

Profile Page



Name : Dr. Sumer Singh Meena

Designation : Assistant Professor Grade-i

Department : Bio-Technology

Qualification : Ph.D. Biotechnology (GGS Indraprastha University, Delhi)
M.Tech. Biotechnology (GGS Indraprastha University, Delhi)
B.Tech. Biotechnology (GGS Indraprastha University, Delhi)

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Research Interests :

Applied Microbiology and Environmental Biotechnology,
Enzyme Technology,
Proteomics,
Metagenomics, and
Bioinformatics

Other Profile Links :

Google Scholar Link :

Dr. Sumer Singh Meena [Click Here](#)

Personal Web Link :

LinkedIn [Click Here](#)

Journal Publications :

Year	Journal	Publication
2023	Systems Microbiology and Biomanufacturing	Aakriti Srivastava, Muhil Raj Prabhakar, Anee Mohanty & Sumer Singh Meena. Study of altered gut microbial dynamics and their association with gestational diabetes mellitus
2023	Materials Today: Proceedings	Simranjeet Singh Mann, Nisha Kumari Pandit, Anee Mohanty, Sumer Singh Meena. Computational analysis of natural compounds targeted for NICD of notch pathway in hepatocellular carcinoma

2022	Materials Today: Proceedings	Shilpa, Nitai Basak and Sumer Singh Meena, Exploring the plastic degrading ability of microbial communities through metagenomic approach
2022	International Journal of Food Microbiology	Anee Mohanty, Megha Mankoti, Prangya Ranjan Rout, Sumer Singh Meena, Simran Dewan, Bhavya Kalia, Sunita Varjani, Jonathan WC Wong, & J Rajesh Banu. "Sustainable utilization of food waste for bioenergy production: A step towards circular bioeconomy"
2022	Frontiers of Environmental Science & Engineering	Shilpa, Nitai Basak & Sumer Singh Meena. Microbial biodegradation of plastics: Challenges, opportunities, and a critical perspective
2021	Natural Product Research	Muhil Raj Prabhakar, Anee Mohanty & Sumer Singh Meena. "In silico screening of effective inhibitor of 5 α -reductase type 1 for androgenic alopecia treatment"
2021	Systems Microbiology and Biomanufacturing	Aakriti Srivastava, Muhil Raj Prabhakar, Anee Mohanty & Sumer Singh Meena "Influence of gut microbiome on the human physiology"
2021	Biomass Conversion and Biorefinery	Anee Mohanty, Prangya Ranjan Rout, Bipro Dubey, Sumer Singh Meena, Parimal Pal & Mukesh Goel. A critical review on biogas production from edible and non-edible oil cakes
2016	Journal of Basic Microbiology	Sumer Singh Meena, Radhey Shyam Sharma, Priti Gupta, Swagata Karmakar, and Kamal Krishan Aggarwal. Isolation and identification of Bacillus megaterium YB3 from an effluent contaminated site efficiently degrades pyrene
2015	Int. J. Curr. Microbiol. App. Sci	Sumer Singh Meena, Sayan Chatterjee and Kamal Krishan Aggarwal. "Structural Modelling of α -subunit of Ring-hydroxylating Dioxygenases (RHDs) from Microbial Sources"

Conference Publications :

Year	Conference	Publication
2020	ChemBioEn-2020	Nigam Kumar, Shilpa, Sumer Singh Meena. "“Computational drug design using Flavonoids”"
2020	ChemBioEn-2020	Rakesh, Amandeep, Sumer Singh Meena. "Design of potent PI3K γ Inhibitors using In-Silico studies"
2019	Applications of Biotechnology in Industry and Society	Shilpa, Nitai Basak, Sumer Singh Meena. "Deterioration of polyethylene by microbial consortia isolated from a dumpsite waste.""
2018	Chemcon-2018, NITJ	Shilpa, Nitai Basak, Sumer Singh Meena. "Microbial degradation of plastic waste materials: a step towards plastic free environment.""
2017	"Strategies to mitigate the effects of climate change: steps towards sustainable development" MAU, Baddi, India	Sumer Singh Meena, and K. K. Aggarwal. Screening and isolation of polyaromatic hydrocarbons (PAHs) degrading microbes for effective bioremediation.
2015	International Conference on Polycyclic Aromatic Compounds (ISPAC-2015), Bordeaux, France.	Sumer Singh Meena, Radhey Shyam Sharma, Swagata Karmakar and Kamal Krishan Aggarwal. "Acinetobacter calcoaceticus ID1 purified from waste dumping site effectively degrades pyrene into non-toxic metabolites"

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
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Book Chapter	Microbial degradation of conventional polyethylene waste: current status and future prospective; Advances in Chemical, Bio and Environmental Engineering	Springer Cham	Shilpa, Nitai Basak, Sumer Singh Meena	Series ISSN 1863-5520 Series E-ISSN 1863-5539	2022
Book Chapter	Microbial adaptation to extreme temperatures: An overview of molecular mechanisms to industrial application	Elsevier	Anee Mohanty and Shilpa Sharma, and Sumer Singh Meena	ISBN: 9780323902748	2022
Book Chapter	Plant-Microbe Interactions and Its Effect on Crop Productivity	Springer	Sumer Singh Meena, Megha Mankoti, Prangya Ranjan Rout & Anee Mohanty	Print ISBN 978-981-16-9681-7 Online ISBN 978-981-16-9682-4	2022
Book Chapter	Chapter 23 - Cellulose and extracellular polymer recovery from sludge	Elsevier	Anee Mohanty, Sumer Singh Meena, Pankaj Pathak, Prangya Ranjan Rout	978-0-323-90178-9	2022
Edited Book	Bioinformatics And Functional Genomics An Indian Adaptation 3ed (Paperback, Jonathan Pevsner)	Wiley India	(Alphabetical order) Aditya Kumar, M. Suresh Kumar, Rajbrata Bhuyan, Sumer Singh Meena, Venkata Rajesh Yella	9789354641633	2022
Book Chapter	Ethical, Patent, and Regulatory Issues in Microbial Engineering-Engineering of Microbial Biosynthetic Pathways	Springer	Sumer Singh Meena, Anee Mohanty	978-981-15-2603-9	2020

Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Co-PI	Seed Grant	Production of Biogas from Kitchen waste of NITJ	NITJ under TEQIP-III	01/01/2019	ongoing	300,000	ongoing	Dr. Anee Mohanty, Dr. G.N. Nikhil

PI	STI Hub	Establishment of Science Technology and Innovation (STI) Hub at NIT Jalandhar	DST	01-11-2020	Ongoing	2.5cr	Ongoing	Dr. Anee Mohanty, Dr. Anjireddy, Dr. Nikhil G N
Co-PI	Industry Project	Color Reduction of Effluent from ETP of Dyeing Unit	Trident Ltd	26-04-2022		5.31 Lac	Ongoing	

Events Organized :

Category	Type	Title	Venue	From	To	Designation
STC/FDP	International	"Intellectual Property Rights and Innovative Entrepreneurship"	NIT Jalandhar	01/03/2019	05/03/2019	Coordinator
STC	International	Trends and Prospects in Biorefinery	NIT Jalandhar	10-06-2020	14-06-2020	Coordinator
STC/Workshop	International	Computational Tools for Analysis of Biological Systems	NIT Jalandhar	02-09-2020	06-09-2020	Convener
Conference	International	International Conference on Recent Advances in Biotechnology (icRAB-2022)	NIT Jalandhar	02-12-22	04-12-22	Conference Chair

Professional Affiliations :

Designation	Organization
Life Member (Membership No. 133445)	International Association of Engineers (IAENG)
Life Member (No. 4959-2020)	Association of Microbiologists of India (AMI)
Life Member (No. LM 2384)	THE BIOTECH RESEARCH SOCIETY, INDIA
Member (No. 34560)	The International Society for Computational Biology, USA
Life Membership (557)	Proteomics Society, India
Full Membership	Biochemical Society, London, UK
Full Membership	Microbiology Society, London, UK

PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Ms. Richa Sharma	Broad Area: Environmental Biotechnology	Ongoing		Dr. Sumer Singh Meena
Ms. Shilpa	Bioremediation of Plastics	Ongoing		Dr. Nitai Basak
Mr. Ankit Kumar	Broad Area: Computational Biology	Ongoing		Dr. Anee Mohanty

PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Mr. Simranjeet Singh Mann	Broad Area: Bioinformatics	Ongoing	2023	
Ms Nisha Pandit	Broad Area: Bioinformatics	Ongoing	2023	
Ms. Aanchal	Advances in Gut microbial interactions	Completed	2022	
Mr. Muhil Raj Prabhakar	In silico identification of drug target and prediction of drug candidate for the treatment of Androgenic alopecia	Completed	2020-21	N.A.
Ms. Aakriti Srivastav	The study of altered gut microbial dynamics and their association with Gestational Diabetes Mellitus	Completed	2020-21	N.A.

Admin. Responsibilities :

Position Held	Organization	From	To
Liaison Officer SC ST and Coordinator OBC/Person with Disability (PwD)	NIT Jalandhar	01/02/19	05/02/19
Member of Campus Amenities Committee	NIT Jalandhar	01/03/19	30/05/2020
Coordinator, Training and Placement (Biotechnology)	NIT Jalandhar	01/02/19	currently working
Coordinator, Virtual Lab Coordinator (Biotechnology)	NIT Jalandhar	10/09/2020	currently working
Nodal Person in EBSB 'identification of student contingent or partner state visit'	NIT Jalandhar	01/02/19	currently working
Media Coordinator- Center for Continuing Education	NIT Jalandhar	28/02/2020	currently working
Member, IPR committee	NIT Jalandhar	02/03/2021	Currently working
Liaison Officer, ST	NIT Jalandhar	02-03-2021	01-01-2023

Award and Honours :

Title	Activity	Given by	Year
International Travel Grant	International Conference on Polycyclic Aromatic Compounds (ISPAC-2015), Bordeaux, France.	Department of Science and Technology (DST), Govt. of India	2015