

Academic and Research Profile

DR. SUMIT KUMAR DUBEY

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CAREER GOAL: To excel in the field of Applied Biotechnology.

ACADEMIC PATH

Awarded with :

- **Ph.D. in Microbiology** from Atal Bihari Vajpayee Vishwaviyalaya, Bilaspur (C.G.) in 2024.
 - **M. Phil (Ph.M.) in Microbiology** from CVRU, Bilaspur (C.G.) in 2014 with 75.20 %.
 - **PGDBM (Diploma) in Management** from C.M.D. College, Bilaspur in 2013 under Atal Bihari Vajpayee Vishwaviyalaya, Bilaspur (C.G.) with 75.87 %.
 - **Postgraduation in Biotechnology** from MATS, Raipur, in 2011 with 68.88%.
 - **Undergraduation in Biotechnology** from Govt. Science College, Bilaspur in 2009 under Guru Ghasidas Central University, Bilaspur (C.G.) with 67.31 %.
 - **Higher Secondary in Biology** from Chhattisgarh Higher Secondary School, Bilaspur (C.G.) under CGBSE, Raipur in 2006 with 73.40%.
 - **High School** from Chhattisgarh Higher Secondary School, Bilaspur (C.G.) under CGBSE, Raipur in 2004 with 80.00 %.
- ✓ **Other Academic Activity**
- Qualified **Diploma in Advance Software Technology** (2007) from NiceTech, Computer Education, Bilaspur (C.G.) with **A+ Grade** (80%).

Patent/Awards/ Publications / Presentation/Program/Courses/&Others

Patent Published	01	Annexure 1 (a)
Awards	07	Annexure 1 (b)
Authored Book	01	Annexure 1 (c)
Edited Book	03	Annexure 1 (d)
Reviewer	05	-
GenBank accession number (nucleotide sequence)	01	-
Invited Talk/Technical Expert	02	Annexure 1 (e)
NPTEL Course Text Translation	02	Annexure 1 (f)
Paper Published	12	Annexure 1 (g)
Book Chapter	09	Annexure 1 (h)
Paper Presented	11	Annexure 1 (i)
Symposium attended	02	Annexure 1 (j)
Workshop/Hands-on attended	06	Annexure 1 (k)
FDP	02	Annexure 1 (l)
Short-term Courses/Program (under NIT-TEQIP, GIAN, NPTEL & ARPIT initiatives)	07	Annexure 1 (m)
Program organized (as organizing secretary and Co-coordinator)	05	Annexure 1 (l)

SKILL SET

- Administrative skills and Data-driven Decisions
- ICT tools, student project design and execution, experience in research activities
- Classroom management, Mentoring, and Advising
- Adaptability and Flexibility
- Community Engagement

EXPERIENCE

- Teaching experience – **7 years**
- Research experience – **8 years**

CELL AND COMMITTEES

- Alumni member, IQAC Cell, Government E. R. R. P.G. Science College, Bilaspur (C.G.)
- BoS Member, Department of Biotechnology, Government E.R.R. P.G. Science College, Bilaspur (C.G.)
- BoS Member, Microbiology, Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur (C.G.)
- IQAC Co-coordinator, D.L.S. P.G. College, Bilaspur (C.G.)

LIFE MEMBERSHIP

- **The Indian Science Congress Association (ISCA)**, Kolkata 700 017
Membership No.: L41771 (New Biology)
- **Avishka Council of Industrial and Allied Biosciences (ACIAB)**, Noida 201301
Membership registration number: ACIAB/2023/LM/00022

LECTURE DELIVERED

- **Resource Person in Workshop** entitled “**Microbial Culture Techniques**”, on **14 Jan 2023** organized by **Department of Microbiology and Biotechnology, Govt. E.R.R. Science P.G. College, Bilaspur (C.G.)**

REVIEWER

- Journal of Advances in Biology & Biotechnology
- Journal of Advances in Microbiology
- International Journal of Environment and Climate Change
- European Journal of Nutrition & Food Safety
- International Journal of Science and Research

RESEARCH EXPERIENCE

- Resource guide
- Planned and executed several M.Sc., M. Phil, Dental, and Research Scholar’s dissertations and research works for intra- and inter-college students.
- Research and Development Cell, D.L.S. P.G. College, Bilaspur (C.G.)
- M. Phil (Microbiology) dissertation work from Aditya Biotech Lab and Research Pvt. Ltd, Raipur (C.G.)
- M.Sc. (Biotechnology) dissertation work from Devleela Biotechs, Raipur (C.G.)

GENBANK ACCESSION NUMBER

- Nucleotide sequence of 16S rRNA gene of alkaline protease producing *Bacillus tropicus* PDB-30 (SUB14272286 907RC_Seq PP396798) was deposited in NCBI-GenBank (**Accessions No.: SUB14272286**)







GOOGLE SCHOLAR

Total Citations	73	h-index	6	i10-index	1
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EXTENSION ACTIVITIES

- Fifteen Days **Industrial Training** in A.K. Products (2012), Bilaspur (C.G.)
- Twenty Days **Industrial Training in Production Department** of Digital Weighing System Pvt. Ltd. (2013), Bilaspur (C.G.)
- Participated in Six Day **National Service Scheme Camp** (2017), Farhada Village, Bilaspur (C.G.)
- Participated in **First Response Training Programme** conducted by Emergency Management & Research Institute, Hyderabad (A.P.)

SOCIAL PROFILE

	https://vidwan.inflibnet.ac.in/profile/424261#other_information_panel
	https://www.researchgate.net/profile/Sumit_Dubey6
	http://independent.academia.edu/Sumitdubey4444
	https://scholar.google.co.in/citations?user=qb4h6kcAAAAJ&hl=en
	https://in.linkedin.com/in/sumit-kumar-dubey-01b6161a
	https://researchid.co/sumit_dubey



I hereby declare that the above-listed information is factual to the best of my knowledge and belief.

Date:

Place:

Sumit Kumar Dubey

Annexure

Annexure I(a)

PATENT PUBLISHED

A Patent published on Vermiwash production entitled “**An innovative and cost-effective method to produce vermiwash for sustainable organic farming practices**”.

Application No. 20222103581 and Publication Date: 15/07/2022

Annexure I(b)

AWARDS -7

- Awarded for Volunteer Service in **AROGYA-2010** organized by (C.G.) State Medicinal Plant Board, Raipur (C.G.)
- **Project Fellow Award-2016** by **Department of Biotechnology, NIT, Raipur (C.G.)**
- **Best paper Presentation Award-2022** on 2nd International Multidisciplinary Conference on Literary and Innovative Research in Hindi, English, Economics, Science & (Computer Science, Technology, Arts, Humanities, Law, Commerce, Management and Library Sciences) organized by Govt. Pataleshwer College, Masturi (C.G.) held dated 7Aug 2022.
- **Best paper Presentation Award-2020** on National Seminar entitled “Emerging Horizons of Science in Natural Resource Management” organized by Department of Biotechnology & Zoology, Govt. E. Raghavendra Rao P.G. Science College, Bilaspur (C.G.) held dated 16-17 Feb 2020.
- **Paryawaran Mitra Award – 2022** by Paryawaran Evm Paryatan Vikas Samiti, Van Vibhag Govt. of Chhattisgarh, by Paryawaran Sanrakshan Mandal. Dated 5 June 2022.
- **Utkrist Shikshak Samman - 2022** on Silver Jubilee Year of the College Foundation Day. Dated 12 Sep 2022.
- **Academic Excellence Award-2023** received from SU College, Hilsa (Nalanda), Bihar in Association with International Centre for Scientific Research and Development (ICSRD), Bangalore, Karnataka. (Reg. No. PU-SUC/ICSRD-023-078)

Annexure I(c)

AUTHORED BOOKS

Recent Trends in Microbial Enzyme Technology (ISBN No. 978-93-5780-1447).

Annexure I(d)

EDITED BOOKS

1. **Sustainable environmental Practices** (ISBN-13 (15) 978-93-94570-62-7)
2. **Trends in Environmental Biology Vol. I** (ISBN- 13 (15) 978-93-90847-55-6)
3. **Trends in Environmental Biology Vol. II** (ISBN - 13 (15) 978-93-94570-52-8)

Annexure I(e)

INVITED TALK/TECHNICAL EXPERT

- Invited talk as **Resource Person** in the **workshop** entitled “**Microbial Culture Techniques**” organized by **Department of Biotechnology**, Govt. E. Raghavendra Rao PG. Science College, Bilaspur (C.G.).
- **National Seminar on” Kinnar Vimarsh” (2023)**, 04 Sep 2023, Govt. Pataleshwer College, Musturi, Dist.-Bilaspur (C.G.).

NPTEL Course Text Translation

- **Bioreactors** (102106053), Lecture 1-11
- **Biostatistics and Design of Experiments** (102106051), Lecture 31-40

Research Paper Published – 12

S. No.	Paper Title	Authors	Year	Journal	Volume & Issue	Page No.
1.	Isolation and characterization of cellulose degrading bacteria from biogas slurry and their RAPD profiling	Dubey, S.K., Meena, R.K., Sao, S., Patel, J., Thakur, S., Shukla, P.	2014	Current Research in Microbiology and Biotechnology	2 (4)	416-421
2.	Callus induction and shoot proliferation from seedling explants of different mustard genotypes	Dubey, S.K., Gupta, A.K.	2014	International Journal of Current Microbiology and Applied Sciences	3 (7)	858-864
3.	Effect of different carbon source on growth of Rhizobium belonging to different region of Chhattisgarh, India.	Patel, J., Dubey, S.K.	2014	International Journal of Current Microbiology and Applied Sciences	3(10)	830-836
4.	Bacteriophages as an antibacterial agent: A promising alternative	Dubey, K., Chandraker, S., Sao, S., Gupta, A., Dubey, S.K.,	2016	International Journal of Current Microbiology and Applied Sciences	5	231-234
5.	Identification and characterization of potential phenol degrading bacterial strains isolated from municipal sewage, Bilaspur, Chhattisgarh	Parihar, R., Dubey, S.K.,	2016	International Journal of Current Microbiology and Applied Sciences	4 (3)	288-293
6.	Characterization of Protease Production Efficiency of Bacteria Present in the Poultry Farm Soil.	Dubey, S.K., Parihar, R.,	2017	International Journal of Science and Research	6 (1)	1025 -1028
7.	Isolation, Identification and Evaluation of Lipase Producing Bacteria for Biodegradation of Lipid-Rich Waste	Kashyap, A.K., Dubey, S.K.	2021	Annals of the Romanian Society for Cell Biology (UGC Care Listed)	25(4)	15338-15348
8.	Assessment of antimicrobial activity of commercially available <i>Withania somnifera</i> (Ashwagandha) powder against pathogenic microorganisms	Dubey, S.K., Verma, K.K., Qureshi, A., Behar, N.	2022	New Bio World	4(2)	25-30
9.	Phytochemical, Antioxidant and Antiviral Potential of <i>Euphorbia milii</i>	Parihar, R., Dubey S.K., Tiwari, U.	2023	Biological Forum – An International Journal	15(2)	23-129
10.	Comparative evaluation of in vitro antimicrobial efficacy of different species of <i>Curcuma</i> against human pathogenic bacteria.	Verma, K.K., Soni, S., Pandey, P., Sahu, V., Dubey, S.K., Behar N.	2023	New Bio World	5(1)	20-23

11.	Alkaline Protease Production by <i>Bacillus</i> sp. using Fortified Crude Dairy Effluent	Dubey, S. K., Parihar, R.	2023	Biological Forum – An International Journal	15(5)	1523-1529
12.	Isolation of <i>Bacillus subtilis</i> from Dairy Waste and Evaluation of their Protease Kinetics on Fortified Dairy Waste Effluent	Dubey, S. K., Parihar, R.	2023	International Journal of Science and Research	12(9)	2148-2151

Annexure 1(h)

Book Chapter - 9

S. No.	Title	Authors	Year	Title of Book	Publisher	Edition	Page No.
1.	Cyanobacterial diversity concerning the extreme environment and their bioprospecting	Kashyap, A.K. Dubey, S.K. Jain, B.P.	2021	Cyanobacterial Lifestyle and its Applications in Biotechnology	Academic Press (Elsevier)	1 st	1-22
2.	Cyanobacteria-mediated heavy metal and xenobiotics bioremediation	Pandey, S. Dubey, S.K. Kashyap, A.K. Jain, B.P.	2021	Cyanobacterial Lifestyle and its Applications in Biotechnology	Academic Press (Elsevier)	1 st	335-350
3.	Molecular Mechanisms in Cancer Development	Kashyap, A.K. Dubey, S.K.	2021	Understanding Cancer	Academic Press (Elsevier)	1 st	79-90
4.	Life Science Engineering: Improving Human Health and Lifestyle	Mishra, P., Behar, N., Sharma, S., Verma, K.K., Banjare, S., Dubey, S.K. , Gurnule, W.B.	2021	Research and Innovations in Chemical Sciences: An Approach towards	Bharti Publications (ISBN: 978-93-91681-17-3)	1 st	105-116
5.	Post COVID-19 Health Scenario in India	Mishra, P., Behar, N., Sharma, S., Dubey, S.K. , Gurnule, W.B.	2021	Health Hygiene, Sanitation and Environment at Pandemic Times	Immortal Publication Vijayawada (AP) ISBN: 978-93-5457-589-1	1 st	
6.	Biofilm: a doable microbial continuum for the treatment of wastewater	Dubey, S.K. Kashyap, A.K.	2022	Microbial Consortium and Biotransformation for Pollution Decontamination	Elsevier	1 st	321-345
7.	Technological Advancements for the Analysis of Phytochemical Diversity in Plants	Kashyap, A.K. Thattantavide, A., Dubey, S.K. , Kumar, A., Kumar, S.	2023	Phytochemical Genomics: Plant Metabolomics and Medicinal Plant Genomics	Springer Nature Singapore	1 st	109-125
8.	A Short Review on Genes Regulating Biosynthesis of Major Secondary Metabolites	Kashyap, A.K. Dubey, S.K. , Kumar, A., Kumar, S.	2023	Phytochemical Genomics: Plant Metabolomics and Medicinal Plant Genomics	Springer Nature Singapore	1 st	501-519
9.	Role of fungal metabolites in pharmaceuticals, human health, and agriculture	Behar, N., Sharma, S., Parihar, R., Dubey, S.K. , Mehta, S., Pandey, V.	2024	Fungal Secondary Metabolites Synthesis and Applications in Agroecosystem Nanobiotechnology for Plant Protection	Elsevier	1 st	519-535

Paper Presented - 11

S. No.	Title of Paper Presented	Year	Name	Date	Organized by
1	Assessment of Protease Production Efficiency of Bacteria Present in Poultry Farm Soil	2016	National Conference on Recent Advances in Biotechnology & Biofuels	Sep, 12-13	Department of Microbiology & Bioinformatics, Bilaspur University Bilaspur (C.G.)
2.	Assessment of Actinomycetes Biodiversity in Composting	2020	National Seminar on Regional Warming and Narwa, Garwa, Ghurwa, Bari	Feb, 1-2	Research & Development Cell D.L.S. P.G. College Bilaspur (C.G.)
3.	Merops: The Protease Database	2020	National Seminar on Impact of Computer Science & Information Technology on Modern Society	Jan, 18-19	Department of Computer Science, Information Technology & Computer Application Govt. E. Raghavendra Rao P.G. Science College Bilaspur (C.G.)
4.	Characterization of Amylase Producing Bacterial Strains isolated from Soil (Best Paper Award)	2020	National Seminar on Emerging Horizons of Science in Natural Resource Management	Feb, 16-17	Department of Biotechnology & Zoology, Govt. E. Raghavendra Rao P.G. Science College Bilaspur (C.G.)
5.	In-silico ADME and Toxicological analysis of some bioactive compounds of Medicinal Plants	2020	International Conference on Recent Advances in Biological Sciences & Opportunities in Entrepreneurship	Jan, 7-8	School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur (C.G.)
6.	A Comprehensive Assessment of Bacterial Profile in Local Dairy and Bakery Waste of Bilaspur City (Best Paper Award)	2022	2nd International Multidisciplinary Conference on Literary and Innovative Research in Hindi, English, Economics, Science & (Computer Science, Technology, Arts, Humanities, Law, Commerce, Management and Library Sciences)	Aug, 7	Govt. Pataleshwer College, Masturi (C.G.)
7.	Alkaline Protease Production from Dairy Effluent using <i>Bacillus</i> Sp.	2022	An International Conference on ICIMST2022 (Innovations in Management, Science and Technology)	Aug 5-6	University of Science and Technology, Meghalaya (USTM), India Meghalaya, India
8.	Kinetics of Protease Production by <i>Bacillus subtilis</i> on fortified dairy effluent.	2023	Multidisciplinary International Seminar on Innovative Training, Learning, Evaluation and New Digitalise Research System in India”	Aug 20	International Centre for Scientific Research and Development (ICSRD), Bengaluru, Karnataka. Registration No: ICSR/023-08-041
9.	Evaluation of <i>Pleurotus ostreatus</i> substrate spent for ethanol Production	2023	National Seminar on Recent Advances in Economic and Potential Benefits in Mushroom Cultivation	Dec 15-16	Department of Microbiology and Biotechnology, DLS PG College, Bilaspur (C.G.) in collaboration with ISCA, Bilaspur Chapter

10	तृतीय लिंग एवं न्यायपालिका की भूमिका (Role of third gender and judiciary)	2023	National Seminar on Human Rights with Reference to Third Gender	Feb 7	Department of Political Science & Sociology, Govt. Mata Shabari Naveen Girls PG College, Bilaspur (C.G.)
11	Data Collection, Representation and Analytical paradigm of Biological Enzyme Research (Academic Excellence Award 2023)	2023	Multidisciplinary National Seminar on Recent Trends of Collecting, Analyzing and Sharing Qualitative Research Data	Sep 14-15	SU College, Hilsa (Nalanda), Bihar in Association with International Centre for Scientific Research and Development (ICSRD), Bangaluru, Karnataka. (Reg. No. PU-SUC/ICSRD-023-078)

Annexure 1 (j)

SYMPOSIUM ATTENDED – 02

- **Bio-Resources: Technology & Prospects (2007)**, 18-19, March, Govt. E. Raghvendra Rao P.G. Science College, Bilaspur (C.G.)
- **Herbal Medicine and Diabetes (2017)**, 13, February, D.L.S. P.G. College, Bilaspur (C.G.)

Annexure 1(k)

WORKSHOP/HANDS-ON ATTENDED – 06

- **Hands-on - Training in Basics of Bioinformatics (2014)**, 13-15, February, Chhattisgarh infotech and biotech Promotion Society (CHiPS), Govt. of Chhattisgarh, Raipur (C.G.)
- **Research Methodology and Tools (2016)**, 25-30, June, Bilaspur University, Bilaspur (C.G.)
- **Current Trends in Mushroom Cultivation & Culture Techniques (2017)**, 12-13, January, D.L.S. P.G. College, Bilaspur (C.G.)
- **Examination Reforms: Evaluation System and its Prospects (2017)**, 18, March, Govt. E. Raghavendra Rao P.G. Science College, Bilaspur (C.G.)
- **Workshop cum Pre Ph.D.-Course Work (2019)**, 25 May to 03 June, Atal Bihari Vajpayee University, Bilaspur (C.G.)
- **One-week National e-workshop on Research Methodology in Scientific Studies (2022)**, 06-12 June, Govt. Lahiri P.G. College, Chirimiri, Koriya (C.G.)

Annexure 1(l)

FDP - 2

S.N.	Title of FDP	Duration	Organized by	Held on
1	Futuristic Intervention in Biotechnology: A Roadmap Ahead	5 Days	AMITY University, Raipur (C.G.)	4-8 July 2022
2	Effective Communication Skills	5 Days	PIBM, Pune	18-22 April 2022

Annexure 1(m)

SHORT-TERM COURSES/PROGRAM - 07

- NIT-TEQIP - 01, GIAN - 02, NPTEL - 02 & ARPIT- 02

Courses/Programmes	Title	Year	Place
NIT TEQIP (Short-Term Course)	Advance Wastewater Treatment Technologies	2016	NIT, Raipur (C.G.)
GIAN Programme	Nanobiotechnology for Healthcare	2017	IIT, Kharagpur (W.B.)
GIAN Programme	Transgenic Animal Technology	2018	Hyderabad University (T.S.)
HRD-NPTEL Programme	Industrial Biotechnology	2017	IIT, Kharagpur (W.B.)

MHRD-NPTEL Programme	Cell Culture Technology	2017	IIT, Kanpur (U.P.)
ARPIT Programme	Skills for Refresher Course on Teacher and Teaching in Higher Education	2020	Sant Gadge Baba Amravati University (M.S.)
ARPIT Programme	Skills for Refresher Course on New Educational Architecture	2020	Sant Gadge Baba Amravati University (M.S.)

Annexure I(n)

PROGRAM ORGANIZED - 05

- Organizing secretary on National Seminar entitled “**Regional Warming and Narva, Garva, Ghurva, Bari**” dated 1-2 February 2020.
- Organizing secretariat for the National e-Poster competition entitled “Impact of Lockdown on Environment”, dated 5 June 2020.
- Organizing secretary on Webinar entitled “**Vaccine Against Covid -19 Opportunities and Challenges**” dated 10 Aug 2020.
- Organizing secretary on an online NAAC workshop entitled “**Revised Accreditation Framework for Accreditation in higher education**” dated 21 Nov 2020.
- Co-coordinator on Intellectual Property Awareness Program organized under **National Intellectual Property Awareness Mission (NIPAM)**, Intellectual Property Office, Govt of India dated 15 July 2022.