## **Bio-sketch of Dion Vlachos**

**Dion Vlachos** is the Allan and Myra Ferguson Professor of Chemical & Biomolecular Engineering and a Professor of Physics and Astronomy at the University of Delaware. He also serves as the Director of the Delaware Energy Institute (DEI) and the founding director of the Catalysis Center for Energy Innovation (CCEI), an Energy Frontier Research Center (EFRC). He is also the technical lead of the intensified process fundamentals of the RAPID chemical manufacturing institute.

Dr. Vlachos obtained a five years diploma in Chemical Engineering from the National Technical Univ. of Athens in 1987. He obtained his MS (1990) with Klavs Jensen and his Ph.D. (1992) with Lanny Schmidt and Rutherford Aris in Chemical Engineering and Materials Science from the Univ. of Minnesota, and spent a postdoctoral year at the Army High Performance Computing Research Center, MN, after which he joined UMass as an Assistant Professor. He was promoted early to Associate Professor in 1998 and joined the Univ. of Delaware in 2000. He was a Visiting Fellow at Princeton Univ. in the spring of 2000, a visiting faculty at Thomas Jefferson Univ. and Hospital in spring of 2007, the George Pierce Distinguished Prof. of Chemical Engineering and Materials Science at the Univ. of Minnesota in 2007, and the Elizabeth Kelley Inez Professor of Chemical & Biomolecular Engineering at the Univ. of Delaware (2009-2016).

Professor Vlachos is the recipient of the ExxonMobil Visiting Chair Professorship from the National University of Singapore (2018-2020), the Catalysis Club of Philadelphia Award (2016), and the R. H. Wilhelm Award in Chemical Reaction Engineering from AIChE (2011). He is an AAAS Fellow (2009) and a recipient of the NSF Career Award and the Office of Naval Research Young Investigator Award. He is a member of AIChE, ACS, the Combustion Institute, MRS, the North American Catalysis Society (NACS) and the Society for Industrial and Applied Mathematics (SIAM). He was a DOE invited panelist of the workshop and a report writer of the Basic Research Needs: Catalysis Science to Transform Energy Technologies (2017) and the lead Organizer and Roadmap Leader of the NSF/DOE Modular Manufacturing Workshop (2017). He is the ISCRE Vice President (2017-2018) and President (2019-20).

He is the corresponding author of ~400 refereed publications (a total of >15,000 citations and an h-index (by ISI) of 66; >20,000 citations and an h-index of 81 (by google scholar)). He holds one patent and nine provisional patents. He has given ~300 named, plenary, and keynote lectures, and other invited talks.

He served as the executive editor of the Chemical Engineering Science journal and serves or has served on the editorial advisory board of several journals, e.g., ACS Catalysis, Reaction Chemistry & Engineering, Industrial and Engineering Chemistry Research (I&ECR), Applied Catalysis A: General, The Combustion Institute, The Open Energy and Fuels Journal, the Journal of Nano Energy and Power Research, and J. Chem. Eng. & Proc. Tech.: Proc. Intensification.