



Biography of Rigoberto Advincula

Rigoberto Advincula has made immense contributions to polymer and nanomaterials research. He is the Governor's Chair Professor at Oak Ridge National Laboratory and the University of Tennessee. His significant contributions are in: nanostructured functional macromolecules; interfacial phenomena; nanostructuring of polymer ultrathin films; development of novel analytical characterization methods; polymer nanocomposites; and additive manufacturing (3D printing). He obtained his Ph.D. degree from the University of Florida and pursued post-doctoral fellowships at the Max Planck Institute and Stanford University. Prof. Advincula has published over ~700 papers, which have been cited **28,000 times** and have an **H-index of 87**. He has many patents related to thin films, nanomaterials, and supramolecular initiators (15 patents). He is a Fellow of the National Academy of Inventors (NAI) and Fellow of the American Chemical Society (ACS). Last year, he was inducted as a Fellow of the Materials Research Society, and this year he received the George Stafford Whitby Award from the American Chemical Society (ACS) Rubber Division. Other very notable awards of Prof. Advincula include: 1) International Prize 2024, Society of Polymer Science of Japan (SPSJ), 2) Royal Society of Chemistry (RSC), Fellow, 3) PMSE Division (ACS) Fellow, 4) Polymer Division (ACS), Fellow, 5) American Association for Advancement of Science (AAAS), Fellow, 6) American Institute of Medical and Biological Engineering (AIMBE), Fellow, 7) Institute of Minerals, Materials, and Manufacturing (IMMM), 8) North American Thermal Analysis (NATAS) Fellow, 9) Mark Scholar Award, Polymer Division (ACS), 10) Arthur Doolittle, PMSE (ACS) Award, among many others.

He is a leader in materials research and is well known internationally. He is a Board Member, National Academies of Science, Engineering, and Medicine (NASEM), Board of Chemical Science and Technologies (BCST). As President of the Pacific Polymer Federation (PPF), he led the Pacific Polymer Conference (PPC-2018) as a Mexico-US event. As Past Chair of the Polymer Chemistry Division, American Chemical Society (ACS), and a long-time executive committee member, he led many initiatives of the Division that benefited the professional community. As International Committee Chair, he led many initiatives as a long-time co-organizer with Macromex, PPF Councilor, and a member of the IUPAC polymer education committee. He is a well-sought-after invited and plenary speaker at many international conferences, including IUPAC-Macro 2014, Macromex 2020, and the Waterborne Symposium 2015, with a total of almost 780

presentations over his lifetime. Overall, he is considered a seasoned and eminent scientist in polymers and materials.

Mentoring future scientists has been an essential mission of Rigoberto Advincula since 1997, with many mentoring accomplishments: 39 Ph.D. graduates, 42 MS/graduate students, 18 Post-Doctoral Scholars, 74 visiting scholars, 240 undergraduates, and 80 local high school students in his laboratory in the STEM fields. Many have won awards (52) during their time with his group. He has hosted and mentored many international scholars: visiting professors, scholars, and students. Many Ph.D. graduates are in the industry, and others are in academic leadership positions both here and abroad. Awards included mentoring awards and nomination to the Stanley Israel Regional Award for Advancing Diversity in the Chemical Sciences (ACS) in 2009. In 2010, he received the University of Houston's highest Undergraduate Research Mentoring Award. In 2022, he received the Lifetime Distinguished Achievement Award from his alma mater, the University of the Philippines, honoring his achievements and giving back to the community.