Name of Faculty Dr. Sanjeeb Kumar Mandal

Designation Assistant Professor

Nature of Job/Appointment Contract (30th April 2022)

Date of Joining 26-05-2021

E-mail sanjeebkumar_biotech@cbit.ac.in/

sanjeeb.vit@gmail.com

Education Qualifications Name of the Degree Class

Ph. D Doctor of Philosophy (BIOTECNOLOGY) Distinction

PG M. Tech Biotechnology First

UG B. Tech Biotechnology First

Work Experience

Teaching 2.5 Years

Research --Industry ---

Area of Specialization Environmental and Food Biotechnology, Microbiology

1. Membership in Indian Initiative for Management of Antibiotic

Resistance from Feb 2016 to till date.

2. Student Membership (01 Jan 2018 to 31st Dec 2018) at International Biodeterioration and Biodegradation Society, United

Kingdom having Membership No.:1062.

Professional Memberships 3. Postgraduate Membership (01 Jan 2014 to 31 Dec 2016) at

Biochemical Society, United Kingdom having Membership

No.:01059119.

4. Student Membership (Membership No: 5217) in Indian Society for

Technical Education (ISTE) from 2008 to 2012, VIT University

(Institute Code: TN090).

Responsibilities held at Institution

Others

Level

1. Result Analysis -2

2. Innovation Ambassador

Responsibilities held at Department

Level

3. UHV faculty coordinator

4. Conferences organized and attended by faculty along with

certificates/proofs -2

Research Guidance 18 students (B.Tech. Biotechnology)

1. Winner of JEB International Award for the Best Paper published in 2018 and also received the Cash Prize of USD 500. The

International Selection Committee has selected as best paper out of 142 papers published by the Journal "Journal of Environmental"

Biology" in the year 2018.

Awards Received 2. Received Research Award from Vellore Institute of Technology (VIT), Vellore, 2016, 2017 and 2018 for publishing paper for year

2015, 2016 and 2017 respectively.

3. Awarded for Paper Published in Scopus cited peer reviewed Journal by Committee Member of 6th SET Conference, VIT

University, 2014.

1. Bioorganic chemistry

2. Biochemistry

3. Analytical Methods and Instrumentation

4. Marine Biotechnology

Courses Handled at Under Graduate /

Post Graduate Level.

5. Biosafety and Hazardous Management

6. Agricultural Waste Management

7. Analytical Methods and Instrumentation Laboratory

8. Biochemistry Laboratory

9. Microbiology Laboratory

- Bioinformatics Laboratory
- Microbial physiology and metabolism Laboratory
- 12. Fermentation Technology Laboratory

National Journals - 14 No. of Papers Published

International Journals - 09

National Conference - 02

International Conference - 04

Received consultancy project of Rs. 2.0 lakh for waste water treatment from the company "N-Science Sustainable Solutions Pvt. Ltd., Kolkata, India".

Patents

Technology Transfer

Invited Speaker

1. Nilanjana Das, Sanjeeb Kumar Mandal, Devlina Das, Jagannathan Madhavan and Adikesavan Selvi (2021) "Recent Updates on the Role Biosurfactants for Remediation of Various Pollutants", Rhizomicrobiome Dynamics in Bioremediation, Chapter 9, Page No. 180-197, CRC Press, Florida, USA.

[Taylor and Francis Group]

2. Venkatramanan Varadharaian, Sri Thatchavani Ganapathi. Sanjeeb Kumar Mandal, Arulvel Ramaswamy, Subbaiya Ramasamy and M. Ponraj (2020) "Biodegradation of Polycyclic Aromatic Hydrocarbons and Synthetic Dyes" Degeneration to Regeneration -Alternative Approaches, Chapter 9, Page No. 140-160.

[Royal Book Publishing]

3. Nilanjana Das, Sanjeeb Kumar Mandal and A. Selvi (2018) "Petroleum Hydrocarbons Environmental Contamination, Toxicity, and Bioremediation Approaches" Recent Advances in Environmental Management, Chapter 15, Page No. 351-372, CRC Press, Florida, [Taylor and Francis Group] USA.

CONFERENCES/EVENTS/GUESTLECTURE PARTICIPATED:

- 1.Participated in the International Conference on "Current Trends and Emerging Challenges in Biological Sciences (CTECBS)- 2018" organised by the Department of Life Sciences, DKM College for Women (Autonomous), Vellore, Tamil nadu, India held during 15-16th February 2018.
- 2. Certificate of participation in the "3rd edition of VIT Bio Summit 2014", organised by School of Bio Sciences and Technology, VIT University, Vellore held on 7th and 8th August 2014.
- 3. Certificate of participation in the "2nd edition of VIT Bio Summit 2013", organised by School of Bio Sciences and Technology, VIT University, Vellore held on 2nd and 3rd May 2013.
- 4. Attended Guest Lecture on Next-Generation Sequencing by Dr. G Ramesh Kumar at VIT University, Vellore on 19th October 2013.
- 5. Certificate of participation in the event "Bio Trail Blazer of Gravitas'11, an International Knowledge Carnival", organised by VIT University, Vellore held on 16th and 18th September 2011.
- 6. Participated in the "Entrepreneurship Awareness Camp" organized by the Vellore Institute of Technology (VIT)-Technology Business Incubator (TBI), Vellore with the support of DST, Govt. of India, New Delhi from 4th -6th March, 2011.
- 7. Certificate of participation in the event "Science Mystery of Gravitas'10, an International Knowledge Carnival", organised by VIT University, Vellore held on 17th and 19th September 2010.
- 8. Certificate of participation in the event "BIO-SAGE of Gravitas'10, an International Knowledge Carnival", organised by VIT University, Vellore held on 17th and 19th September 2010.
- 9. Participated in the "Entrepreneurship Awareness Camp" organized by the Vellore Institute of Technology (VIT)-Technology Business Incubator (TBI), Vellore with the support of DST, Govt. of India, New Delhi from 3rd -5th September, 2010.
- 10. Participated in Silver Jubilee International Conference on Biotechnological Solution for Environmental Sustainability, October 21-23, 2009 held at VIT University, Vellore, Tamil nadu, India.

No. of Books/Chapter Published with details

Projects Carried out

of Short-Term **Training** Details Programs/Faculty Development Programs/Seminars/Workshops.Other **Trainings** (Attended and/or Organized).

FDP Attended:

- 1. Five days Faculty Development Program on "Good Laboratory Practices", organised by the Department of Life Sciences, Scholl of Basic Sciences and Research, Sharda University from 8th February to 12th February 2021.
- 2. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Computer Science & Biology" from 19th January to 23rd January 2021 at Malnad College of Engineering.
- 3. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Waste Technology" from 21st December to 25th December 2020 at C V Raman Global University.
- 4. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Aqua-food technology (Emerging Food Processing Technologies: Prospects and Challenges for Food and Nutrition Security" from 4th January to 8th January 2021 at Tezpur University.
- 5. Participated and completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Synthetic Biology" from 14th December to 18th December 2020 at Bharathiar University.
- 6. One week Webinar cum Faculty Development Program Series on "Current Progress and Future Prospects of Biotechnology", organised by the Department of Biotechnology, Chaitanya Bharathi Institute of Technology (CBIT) in association with Andhra Pradesh Akademi of Sciences from 8th June to 13th June 2020.
- 7. Titled "Two Weeks Faculty Development Programme in Entrepreneurship" organized by Nehru Group of Institutions Technology Business Incubator (NGI-TBI) along with Research and Development Cell, Nehru Group of Institutions, Coimbatore and Catalysed & Supported by NSTEDB, Department of Science and Technology, Govt. of India, New Delhi during 8th to 21st May, 2019.
- 8. Titled "A half a day workshop on nanostructured materials for energy and environmental applications" facilitated by Dr. J. Madhavan, Assistant Professor, Thiruvallurar University, Vellore on 24th April 2018 (Tuesday), conducted by Academic Staff College of VIT University, Vellore, India
- Titled "A half a day workshop on innovative projects towards production of significant metabolites" on 3rd April 2017 (Monday), conducted by Academic Staff College of VIT University, Vellore, India
- 10. Titled "Inter Disciplinary Research for preparing International Funded Project Proposals" facilitated by Dr. K. Krishna Mohan, International University of Sarajevo, Bosnia, South America on 10th September 2016 (Saturday), conducted by Academic Staff College of VIT University, Vellore, India
- 11. Titled "Writing Funded Project Proposals and Publishing Quality Research Papers" facilitated by Dr. Audinarayana N, Consultant Trainer, Andhra Pradesh on 20th August 2016 (Saturday), conducted by Academic Staff College of VIT University, Vellore, India
- 12. Titled "Big Data in Biology (NGS)" facilitated by Dr. G. Ramesh Kumar, Anna University, Chennai on 16th July 2016 (Saturday), conducted by Academic Staff College of VIT University, Vellore, India
- 13. Titled "Project Based Learning" facilitated by Dr. Yogesh Velankar, Consultant Trainer on 2nd April 2016 (Saturday), conducted by Academic Staff College of VIT University, Vellore, India
- 14. Titled "Digital Media in Academics" facilitated by Mr. Vikramraj Sundararaj Samuel, Students Outreach Manager, VIT on 23rd June 2015 (Tuesday), conducted by Academic Staff College of VIT University, Vellore, India

15. Titled "Effective Session Plan" facilitated by Dr. G. Edison, ASC, VIT on 19th June 2015 (Friday), conducted by Academic Staff College of VIT University, Vellore, India.

16. Titled "Analytical Techniques for Micro-Molecules Isolation and Structure Prediction" facilitated by Dr. V. Vijayakumar & Dr. Dominic Ravichandran Y, SAS, VIT on 23rd and 24th December 2014 (Tuesday- Wednesday), conducted by Academic Staff College of VIT University, Vellore, India.

Details of Journal Publications/ Conferences (National and International)

National Journals

22

- Sanjeeb Kumar Mandal, Devlina Das and Nilanjana Das (2020) "Microbial and plant assisted remediation of benzo[a]pyrene from soil and aqueous environment: A research update", Research Journal of Chemistry and Environment, Volume 24: Issue 2, Page No. 148-159. [Scopus Index]
- Nupur Ojha, Sanjeeb Kumar Mandal, Pooja Aich, Anuja Guru and Nilanjana Das (2019) "Process optimization on degradation of phenanthrene by Candida tropicalis NN4 using response surface methodology: Green chemistry approach", Research Journal of Biotechnology, Volume 14: Issue 10, Page No. 10-22. [Scopus Index]
- Sanjeeb Kumar Mandal and Nilanjana Das (2018) "Phyto-mycoremediation of benzo[a]pyrene in soil
 by combining the role of yeast consortium and sunflower plant", Journal of Environmental Biology,
 Volume 39: Issue 2, Page No. 261–268. [Impact Factor: 0.781]
- Sanjeeb Kumar Mandal and Nilanjana Das (2018) "Biodegradation of perylene and benzo[ghi]perylene (5-6 rings) using yeast consortium: kinetic study, enzyme analysis and degradation pathway", Journal of Environmental Biology, Volume 39: Issue 1, Page No. 5–15.

[Impact Factor: 0.781]

- Sanjeeb Kumar Mandal and Nilanjana Das (2017) "Biodegradation of benzo[a]pyrene by Rhodotorula sp. NS01 strain isolated from contaminated soil sample", Research Journal of Pharmacy and Technology, Volume 10: Issue 6, Page No. 1751–1757. [Scopus Index]
- 6. Abhirup Dey, Mangala Lakshmi Ragavan, Sanjeeb Kumar Mandal, Nilanjana Das (2017) "Isolation, identification and in vitro characterization of probiotic yeast strains" Research Journal of Pharmacy and Technology, Volume 10: Issue 3, Page No. 726–732. [Scopus Index]
- Sanjeeb Kumar Mandal, A. Selvi and Nilanjana Das (2016) "A novel approach on degradation of Benzo[a]pyrene by yeast consortium isolated from contaminated soil", Der Pharmacia Lettre, Volume 8: Issue 7, Page No: 80–93. [Scopus Index]
- Sanjeeb Kumar Mandal and Nilanjana Das (2015) "Microbial remediation of high molecular weight PAHs from environment: an overview" International Journal of ChemTech Research, Volume 8: Issue 8, Page No: 36–43. [Scopus Index]
- Vanaja Nuthalapati, Ramalingam Chidambaram, Nandita Das Gupta, Shivendu Ranjan, Lina Rose Varghese and Sanjeeb Kumar Mandal (2014) "Optimization of growth medium using a statistical approach for the production of plant gallic acid from a newly isolation Aspergillus tubingenesis NJA-1", Journal of Pure and Applied Microbiology, Volume 08: Issue 04, Page No: 3313–3324.

[Scopus Index]

- Ashish Jain, Sanjeeb Kumar Mandal, Vanaja Nuthalapati, Abhinav Ramesh, Naisarg Modi, Sughosh Rao, and KM Jyoti Singh (2013) "Biosynthesis of nanoparticles by Ficus benjamina (Fig Tree) and comparing Ag NP's synthesized by cocktails of plant extracts", International Research Journal of Biological Sciences, Volume 3: Issue 5, Page No: 34–39. [Non-Scopus Index]
- Sanjeeb Kumar Mandal and Suneetha V. (2013) "Preliminary Studies on probiotic potential of selected Lactobacillus VIT SSV strains screened from curd samples of Vellore, Bihar, Haryana and Varanasi", International Journal of Pharma and Bio Science, Volume 4: Issue 2, Page No:193–200.

[Scopus Index]

- Sanjeeb Kumar Mandal, M. Vignesh Kumar and Suneetha V. (2013) "Nutraceutical evaluation and comparison of plant derived products from Vellore like Moringa olifera, Banana inflorescence, Spinach leaves and Colocasia fruit for pharmacological applications", International Journal of Pharmaceutical Sciences Review and Research, Volume 19: Issue 2, Page No:114–118. [Scopus Index]
- Sanjeeb Kumar Mandal, M. Vignesh Kumar, Moumita Banerjee, Bishwambhar Mishra and Suneetha V. (2013) "Evaluating the nutritive properties of mixed plant derived products with and without soyamilk for pharmacological usage", Asian Journal of Pharmaceutical and Clinical Research, Volume 6: Issue 4, Page No:74–77. [Scopus Index]
- 14. Sanjeeb Kumar Mandal et al., (2012) "Effect of cooking on amylase content of rice" European Journal of Experimental Biology, Volume 3: Issue 2, Page No:385–388. [Non-Scopus Index]

International Publications:

- Nilanjana Das, Nupur Ojha and Sanjeeb Kumar Mandal (2021) "Wastewater treatment using plantderived bioflocculants: Green chemistry approach for safe environment", Water Science and Technology, Volume 83: Issue 8, Page No. 1797-1812. [Impact Factor: 1.638]
- Bishwambhar Mishra, Sunita Varjani, Dinesh Chand Agrawal, Sanjeeb Kumar Mandal, Huu Hao Ngo, Mohammad J. Taherzadeh, Jo-Shu Chang and Siming You (2020) "Engineering biocatalytic material for the remediation of pollutants: A comprehensive review", Environmental Technology and Innovation, Volume 20, Page No. 101063.
- Nupur Ojha, Sanjeeb Kumar Mandal and Nilanjana Das (2019) "Enhanced degradation of indeno(1,2,3-cd) pyrene using Candida tropicalis NN4 in presence of iron nanoparticles and produced

- biosurfactant: a statistical approach", 3 Biotech, Volume 9: Issue 3, Page No. 86. https://doi.org/10.1007/s13205-019-1623-x [Impact Factor: 1.798]
- Sanjeeb Kumar Mandal, Nupur Ojha and Nilanjana Das (2019) "Role of yeast consortium for the remediation of perylene from aqueous environment: Process optimization", Journal of Microbiology, Biotechnology and Food Sciences, Volume 9: Issue 1, Page No. 132-139. [Scopus Index]
- Sanjeeb Kumar Mandal, Nupur Ojha and Nilanjana Das (2018) "Process optimization of benzo[ghi]perylene biodegradation by yeast consortium in presence of ZnO nanoparticles and produced biosurfactant using Box-Behnken design", Frontiers in Biology, Volume 13: Issue 6, Page No. 418–424. [Scopus Index]
- Sanjeeb Kumar Mandal, Nupur Ojha and Nilanjana Das (2018) "Optimization of process parameters for the yeast mediated degradation of benzo[a]pyrene in presence of ZnO nanoparticles and produced biosurfactant using 3-level Box-Behnken design", Ecological Engineering, Volume 120, Page No. 497–503. [Impact Factor: 3.512]
- Sarita Ramsaran Yadav, Mangala Lakshmi Ragavan, Sanjeeb Kumar Mandal and Nilanjana Das (2018) "Degradation of azo dye and electricity generation using yeast mediated microbial fuel cell", Fungal Territory, Volume 1: Issue 1, Page No. 1–4. [Non-Scopus Index]
- Sanjeeb Kumar Mandal and Nilanjana Das (2018) "Enhanced biodegradation of high molecular weight PAHs using yeast consortia immobilized on modified biowaste material" Journal of Microbiology, Biotechnology and Food Sciences, Volume 7: Issue 6, Page No. 594–601. [Scopus Index]
- Sanjeeb Kumar Mandal and Nilanjana Das (2018) "Application of microbial fuel cells for bioremediation of environmental pollutants: an overview" Journal of Microbiology, Biotechnology and Food Sciences, Volume 7: Issue 4, Page No. 437

 – 444. [Scopus Index]