Ram B. Gupta, Ph.D.

Associate Dean for Faculty Research Development | Professor of Chemical & Life Science Engineering at VCU College of Engineering

Engineering West Hall, Suite 331, Richmond, VA, US

Research interest: batteries, electrochemistry, sustainable energy, biofuel, supercritical fluids, and nanomedicine.

Description

Dr. Gupta is the Associate Dean for Research and a Professor in the School of Engineering at the Virginia Commonwealth University, Richmond, VA. Prior to joining VCU, during 2011-2014, he served as the Director of Energy for Sustainability Program at the National Science Foundation. This program supports fundamental research and education that will enable innovative processes for the sustainable production of electricity and transportation fuels. Processes for sustainable energy production must be environmentally benign, reduce greenhouse gas production, and utilize renewable resources. Projects include those related to biofuels, photovoltaic solar energy, wind energy, and advanced batteries for transportation. During 1995-2014, he was a professor of chemical engineering at Auburn University. He has published numerous research papers and patents on pharmaceuticals and fuels, and is the recipient of Wright A. Gardner Award (2013) from the Alabama Academy of Science, Distinguished Graduate Faculty Lectureship award (2007) from Auburn University, Science and Engineering Award (2002-2004) from DuPont, Junior and Senior Research awards (1998, 2002, 2009) from Auburn Alumni Engineering Council, the James A. Shannon Directorâ€™s Award (1998) from the National Institutes of Health, and Young Faculty Career Enhancement Award (1997) from Alabama NSF-EPSCoR.

He is a Fellow of Alabama Academy of Science (2008) and serves/served on the editorial advisory boards various journals including ACS Sustainable Chemistry & Engineering, Industrial & Engineering Chemistry Research, Nanomedicine: Nanotechnology, Biology and Medicine (2005-07), Journal of Biomedical Nanotechnology, Research Letters in Nanotechnology, and Research Letters in Chemical Engineering. He received the B.E. degree (1987) from Indian Institute of Technology, Roorkee, the M.S. degree (1989) from the University of Calgary, and the Ph.D. degree (1993) from the University of Texas at Austin, all in chemical engineering. During 1993-95, he did postdoctoral work at the University of California, Berkeley. His recent books are: Nanoparticle Technology for Drug Delivery (2006, Taylor & Francis), Solubility in Supercritical Carbon Dioxide (2007, CRC Press), Hydrogen Fuel: Production, Transport, and Storage (2008, CRC Press), Gasoline, Diesel and Ethanol Biofuels from Grasses and Plants (Cambridge University Press, 2010), and Compendium of Hydrogen Energy (Elsevier, 2015).

Industry Expertise

Energy, Pharmaceuticals, Cleantech, Nanotechnology, Chemicals, Research, Education/Learning

Topics

Batteries, Electrochemical engineering, Bio-carbon, Supercritical carbon dioxide technology, Nanotechnology, Nanoparticles, Nanomedicine, Controlled release, Nanomixing, Smart medicine, Supercritical water technology, Hydrogen fuel, Renewable fuels, Bio-energy, Liquid fuels from methane and biomass, CO2 sequestration, Photochemical engineering, Oil spill remediation using benign dispersants, Renewable materials

Affiliations

Education

University of California, Berkeley
Postdoc Chemical Engineering

The University of Texas at Austin
Ph.D. Chemical Engineering

University of Calgary
M.S. Chemical Engineering

Indian Institute of Technology, Roorkee
B.E. Chemical Engineering
