

Name of Faculty Dr B. Sumithra  
 Designation Asst. Professor  
 Nature of Job/Appointment Regular  
 Date of Joining 07 - 10 - 2021  
 E-mail Sumithrab\_biotech@cbit.ac.in



| Education Qualifications | Name of the Degree                   | Class       |
|--------------------------|--------------------------------------|-------------|
| Ph. D                    | Doctor of Philosophy (Biotechnology) | Awarded     |
| PG                       | M. Tech. (Biotechnology)             | Awarded     |
| UG                       | B. Tech. (Biotechnology)             | First Class |

**Work Experience**

Teaching 1.5 Years  
 Research 1 with teaching)  
 Industry 06 months  
 Others --

Area of Specialization Genetic engineering, Insilico data analysis & Medical Biosensors

- Professional Memberships
1. International Biodeterioration and Biodegradation Society, United Kingdom.
  2. Membership in Indian Initiative for Management of Antibiotic Resistance.

Responsibilities held at Institution Level --

- Responsibilities held at Department Level
1. Academic Performance Indicator-2
  2. Higher Studies Information / Admission -2
  3. 4/4 year all survey collection-2
  4. Industrial visit arrangement / Data/ Pictures/ Report-2
  5. Minor Engineering coordinator-2
  6. Students and Faculty awards database coordinator-2
  7. Mentor for students
  8. Honors degree -- 2019 admitted batch
  9. Internships Dept level coordinator-2
  10. Member, Course Expert Group (CEG)
  11. Coordinator, BBCC, Dept. Club
  12. Dept. Time Table Coordinator

Research Guidance --

Awards Received --

- Courses Handled at Under Graduate / Post Graduate Level.
1. Bionanotechnology
  2. Basics of Biology
  3. Cancer Biology
  4. Genetic engineering Laboratory
  5. Immunology Laboratory
  6. Fermentation Laboratory
  7. Plant tissue culture Laboratory

No. of Papers Published National Journals – -- International Journals – 3  
 National Conference – 01 International Conference – 08

Projects Carried out --

Patents --  
 Technology Transfer --  
 Invited Speaker --

No. of Books/Chapter Published with details

1. Kanagaraj Suganya, Balraj Sudha, Bishwambhar Mishra, Bapatla Sumithra, Sanjeeb Kumar Mandal, Sundaravadivelu Sumathi Marine Microbes as a Resource for Novel Enzymes. In: Sanjay Kumar, Narendra Kumar, Shahid-ul-Islam (eds) Role of Microbes in Industrial Products and Processes. John Wiley & Sons. <https://doi.org/10.1002/9781119901198>, Publisher Name: John Wiley & Sons. ISBN: 978-1-119-901198
2. Pooja Aich, Balraj Sudha, Kanagaraj Suganya, Bishwambhar Mishra, Bapatla Sumithra, Sanjeeb Kumar Mandal, Sundaravadivelu Sumathi Recovery of Valuable Products from Vegetable Wastes. In: Sanjay Kumar, Narendra Kumar, Shahid-ul-Islam (eds) Role of Microbes in Industrial Products and Processes. John Wiley & Sons. <https://doi.org/10.1002/9781119901198> Publisher Name: John Wiley & Sons. ISBN: 978-1-119-901198

3. B Sumithra, Sanjeeb Kumar Mandal, B Bishwambhar Mishra, Mounika KVSSN, Caleb Joel Raj J, Aishwarya CVS (2022) "Plant-derived drugs for Alzheimer's and other neurological disorders", Phytomedicine: Insights into Tropical Medicinal Plant. Springer [accepted]
4. Caleb Joel Raj J., Aishwarya CVS, Mounika KVSSN, Bishwambhar Mishra, Sumithra B., Bhushan Vishal and Sanjeeb Kumar Mandal (2022) "Deciphering the Nexus between Oxidative Stress and Spermatogenesis: A Compendious Overview", Oxidative Stress and Toxicity in Reproductive Biology and Medicine: A Comprehensive Update on Male Infertility- Volume One. Springer [accepted]

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

1. Attended webinar on "3D bio printed Humanized Disease Organ Models for Drug Discovery", FABA Academy, 24th June 2022
2. Workshop on "Animal cell culture techniques"- NIPER HYD. 23rd May to 3rd June 2022
3. IQAC cell in house training CBIT Hyderabad, 23rd and 30th April 2022
4. "Advanced Integrated Tools for Research in Marine Biology and Biotechnology" Sathyabama Institute of Science and Technology, 25th April to 29th April 2022
5. Workshop on "Scientific Communications" (CSIR-NPL INTEGRATED SKILL INITIATIVE Programme), 25-3-2022 to 26-3-2022
6. 5 day- International Workshop on Translational Research Taking Novel Drugs from Lab to Clinic: Concepts and Case Studies, DNDi-BRBC, March-2022
7. Next Generation Medical Devices: focusing on therapeutics and diagnostics, INSERB-NIT Rourkela 7-11 Feb, 2022
8. Functional Foods for Healthier Life: A Post COVID Perspective, Haldia institute of technology, 31st Jan 22
9. Completed " Patent analytical course" organized by Turnip Innovations, Dec 8th to 17th 2021
10. Online Webinar on "Research Dissemination and increasing impact. Conducted by Taylor & Francis group, November 25th, 2021
11. Online Webinar on "Excellence in peer Review: How to be an effective Reviewer" conducted by Taylor & Francis group, 23rd November, 2021
12. Completed online ATAL- FDP on "Data Science" organized by School of Computer Science and Information Technology, MANUU university, Hyderabad, Telangana, November 22nd-26th 2021
13. Completed online ATAL - FDP on "Regaining Effective Creativity and Peace of Mind" organized by MCNUJC Bhopal, November 15th-19th 2021

14. Workshop on “Next generation sequencing data analysis for clinical diagnostics”, organized by National genomics core, at CDFD, Hyderabad, June, 2021.
15. National workshop on “High Through-put Biological Data Analysis”, at Andhra University, Vishakhapatnam, Feb 2016.
16. National workshop on “Continuous medical education on clinical immunology past & present”, organized by Dept. of Biotechnology, NIT Warangal, January 2016.
17. FDP on “Statistics with R”, organized by E& ICT academy, Dept. of. CSE, NIT Warangal, December 2016.
18. Hands-on Workshop on “Development of Signaling Pathway Networks” held at Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram, and October 2015.
19. 3rd IIT- Madras – Tokyo Tech Joint Symposium on “Algorithms and Applications of Bioinformatics”, at IIT Madras, November, 2015.
20. National workshop on “Research Trends in Animal Biotechnology”, organized by Dept. of Biotechnology at NIT Warangal, 2015.
21. DBT, Govt. of India Sponsored National Short Term Training course on “Animal Cell Culture & Molecular Diagnostic Techniques” at Kakatiya University, 18th august - 1<sup>st</sup> September 2014.
22. National workshop on “Eco-friendly structural innovations for Sustainable development” organized by NIT Warangal, under TEQIP-II, July 2014.
23. National workshop on “Bioinformatics and its Applications”, organized by Dept. of Biotechnology at NIT Warangal, April 2014.
24. National workshop on “Research Methodology and Scholarly Writing Skills”, organized by NIT Warangal, January 2014.
25. National workshop on “Environmental Biotechnology & Sustainability” organized by Dept. of Biotechnology, NIT Warangal, October 2013.
26. QIP (Quality Improvement Programme) short term course on “Advances in Drug Discovery” July, 2010 at IIT Guwahati.

Details of Journal Publications/  
Conferences (National and  
International)

**International Conference :**

1. Paper presented in “International conference on Modern advancements in diagnosis and treatment of clinical cancer” sree sashtra institute of Technology, Chennai, May 2022
2. Participated in International conference “Microbiofiestia” organized by VIT, vellore, November 30, 2021
3. Co-chaired a session on Biosensors, Bioelectronics & Nanobiotechnology and organized a workshop in “International Conference on Biotechnology and Interdisciplinary Technologies” (iCBIT 21), CBIT in association with FABA Academy, CBIT, Hyderabad
4. Sumithra. B, Asim Bikas Das. (ICSCC 2015) Transcriptional Regulation and Protein-Protein Interaction Networks of Human Oncogenic Splicing Factor Sam68, “6th International Conference on Stem Cell and Cancer: Proliferation, Differentiation and Apoptosis” Pune. (Best poster award).
5. Sumithra. B, Asim Bikas Das. Oncogenic Sam68 links Signaling Pathways and Alternative Splicing, “9th Indo Global Summit on Cancer Therapy”, 2015 Hyderabad.
6. Participated in “7th IEEE International Conference on Technology for Education (T4E)” organized by NIT Warangal during 10-12th December 2015

**National /International Journal :**

1. B. Sumithra, Urmila Saxena, Asim Bikas Das (2016) Alternative splicing within the Wnt signaling pathway: role in cancer. Cellular Oncology: 39:1-13.
2. B. Sumithra, Urmila Saxena, Asim Bikas Das (2019) A comprehensive study on genome-wide coexpression network of KHDRBS1/Sam68 reveals its cancer and patient-specific association. Scientific Reports: 9, 11083.
3. B. Sumithra, V.S.P.K. Sankara Aditya Jayanthi, Hari Chandana Manne, Rashmika Gunda, Urmila Saxena\*, Asim Bikas Das\* (2020) Antibody based biosensor to detect oncogenic splicing factor Sam68 for the diagnosis of lung cancer. Biotechnology Letters 2020, 42, 2501 -2509