BIODATA OF M.S.THAKUR

Designation: Chief Scientist (Retd) and former Head

CSIR-Central Food Technological Research Institute, Mysore, India

Prently Voisiting Professor, Mysore University, Mysore India

Dr. M.S. Thakur has made significant contribution in biotechnology especially in biosensor research in India from past 35 years. He has published more than 120 outstanding research papers along with 15 patents. As an expert in biosensor and biotechnology he has delivered many invited (more than 100) lectures and keynote addresses in national and international symposia.

Dr. M. S. Thakur has made fundamental discoveries in bio-inspired biomolecular electronics and biophotonics, interfacing the biochemical events with opto-electronic systems making biosensing simple, specific, rapid and ultrasensitive which is very unique contribution. He has made appreciable contribution in understanding the opto-physical properties of nanoparticles and biomolecules using Fluorescence Resonance Energy Transfer and Bioluminescence Resonance Energy Transfer (BRET/FRET) phenomenon. He has solved the intricate problems associated with ultrasensitive detection of toxins, pesticides and vitamins. His expertise in this area is well recognized nationally and internationally. His novel finding in developing non-conventional protein based stabilizers has made breakthrough in the stabilization of enzymes and antibodies for biosensor application and viable technology development. He has transferred his biosensor technologies which reflect his research confidence on application of lab research to commercialization. He is involved in developing the state of art biosensing techniques based on Localized Surface Plasmon Resonance (LSPR), surface enhanced Raman scattering (SERS), nanosensors, aptasensors and image processing. He has ingeniously developed an indigenous microarray system based on CCD using Biophotonics. He is also actively involved in promoting the research in biosensors and nano-biotechnology in India through organizing seminars, workshops and symposia. He has initiated the establishment of the Biosensor Society India.

His commitment to science specifically for the development of frontier areas of research in India is recognized by various scientific agencies such as Department of Science and Technology (DST), Department of Biotechnology (DBT) and Indian Council of Medical Research (ICMR).

During past 30 years he has handled several national and International projects on Biosensor research, which were funded by CSIR, DST, DBT, Indo-Swiss, Indo-Swedish and Indo-Spanish agencies. He is a member of Editorial board of International journals. He has been awarded L.G. Goodho AFST Award for his outstanding contribution in biosensor research. He was the recipient of best research papers award for the year 2000-2004 and 2008 at CFTRI and best scientist award 2009. He was visiting Scientist at Massachusetts Institute of Technology (MIT), Cambridge, USA, University of Maryland, USA, University of Lund Sweden, University of Kalmar, Sweden, EPFL, Switzerland, IMT, Neusechetel, Switzerland.

He is in expert committee member, constituted by office of Principal Scientific Adviser, Govt. of India on explosive detection, Department of Science and Technology, Indian council Medical research, University Grant Commission and an expert member of FSSAI food contaminants panel. Recently he has been nominated as a member of Board of Governors of National Design and Research Forum (NDRF) and also Expert member of Board of Director Biotechnology Council, Government of Madhya Pradesh.