

ENDOWED PROFESSORSHIP
The Alexander F. Giacco Chair in Chemical Engineering

The Alexander F. Giacco Chaired Professorship is funded through the Alexander F. Giacco Endowed Presidential Chair Fund, which was initiated by a donation from Hercules Inc. to honor the many contributions to business and education by the late Mr. Alexander F. Giacco. Giacco was a former president of Hercules, a distinguished 1942 alumnus of Virginia Tech's Department of Chemical Engineering, the 1984-1987 Rector of the Virginia Tech Board of Visitors, and a member of the National Academy of Engineering.

Dr. Julia Ross, Dean of the College of Engineering, has nominated Dr. Erdogan Kiran to hold the Alexander F. Giacco Chaired Professorship in the Department of Chemical Engineering, concurring with the College of Engineering Honorifics Committee. The nomination is recommended by the Honorifics Committee of the Chemical Engineering Department, as well as by Chemical Engineering department head, Dr. Steven Wrenn.

Dr. Kiran is an internationally recognized leader in the area of supercritical fluids and their chemical engineering applications in polymer modification and processing. A supercritical fluid has unique properties for a wide range of applications in coffee decaffeination, food and polymer processing, environmental control, and medicine. He is the founder and the editor in chief of *The Journal of Supercritical Fluids*. The journal, which he established in 1988, has helped the field of supercritical fluids evolve and become recognized as a vibrant discipline. He is also the editor of *the Elsevier Book Series on Supercritical Fluid Science and Technology*, which aims at developing pedagogical monographs that can be used as teaching tools. He has edited 12 books and published 17 book chapters, more than 120 journal articles, and more than 50 articles in conference proceedings. He has been a mentor to 10 postdoctoral research associates, 15 Ph.D. and 20 M.S. graduate students, and 38 undergraduate research students.

This nomination is strongly endorsed by two members of the National Academy of Engineering, among other professional leaders. Professor Jefferson W. Tester, Croll Professor of Sustainable Energy Systems, Chemical and Biomolecular Engineering and Director of the Cornell Energy Institute at Cornell University says:

Simply put, Professor Kiran is without equal in the field of supercritical fluids – there is not anyone who even comes close. The range of his interests and contributions, the impact of his overall work, his leadership in organizing and managing critically important scientific meetings and symposia have been and continue to be enormous. The breadth and impact of his research and leadership in the field of supercritical fluids has continued during these two past years, exemplifying to me what a chaired professorship should represent in terms of research and teaching excellence.

Also, Professor Keith P. Johnston, Claire and Peter Buenz Endowed Chair, Paul D. and Betty Meek American Petrofina Foundation Centennial Professor of Chemical Engineering at University of Texas at Austin adds:

Erdogan has provided perhaps the greatest leadership of any American chemical engineer in the field of supercritical fluids with over 40 years of research, several edited books, key review articles, his role as Editor-in-Chief of *Journal of Supercritical Fluids*, NATO Advanced Study Institutes in Europe and many other international symposia. Hundreds of researchers in the field have been influenced significantly by his research and leadership. He is extremely well known internationally by numerous colleagues, and the Giacco Chair would recognize his outstanding contributions to this important field.

RECOMMENDATION:

That Dr. Erdogan Kiran be appointed the Alexander F. Giacco Professor of Chemical Engineering for a renewable five-year term, effective August 10, 2022, with a salary supplement and annual operating budget provided by the endowment and, if available, with funds from the eminent scholars match program.

August 22, 2022

ENDOWED FACULTY FELLOWSHIP
The Jerry L. Hulick Faculty Fellowship for Special Needs,
Disabilities, and Inclusion

The Jerry L. Hulick Faculty Fellowship for Special Needs, Disabilities, and Inclusion was established by a generous gift from Mr. Jerry Hulick, '73 in 2021 to enhance the national and international prominence of the Virginia Tech College of Science. The purpose of the fellowship is to recruit, develop, and retain outstanding faculty whose research, teaching, outreach, and/or public policy efforts positively impact the disabilities and special needs communities.

Dr. Kevin Pitts, dean of the College of Science, in consultation with a panel of disciplinary experts in the college, has nominated Dr. Rosanna Breaux, assistant professor in the Department of Psychology, for the Hulick Faculty Fellowship. Dr. Breaux's comprehensive excellence in research, education, and service to the university and her research community make her a natural holder of this Fellowship. She is an accomplished scholar and a "rising superstar" in this important and emerging field.

Dr. Breaux joined the Department of Psychology in 2019 as an assistant professor. In 2021, she was appointed as the director of the VT Child Study Center. She earned her Ph.D. in Clinical Psychology from the University of Massachusetts, Amherst in 2017 and completed a postdoctoral fellowship at Virginia Commonwealth University before joining Virginia Tech.

A central focus of Dr. Breaux's research, clinical work, mentoring, and community outreach is supporting individuals with special needs and disabilities, particularly youth with neurodevelopmental disorders such as attention-deficit/hyperactivity disorder (ADHD) and autism spectrum disorder (ASD). Her research encompasses three major themes among neurodevelopmental disorder populations: youth emotional regulation development, emotion socialization parenting practices, and interventions for youth with ADHD.

Dr. Breaux's scholarship record is outstanding, with 63 publications in peer reviewed journals and 30 invited or keynote presentations. She has already earned several awards including the Rising Star award from the Association for Psychological Science, appointment as a Child Intervention, Prevention, and Services (ChIPS) Research Institute Fellow, and the CHADD (Children and Adults with ADHD) Young Scientist Research Award.

Dr. Breaux's research program has been supported with both internal and external funding. Since coming to Virginia Tech, she has already been principal investigator (PI) or co-PI on seven grants from a variety of agencies including the Society for a Science of Clinical Psychology, the American Psychology Association Committee on Early Career Psychologists, and the VT Institute for Society, Culture, and Environment.

RECOMMENDATION:

That Dr. Rosanna Breaux be appointed the Jerry L. Hulick Faculty Fellow for a renewable three-year term, effective August 10, 2022, with a salary supplement and operating support as provided by the endowment and eminent scholar match, if available.

August 22, 2022

ENDOWED FACULTY FELLOWSHIP
The Leo and Melva Harris Faculty Fellowship

The Leo and Melva Harris Faculty Fellowship was established by the College of Science Roundtable Advisory Board in 2021, in memory of long-time member Leo Harris and in honor of his wife Melva. The purpose of this fellowship is to enhance the national and international prominence of the Virginia Tech College of Science by recruiting, developing, and retaining outstanding tenured and tenure-track faculty and providing support and recognition of faculty scholarship in any discipline or transdisciplinary area in the College of Science.

Dr. Kevin Pitts, dean of the College of Science, in consultation with the College of Science Honorifics Committee, has nominated Dr. Feng Lin, associate professor of Chemistry, as the Harris Faculty Fellow. Dr. Lin's comprehensive excellence in research, education, and service to the university and his research community make him an extraordinary scholar in an important and emerging transdisciplinary field.

Dr. Lin earned his Ph.D. in Materials Science in 2012 from the Colorado School of Mines and then completed a series of research appointments at the National Renewable Energy Laboratory, the Lawrence Berkeley National Laboratory, and the Quantscape Corporation before joining Virginia Tech. Dr. Lin joined the Department of Chemistry in 2016 as an assistant professor. In 2018, he joined the Macromolecules Innovation Institute as an affiliate faculty and then he was promoted to full professor in 2021.

Dr. Lin's interdisciplinary research is focused on materials for energy and sustainability, which is of enormous current interest worldwide due to its application in advancing electrochemical energy systems and battery storage. His research program aims to advance fundamental and practical knowledge for manufacturing new materials that can lower battery costs by using cheaper, more abundant raw materials. Of particular interest is research that will improve the affordability, convenience, reliability, and safety of electric vehicles.

Dr. Lin's scholarship record is outstanding, with over 130 publications in peer reviewed journals, six book chapters, three patents, and more than 70 invited presentations at universities, national laboratories, and conferences.

Dr. Lin's research program has been supported with substantial external funding. Since coming to Virginia Tech, he has been principal investigator (PI) or co-PI on grants with a personal share of \$4.5M from a variety of agencies including the National Science Foundation, Department of Energy, U.S. Department of Agriculture, U.S. Air Force, and others.

RECOMMENDATION:

That Dr. Feng Lin be appointed the Leo and Melva Harris Faculty Fellow in the College of Science for a renewable term of three years, effective August 10, 2022, with a salary supplement and operating support as provided by the endowment and eminent scholar match, if available.

August 22, 2022

ENDOWED CHAIR
T. Marshall Hahn, Jr. Chair in Physics

The T. Marshall Hahn, Jr. Chair in Physics was established by a generous gift from its namesake to attract and retain eminent scholars. Dr. Hahn served as the 11th president of Virginia Tech from 1962 – 1974. During his transformative presidency, he led the evolution of Virginia Tech from a college to a comprehensive major research university.

Dr. Kevin Pitts, Dean of the College of Science, has nominated Dr. Sophia Economou, professor of physics, to the T. Marshall Hahn, Jr. Chair in Physics, concurring with the recommendation of the College of Science Honorifics Committee. Dr. Economou's comprehensive excellence in research, education, and service to the university and her research community make her a natural holder of this chair that honors the memory of the man who was central to what Virginia Tech has become today.

Dr. Economou joined the Department of Physics in 2015 as an associate professor. She was appointed as the William E. Hassinger, Jr. Senior Faculty Fellow in Physics in 2019 and was promoted to full professor in 2020. In 2022, she was appointed as the inaugural director of the Virginia Tech Center for Quantum Information Science and Engineering. She earned her Ph.D. in Physics from the University of California, San Diego in 2006.

Dr. Economou's research is focused on theoretical quantum information science, which is of enormous current interest worldwide due to the technological revolution it can enable in communications and computing. She leads an active research group of ten graduate students and nine postdoctoral fellows. She has created three new courses in this field and led the creation of a minor in Quantum Science and Engineering to bring the excitement and promise of this field to a wide range of students.

Dr. Economou's scholarship record is outstanding, with 99 publications in peer reviewed journals and more than 70 invited or keynote presentations at professional conferences. Her publications have garnered over 3800 citations in her career to date. She has established an international reputation for her research, particularly her ability to inform and guide the work of experimentalists and her recent contribution to the field of quantum algorithms, with her most cited paper being written at Virginia Tech in 2019.

Dr. Economou's research program has been supported with substantial external funding. Since coming to Virginia Tech, she has been principal investigator (PI) or co-PI on 20 grants with a personal share of \$4.2M from a variety of agencies including the National Science Foundation, Department of Energy (DOE), Army Research Office, and the Defense Advanced Research Projects Agency. She is a member of the Co-design Center for Quantum Advantage, a DOE center led by Brookhaven National Lab.

RECOMMENDATION:

That Dr. Sophia Economou be appointed the T. Marshall Hahn, Jr. Chair in Physics for a renewable period of five years, effective August 10, 2022, with a salary supplement and operating support as provided by the endowment and eminent scholar match, if available.

August 22, 2022