

Dr. K.Madhukar, M.Sc, Ph.D Professor

Presently he is actively working in the area of Nanoscience and technology: Our main focus is to design and develop novel polymer and polymer blend based nanocomposites, using different types of nanofillers, such as CNTs, Graphene Oxide etc. Developed few High Performance Polymer based Nanocomposites, using functionalized and Non-functionalized SWCNTs for reinforcement and as compatibilisers, to enhance compatibility between immiscible polymer systems. Developed new class of biodegradable polymer (Starch, PPC, PLA, Cellulose etc.,) based nanocomposites, using Graphene Oxide and other naturally extracted nano fillers. Synthesized nano particles, in-situ, using Plant extractions and used them in developing new class of biopolymer nanocomposites. These biopolymer nanocomposites, having good mechanical strength, exhibited good antibacterial activity making them good candidature for food packaging applications. Few students are actively working on this by using different medicinal plants. Attended several International / National Conferences and present papers. He has Teaching and Research Experience of 28 Years. He has successfully guided Four Ph.D scholars and presently six Research Students working are working for their Ph.D. He has Published 30 research papers in journals with Highest Impact factor of 4.25. He has authored / edited: Five books (Including Telugu Academy). He taught, at UG and PG levels papers of Electronics; Microprocessors, Digital electronics, PC architecture, Computer hardware, Computer Networks, RDBMS etc., Developed laboratories related UG / PG programmes. Presently he teaching different PG courses of Nanoscience & Electronics. He has Visited / Worked in ten countries on various capacities. He is life member in several Scientific Professional Bodies / societies. He is presently Director of Central Facilities for Research and Development (CFRD), Osmania University. He is also Chairman, BoS in Electronics, Sri krishnadevaraya University (2014-16 and 2016-2018) He worked as ICT4D Programme Specialist, UNDP and Manger (Networks) PSI Net, Cyber Towers, Hitech City Hyderabad.