

Prof. Dr. Semahat Siddika Demir

Born in Istanbul, having completed Hasan Ali Yücel primary school, Professor Semahat S. Demir graduated from middle and high schools of Robert College of Istanbul. She earned a bachelor's degree in Electronics Engineering at Istanbul Technical University (İTÜ) and master's degree in Biomedical Engineering at Boğaziçi University, Istanbul. She earned another master's degree and a Ph.D. degree in Electrical and Computer Engineering at Rice University in the U.S.A. She completed her post-doctoral studies in Biomedical Engineering at the Johns Hopkins University in the U.S.A. She is a professor of Biomedical Engineering, Computer Engineering and Electronics Engineering. Professor Demir has been the academic adviser to more than 40 successful masters and PhD students.

Dr. Demir has served as the director of USA National Science Foundation (NSF) Biomedical Engineering Program during 2004-2012. She was appointed to be the director of 20 different programs at NSF and in collaboration with NASA, NIH, DOE, VA and FDA. Dr. Demir published 215 scientific papers and has served on 15 editorial and publishing company boards. Having been invited to give more than 900 invited talks in more than 25 countries, Professor Demir has led more than 200 academic assemblies as the congress / assembly chair, the organizer and the delegation/summit head. She has served on the governing boards of 18 different organizations including Society of Women Engineers (SWE), American Society for Engineering Education (ASEE), Biomedical Engineering Society (BMES), Institute of Electrical and Electronics Engineers (IEEE) Engineering in Medicine and Biology Society (EMBS), Turkish American Scientists and Scholars Association (TASSA), Eta Kappa Nu Electrical Engineering Honor Society and Sigma Xi Scientific Research Honor Society. Professor Demir has been granted more than 16 science and service awards.

She has directed 'Science Diplomacy Cooperation with Turkey', a program of the U.S.A. State Department. Professor Demir combined science diplomacy with public diplomacy effectively as a USA Embassy Science Fellow. USA and Turkey signed a Science and Technology agreement on 10/20/2010 where science diplomat Dr. Demir's report "Science Diplomacy with Public Diplomacy" provided the foundation.

Professor Semahat S. Demir and her sister Siddika Demir Velipaşaoğlu were 2 of the 32 Turkish women engineers to be featured in the book 'Ataturk's Engineer Daughters' published in the year 2010. Dr. Demir has been among the 4 role model people whose names were stated as the 'People that have served Humanity at Arts, Sports and Science Areas', in the mandatory life sciences text book for primary school 3rd grade students published by Turkey's Ministry of National Education.

Dr. Demir served on the SWE Board along with her sister Siddika Demir Velipaşaoğlu, SWE President. Professor Semahat Demir was responsible for SWE's strategy development, public policy, international participation, E-Week and partnerships. As a board member, she was a key player for talent management and succession planning for SWE leadership pipeline, and the development and implementation of the diversity and inclusion strategy. Dr. Demir worked for SWE's public policy development and chaired the congressional briefings and roundtables for SWE at the Capitol Hill (Washington DC) and at the National Academies; the goals of these congressional briefings and roundtables were to educate the attendees on the need for more women and diversity in Science, Technology, Engineering and Mathematics (STEM) Fields and the importance of diversity issue to the innovation and competitiveness debate.

Professor Semahat S. Demir served as the Rector (President) of Istanbul Kültür University (IKU) during 2012-2016. She set the direction of the university and oversaw the management of seven four-year colleges (Architecture, Education, Engineering, Arts and Design, Law, Letters and Sciences, Economic and Administrative Sciences), two graduate schools (Sciences and Social Sciences), and three vocational schools (Justice, Technical and Administrative Sciences). Her university had 31 undergraduate degree, 46 masters degree, 10 PhD degree and 23 associate degree programs. Her university had 15,375 students, 956 faculty and staff members and 12,000 alumni. The full-time international students were 6 % of the student body and were from 62 countries. She increased enrollment with quality growth. Under her leadership, President Demir developed and established two new colleges (Education College and Health Sciences College), 14 new undergraduate, 11 new masters and three new doctorate programs, one new vocational school for justice and 12 associate degree programs. She increased student enrollment by 95.4 % (46% for woman students) over 4 years during her presidency. She also served as the Dean of her College of Art and Design. During the extraordinary times in Turkey in 2016 she also served as the Dean of all of her colleges and schools.

Currently, she is the President of Science Heroes Association that promotes and develops STEM activities for students. She is also a professor of computer engineering and the former Dean of Engineering faculty at Istanbul Topkapi University. She is a Fellow of US Embassy Science, American Institute for Medical and Biological Engineering (AIMBE) and Society of Women Engineers (SWE).