

Project Director(s) Profile

Prof. Sunil Bhand

Dr. Sunil Bhand is a Senior Professor in the Department of Chemistry, BITS Pilani, K. K. Birla Goa Campus. He obtained Ph. D. in Chemistry from Devi Ahilya Vishwavidyalaya Indore in 1996. Thereafter, he worked as visiting scientist in RRCAT-DAE, Indore. During 200-2002, he worked as Post-Doctoral associate at Lund University, Sweden under Indo Swedish Technology Transfer project funded by SIDA Sweden and DBT GOI. In dec 2002, he joined BITS Pilani, Pilani Campus, became Professor in 2013 and a Senior Professor in 2022. Major thematic of his research involves biosensors and bio-analytical chemistry, Bio-MEMS, environmental analysis and field portable biosensors. Prof. Bhand has successfully completed 05 International and 12 national research projects funded by The Swedish Research Council (2 projects), The World Bank USA (NAIP-ICAR USD 5 Million grant about INR 32 crores with Prof Bhand as Consortia PI with 4 other institutes including IIT Delhi, NDRI-ICAR) Indo-UK (UKIERI- DST), MHRD-SPARC (Indo-Swedish), NASF- ICAR, ICMR-MERA, DAE-BRNS, CSIR, DRDO, Tea Board (Min of Commerce), RD Tata Trust, Birla Carbon and currently PI in 6 funded projects. Prof. Bhand has supervised 11 Ph. D. Thesis and currently leading a biosensor group with 06 researchers. He has published 70 research papers, 6 International Invited Book Chapters and inventor in 13 patents of which so far 5 are granted. He has presented 50+ research papers in national and international conferences held in USA, UK, France, Germany, Sweden, Australia, Mexico, Turkey and been reviewer for several international journals (Biosensor and Bioelectronics, Microchimica Acta, J Agri Food and Chemistry, Analyst etc.). Prof Bhand has served BITS Pilani in various capacities as Head of the Department (Chemistry), Associate Dean Sponsored Research and Consultancy (Goa Campus), Dean (Institute wide) Sponsored Research and Consultancy (2014-2022). Board of Director, (Technical) BITS BIRAC BioNEST Incubator supported by BIRAC. Prof Bhand was appointed expert by Goa State Innovation Council. He is currently the Vice president BITS Goa Innovation Incubation and Entrepreneurship Society BGIIES. Past founding Secretary as well as past Chairman IIM Goa Chapter, an alumnus of Holling Centre for International Dialogue Istanbul-Turkey (US Dept. of State) and Indo-German Frontiers of Engineering (Humboldt Foundation Germany). Prof Bhand is recognised biosensor expert in various committees of ICAR, DSIR, DBT (Indo-Russian), DST, Swiss National Science Foundation, Innovate UK and appointed expert member of RAC- ICAR as well as PRISM Impact Review Committee of DSIR.

Prof. Samit Chattopadhyay

Dr. Samit Chattopadhyay, Senior Professor & Shri B K Birla & Shrimati Sarala Birla Chair Professor position at the Department of Biological Sciences at BITS Pilani, Goa Campus, is the former Director of CSIR-Indian Institute of Chemical Biology, Kolkata and former Director, CSIR-NEIST (North East Institute of Science and Technology, Jorhat. He had started the Translation Research Unit of Excellence (TRUE) in IICB new campus in 2016, where he established a skill development-training center and an incubation center. His major contribution was setting up of a state-of-the-art facility for genomics, proteomics, bioinformatics, cancer epigenomics, cancer cell metabolomics and microbiomes.

His pioneering work on various aspects of cancer molecular biology is of significance with potential

therapeutic applications. He has published 100+ research papers in high impact journals having over 4000 citations and h-index of 32. He is a Fellow of all the three national Academies of Science. He is also the recipient of the Fellowship of The World Academy of Sciences (TWAS) and J C Bose National Fellowship.

His contribution has been in creating eco-system for research on disease and diagnostics, such as: bringing large number of mission mode and fast track projects between Biology and Chemistry for immediate translatable products for India, developing advanced knowledge in developing target-based drugs, understanding molecular basis of gene regulation and epigenetics in cancer and other diseases, molecular biology work on HIV transcription and latency, immune responses on mycobacterial infection, role of Nuclear Matrix Attachment proteins in DNA damage repair, Splicing etc., structure function relation of MAR binding proteins, role of miRNA in cancer and other diseases, plant genetics, plant molecular biology, chromosome techniques, Karyotyping and Cytogenetics. Has executed projects on Cholera Bacteriophages and their physical mapping, role of RNA-protein interaction in viral transcription, immuno-biology and T helper cell differentiation. He and his collaborators from BITS Pilani, CSIR-IICB, Bose Institute, NCCS Pune and other institutes are now trying to develop small molecule drugs against cancers and inflammatory diseases. He is also planning to initiate an advanced genetics lab to combat hereditary and rare diseases. He has trained 100+ project students and supervised 30+ PhD students. Currently, he is a part of a good number of task-force high-powered committees.

Prof Syamantak Majumder

Dr. Majumder is Associate Professor (Biological Sciences) at BITS Pilani Pilani Campus. He received his Ph.D. from Anna University, Chennai, India (2007-2011) and his Post Doctoral Training from the University of Rochester, USA (2011-2014) and the University of Toronto, Canada (2014-2017). He was awarded many International Fellowships and Awards such as Post Doctoral Fellowships from Canadian Diabetes Association; Post Doctoral Fellowships from Banting & Best Diabetes Centre, Toronto, Canada; EMBO Short Term Fellowship; Wood Whelan Research Fellowship from IUBMB; and ATVB Travel Award for Young Investigators from AHA. As an independent investigator, he has received Early Career Research Award from SERB, an Ad-hoc Research Grant from ICMR, and a Core Research Grant from DBT. He was also able to secure funding through the DBT-BUILDER scheme as one of the PI of the multi-departmental high-value project to work in the area of epigenetics and genome editing. In addition, he is one of the investigators to secure funding from the Department of Science and Technology under the Promotion of University Research and Scientific Excellence (PURSE) scheme. He is currently guiding five Ph.D. students. Dr. Majumder's work has been funded by multiple grants from SERB, DBT, ICMR and DRDO totaling around Rs. 6.0 Cr. Dr. Majumder has authored 56 (4 as corresponding author and 20 as the first author) published research articles, reviews, and book chapters including 50 research articles in peer-reviewed journals like JCI (2018; IF 19.5), JASN (2016a, 2016b, 2017; IF 15), Diabetologia (2019; IF 10.5), Cell Report (2016; IF 10), ATVB (2013, 2014 IF 10.51) and Diabetes (2016, 2018a, 2018b; IF 9.3) with a total of more than 1660 citations with an h-index of 24 and an i10-index of 40. Dr. Majumder's Lab at BITS Pilani, Pilani

Campus is trying to identify and target the epigenetic mechanisms driving endothelial inflammation and senescence during cardiovascular and kidney diseases. His lab at BITS Pilani has recently published three high-impact papers exploring the epigenetic mechanisms of vascular anomalies specifically mediated by endothelial inflammation during cardio-renal diseases (Cells 2021, IF 7.66; JCP 2022, IF 6.53; and Frontiers in Cell and Dev Bio 2022, IF 6.08).
