Metin Duran, PhD

Professor of Civil and Environmental Engineering | College of Engineering at Villanova University

Villanova, PA, US

Metin Duran, PhD, is an expert on using beneficial microorganisms to re-mediate pollutants and remove harmful microorganisms from water.

Biography

Solving the growing problem of how to treat and remove waste is one of today's most important environmental concerns. Dr. Metin Duran?s professional activities lay on the interface of applied microbiology and engineering. He uses microbiological principles to understand, design, and control biological processes for wastewater treatment, bioremediation, solid and hazardous waste management, and water quality control. Dr. Duran can discuss how to identify and remediate pollutants in waste, and the potential for wastewater reuse. Particularly timely is Duran's research on increasing methane yield at Philadelphia Water Department Water Pollution Control Facilities so that use of methane as a renewable energy source would be economically more feasible. He can also speak about microorganisms that live in extreme environments like thermal vents on Earth and possibly on Mars. Dr. Duran also leads the Environmental Microbiology and Biotechnology (EMB) Laboratory at Villanova, which is engaged in research and education in the applied microbiology area as it relates to biological processes of environmental engineering.

Industry Expertise

Environmental Services, Writing and Editing, Research, Education/Learning

Areas of Expertise

Microbial Water Quality, Renewable Energy from Waste, Wastewater Treatment, Water Pollution

Affiliations

Visiting Scholar, Environmental Engineering Department, Middle East Technical University, Ankara, Turkey, 2013, Visiting Scholar, Genomics and Microarray Facility, The Wistar Institute, University of Pennsylvania, 2006

Education

Vanderbilt University
PhD

Vanderbilt University
MS

Istanbul Technical University
BS