Melting Away the Barriers to Grow the NSF Thermal Transport Processes Program

José L. Lage
Professor of Mechanical Engineering,
Southern Methodist University (on leave)
Director, Thermal Transport Processes Program
Division of Chemical, Bioengineering, Environmental, and Transport Systems (CBET),
Directorate for Engineering, National Science Foundation

Abstract: A brief overview of the current NSF structure and main funding activities is presented, including the recent metamorphosis of the broader impact of research projects, the perceived growing emphasis on practical applications, the pre- and proposed post-tenure CAREER program, the Eager/Unsolicited/Goalie programs and their possible and sometimes unpredicted and undesired consequences to the academic research community. Finally, strategies for reshaping and strengthening the Thermal Transport Processes program of the Division of Chemical, Bioengineering, Environmental, and Transport Systems within the NSF Directorate of Engineering, and their relation to the overall well-being of the academic community, are presented.

Biographical Sketch: José L. Lage received his BSc ('84) and MSc ('86) from the Pontifical Catholic University-RJ, Brazil, and his PhD ('91) in Mechanical Engineering from Duke University. In 1991 he joined Southern Methodist University (SMU) as an Assistant Professor of Mechanical Engineering (ME), and was promoted to full Professor in 2001. A Texas Professional Engineer, he is the founder of the Laboratory for Porous Material Applications funded by the NSF, NIST, DOE and several industries. He was the Associate Chair of the SMU/ME Department (2000-2002), and more recently the President of the SMU Faculty Senate (2011-2012). He has over 200 publications and one patent. Lage has been elected an Honorary Member of Pi Tau Sigma and a Fellow of the ASME, and served twice as an Associate Editor of the ASME JOURNAL OF HEAT TRANSFER, among other journals. He is the recipient of several awards, including the Sigma Xi for Outstanding Research, the ASEE for Outstanding Teaching, the ASME-NTS Engineer of the Year, and the SMU Golden Mustang Award. He has been a Visiting Professor of the Swiss Federal Institute of Engineering (ETH-Zurich), and of the Federal University of Technology Parana (UTF-PR-Brazil). In 2014 he was elected member of the Scientific Council of the International Centre for Heat and Mass Transfer. He is currently on leave from SMU, serving as the National Science Foundation Director of the Thermal Transport Processes Program in the Division of Chemical, Bioengineering, Environmental, and Transport Systems (CBET), Directorate for Engineering.

For additional information, please contact Prof. Xinyu Zhao at (860) 486-0241, xinyuz@engr.uconn.edu or Laurie Hockla at (860) 486-2189, hockla@engr.uconn.edu