over 1,500 people and continue to grow.

Professionally, Dr. Druschitz is considered an international expert in metal casting and corrosion. He has published over 80 papers, organized many symposia, and recently received a \$500,000 research contract to study metal-ceramic composite castings.

Dr. Druschitz carries a heavy teaching load in the department, and he is always mentioned during face-to-face senior exit interviews as being an outstanding teacher and mentor.

RECOMMENDATION:

That Dr. Alan Druschitz be appointed as the Thomas G. Digges and Thomas G. Digges, Jr. Faculty Fellow in Materials Science and Engineering for a nonrenewable period of two years effective August 10, 2018 with a salary supplement and program support funds as provided by the endowment and, if available, with funds from the eminent scholars match program.

August 27, 2018

ENDOWED FACULTY FELLOWSHIP
The Raymond G. and Madelyn Ann Curry Faculty Fellow in Structural Engineering

The Raymond G. and Madelyn Ann Curry Faculty Fellowship in Structural Engineering was established in 2018 with a gift from Raymond G. Curry, Jr. and his wife Madelyn. Mr. Curry is a member of Virginia Tech's Class of 1954 and an entrepreneur in the construction and development industry. Dean Julia Ross nominates Dr. Matthew R. Eatherton for appointment to hold the Raymond G. and Madelyn Ann Curry Faculty Fellow in Structural Engineering in the Via Department of Civil Engineering (CEE). The nomination is recommended by the Honorifics Committee of the CEE Department as well as by CEE Department Head, Dr. W. Samuel Easterling.

Dr. Eatherton is a multi-talented, nationally recognized faculty member who brings a number of significant strengths in his research, teaching, and service to Virginia Tech. He is acknowledged to be one of the leading researchers in the field of structural steel structures and earthquake engineering. His work has beneficially impacted national design codes. Dr. Eatherton has published over 33 peer-reviewed papers, books and book chapters. He has been part of approximately \$5.5M in externally funded research, with a personal share of approximately \$2.3M. The quality of Dr. Eatherton's research has been recognized several times, including his selection by the American Institute of Steel Construction with the Milek Faculty Fellowship in 2012 and the Early Career Faculty Award in 2016; the VT College of Engineering Dean's Award for Outstanding New Assistant Professor in 2013 and College Faculty Fellow in 2016; and the National Science Foundation CAREER Award in 2015.

Dr. Eatherton has shown to be a dedicated classroom instructor and research advisor. Over the past eight years, his teaching evaluations indicate a very strong commitment to his students. Dr. Eatherton is also well respected and sought out as a graduate advisor as reflected by the number of students that he has advised or co-advised. These include having advised or co-advised to completion four Ph.D. students, 31 masters students and over 14 undergraduate research students.

Dr. Eatherton is a true leader in the field and he clearly understands the importance of service and has exhibited our motto of *Ut Prosim* for many years. Each year, he leads between five and ten K-12 outreach activities for CEED, the college of engineering, or local schools. He currently serves as structures laboratory director, master of science admissions coordinator for the structural engineering and materials group, faculty advisor for the Order of the Engineer, and member of the CEE department curriculum committee and fellowship committee. He also serves on five professional committees for the American Institute of Steel Construction and the Building Seismic Safety Council with the goal of improving the safety of our building codes.

RECOMMENDATION:

That Dr. Matthew R. Eatherton be appointed the Raymond G. and Madelyn Ann Curry Faculty Fellow in Structural Engineering, effective August 10, 2018 with discretionary funds to support his research as provided by the endowment and, if available, with funds from the eminent scholars match program.

August 27, 2018

ENDOWED PROFESSORSHIP
Robert E. Hord, Jr. Mechanical Engineering Professorship

The Robert E. Hord, Jr. Professorship in Mechanical Engineering was established with a generous gift of \$4.7 million from the estate of Robert E. Hord, Jr. (ME '41). This professorship was created to be awarded to an outstanding professor within the Department of Mechanical Engineering for a renewable term of five years. Dean Julia Ross has nominated professor Michael von Spakovsky as the Robert E. Hord, Jr. Professor of Mechanical Engineering based on the recommendations of the of the Department of Mechanical Engineering and the College of Engineering honorifics committee.

Dr. von Spakovsky has made significant and extraordinary contributions to research and scholarship in foundational theories and practical applications of thermodynamics. His work positions him as a leader of this field internationally, brings great prestige to Virginia Tech, and makes him an ideal recipient of this award. Since joining the Department of Mechanical Engineering Department in 1997, he has contributed significantly to the research, scholarly, and educational mission of the department through more than 235 technical publications, been involved in \$12M of funded research projects, and has directed 15 doctoral and 41 masters students.

Professor von Spakovsky has greatly advanced the foundational theories of thermodynamics. In particular, he and his co-workers developed a new paradigm called steepest-entropy-ascent quantum thermodynamics (SEAQT) that, for the first time, unifies the kinematics and dynamics of physics and thermodynamics into a single, self-consistent theory. With his students, he extended SEAQT to be practically applicable from the atomistic level to the macroscopic level and for generalizing the description of equilibrium thermodynamics to any non-equilibrium state. Published in the most respected journals in physics such as Physical Review A/B/E, Dr. von Spakovsky's research has pioneered a new theoretical framework that eliminates phenomenological models and avoids restrictions such as local or global equilibrium. His work has significantly pushed the boundaries of the science of thermodynamics.

Professor von Spakovsky's original contributions are widely recognized. In 2012, he and his student Charles Smith were awarded American Society of Mechanical Engineers (ASME) Edward F. Obert Award for their work validating dynamics of SEAQT against the data by Wineland and Haroche, who won the 2012 Nobel prize for their experiments. He received the prestigious ASME's James Harry Potter Gold Medal in 2014, which recognizes eminent achievement in the science of thermodynamics and its application in mechanical engineering.

RECOMMENDATION:

That Dr. Michael von Spakovsky be appointed as the Robert E. Hord, Jr. Professor of Mechanical Engineering for a period of five years effective August 10, 2018, with a salary supplement and operating expenses as provided by the endowment and, if available, with funds from the eminent scholars match program.

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