Stanford



Turgut M Gür

- Adjunct Professor, Materials Science and Engineering
- Npl Research Liaison, Mechanical Engineering Design

Bio

BIO

Turgut M. Gür is an Adjunct Professor of Materials Science and Engineering at Stanford University, where he recently retired after a distinguished career that included technical and management leadership for three major multi-disciplinary team-based research centers on campus focused on advanced materials and energy conversion and storage, namely, the DOE-EFRC Center on Nanostructuring for Efficient Energy Conversion (CNEEC), the NSF-MRSEC Center for Materials Research (CMR), and Geballe Laboratory for Advanced Materials (GLAM).

Currently, he is the President of The Electrochemical Society and chairs its Board of Directors and several other ECS committees. He is also an inducted Fellow of The Electrochemical Society.

In addition, he holds a Visiting Professor appointment from the Chinese University of Mining and Technology-Beijing (CUMTB) in China, and an "international mentor" appointment from the Norwegian University of Science and Technology (NTNU) in Trondheim, Norway.

He is an internationally recognized leader in high temperature electrochemical energy conversion and storage technologies, materials and processes with 11 US issued patents, 17 (published) patent applications, and 165 technical publications, largely related to energy conversion processes and materials including fuel cells, electrocatalysis, electrosynthesis, coal and hydrocarbon conversion, hydrogen production, and sensors and membranes. He has made nearly 150 oral presentations in national and international conferences, given 85 invited lectures, talks and colloquia, co-organized 24 international conferences and symposia, and co- edited 18 transaction volumes and proceedings.

In 2020, out of more than 186,000 energy scientists in the world, he is ranked the 702nd most cited energy researcher, and is also rated in the top 1% of most cited among all scientists in the world across all scholarly fields of sciences, engineering and medicine (https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000918). Recently, he is also ranked in the top 5% of cited researcher in RSC journals by The Royal Society of Chemistry.

As an entrepreneur, he was involved in developing advanced technologies in several start-up companies developing supercapacitors, chemically assisted spontaneous production of hydrogen via steam electrolysis, carbon fuel cells for efficient conversion of coal, biomass and other solid fuels to electricity with total carbon capture, and industrial wastewater treatment based on electrochemical remediation by selective reduction and capacitive deionization.

He has served in top leadership positions on the boards of several professional societies as well as industrial and non-profit organizations. He has been on the Board of Directors of The Electrochemical Society for 6 years and was the Chair of the High Temperature Energy Materials and Processes division of the Society. Previously,

he had served 3 terms on the Board of the International Society for Solid State Ionics (ISSI), which is another leading global society for scientists in electrochemical energy conversion and storage. Formerly, he was an Associate Editor of the Journal of the American Ceramic Society (2002-2014), and the editor for Solid State Ionics Letters (1998-2002).

He also volunteers his time as a Board Trustee and the former Vice President of the Turkish Educational Foundation, a charitable non-profit organization in the San Francisco Bay Area in California, USA, that provides financial support, scholarships and educational assistance annually to 2400 needy students in Turkey.

He holds BSc and MSc degrees in Chemical Engineering from the Middle East Technical University in Ankara, Turkey, and three graduate degrees including a Ph.D. in Materials Science and Engineering from Stanford University.