Ravi Hadimani

Associate Professor and Director of Biomagnetics Laboratory at Virginia Commonwealth University

Richmond, VA, US

Professor Hadimani specializes in non-invasive brain stimulation, biomagnetics, magnetocalorics and energy harvesting research.

Biography

Dr. Hadimani has first class honors degree in Mechanical Engineering from Kuvempu University, India (2001), MS in Mechatronics from the University of Newcastle, UK (2003) and PhD in Electrical Engineering from Cardiff University, UK (2010). He has served as a Project Scientist from 2010 to 2011 at the Institute of Materials Research and Innovation of the University of Bolton, UK. He has developed a hybrid piezoelectric and photovoltaic energy harvester which is capable of harvesting electrical energy from solar, wind and rain energy. This invention was awarded the UK Energy Innovation Award in 2011 which was published in various news articles by BBC, New Scientist and Scientific America. He has also developed and patented piezoelectric polymer fiber that can be woven or knitted into energy harvesting fabric. Dr. Hadimani has been awarded the International Young Scientist Fellowship by National Natural Science Foundation of China (NSFC) in 2013. Dr. Hadimani was an Adjunct Assistant Professor and an Associate Scientist at Iowa State University from 2014 to 2015. He was also an Associate of Ames Laboratory, a US Department of Energy National Lab from 2011 to 2015. He is currently an Assistant Professor and the Director of Biomagnetics Laboratory at the Department of Mechanical and Nuclear Engineering of Virginia Commonwealth University. Being a Senior IEEE member, he is actively involved with the IEEE Magnetics and Engineering in Medicine and Biology Societies. He has founded the IEEE Joint Magnetics and Engineering in Medicine and Biology Society?s Richmond Chapter and he is the current chair of the chapter.

Industry Expertise

Research, Education/Learning, Mechanical/Industrial Engineering

Areas of Expertise

Transcranial Magnetic Stimulation (Tms), Piezoelectric Energy Harvesting, Magnetic Nanoparticles , Magnetocaloric Effect, Rare-Earth Magnetic Materials , Biomagnetics, Non-Invasive Brain Stimulation

Affiliations

IEEE, (Magnetics Society, Engineering in Medicine and Biology), American Physical Society (GMAG and Medical Physics), ASME, IOP

Education

Cardiff University
Ph.D. Electrical Engineering

University of Newcastle
MS. Mechatronics

Kuvempu University
BE. Mechanical Engineering

Accomplishments

Engineer of the Year 2020
2020 Engineer of the Year awarded by Richmond Joint Engineers' Council.

Finalist British Council Alumni Award 2018
One of the finalists for British Council's 2018 "Study UK" Alumni Award.
https://www.britishcouncil.us/study-uk/alumni-awards

Outreach Award
Received the Outreach Award by the American Physical Society, GMAG topical group.

International Young Scientist Award
Recipient of the International Young Scientist Award from the National Natural Science Foundation, China (NSFC).

Energy Innovation Award
Recipient of the Energy Innovation Award by the UK Energy Innovation Centre for the development of hybrid photovoltaic-piezoelectric cell that can harvest electrical energy from sun, wind and rain.
