#### **CURRICULUM VITAE**

30 years of teaching and research experience. Currently, Professor and Head, Dept. of Biotechnology, MS Ramaiah University of Applied Sciences, Bengaluru. Prior to this, served as Professor at Amity Institute of Biotechnology & Coordinator, Amity Centre for Water Studies and Research, Amity University Rajasthan, Jaipur and as Head, Dept. of Biotechnology, The IIS University, Jaipur and also as faculty at MS University of Baroda, Vadodara and at MDS University, Ajmer, Rajasthan.

Involved extensively in academic administration in various capacities at Amity University Rajasthan since joining in Dec 2010 as coordinator, Board of Studies in Biotechnology, Bioinformatics and Food Technology. Compiling reports, preparing Agenda and minutes of meetings, Coordinator of Ph.D. program of AIB, organising interviews, guide allocations, monitoring Ph.D. progress, organising SRDC and SRAC meetings. Collating data, making reports, making and giving presentations before NAAC team. Organising guest lectures, field trips, conferences, actively involved in syllabi upgradation. Coordinator of MoU with University of West of England.

Was Head of Dept of Biotechnology, The IIS University (Formerly International College for Girls), Jaipur from Sept 2003 Dec 2010 where I led a team of faculty to establish new courses, develop curricula, finalize timetables and initiate innovative research projects. Was part of the core team that was instrumental in making the International College for Girls, Jaipur, autonomous, then deemed to be university, then accredited by NAAC and awarded A + grade.

#### Research Domain:

- Microbial bioremediation of heavy metals and textile dyes, green synthesis of nanoparticles and their use in bioremediation.
- Bioprocess Optimisation.

Several research papers. (Please see list below)

Patent holder. Method of biosurfactant production using agro-industrial wastes

Project proposal entitled "Development of Minimum Viable Product (MVP) of a multiutility polymer (with emphasis on surfactant properties) produced by bacteria grown on agro-industrial wastes", submitted under the 3rd National Call for translation of Research & Commercialization under Accelerating Translation of Research And Commercialization of Technologies in 'Life Sciences' Program" announced by the Discovery to Innovation Accelerator (DIA) Program, Centre for Cellular and Molecular Platforms (C-CAMP) GKVK Campus, Bellary Road, Bangalore 560065 successfully progressed to the final stage after clearing four rounds of evaluation.

It will now be available on their site https://www.ccamp.res.in/dia-past\_applications under the technologies marked as 'Open for Translation' which will serve as the 'Active Pool' of technologies for wider outreach for collaboration with industries.

The above proposal was prepared to scale-up a lab scale method for which patent has been awarded to me in 2021. The method involves production of a commercially important compound (biosurfactant) using agro-industrial wastes. The global surfactants market is projected to grow to \$57.81 billion by 2028 at a CAGR of 4.9% and surfactants find

application in several industries; the biggest player being detergents.



**1.NAME** Prof. (Dr.) Shruti Mathur

**2. DATE OF BIRTH** 13.10.1967

**3. CONTACT** +91 9166844606

shrutimathur6@gmail.com shrutimathur.bt.ls@marua

s.ac.in

# https://scholar.google.com/citations?user=S4M1PAYAAAAJ&hl=en&oi=ao

SCOPUS Author ID =57189234617

https://www.linkedin.com/in/prof-dr-shruti-mathur-

<u>0526b4b0?lipi=urn%3Ali%3Apage%3Ad\_flagship3\_profile\_view\_base\_contact\_details%3BF48%2BhHpnShijhcGm5tGXpw%3D%3D</u>

#### **4. TEACHING AND RESEARCH EXPERIENCE:**

- > 31 years uptil Feb 2024 (including part –time teaching of 2y 4m at MS University of Baroda, Vadodara, Gujarat))
- > 25 years & 03 months (excluding full time research for Ph.D).

	Employer			Tenure		
S. N	Name	Designation	Subjects Taught	From	То	Total (in years) & Level
1.	Dept. of Biotechnology, Faculty f Applied Health Sciences,MS Ramaiah University of Applied Sciences	Professor and Head	Environmental Biology, Bioethics	17 <sup>th</sup> Jan, 2024	continui ng	

	Amity Institute of Biotechnology Amity University Rajasthan, Jaipur	Professor (Full Time)	Research Methodology, Bioprocess & Industrial Biotechnology, Microbiology, Downstream Processing, Structural Biology, Instrumentation, Biochemistry, Bioresource Technology	20 <sup>th</sup> Dec 2010	2 <sup>nd</sup> Jan 2024	11y Ph.D.,PG,UG
	The IIS University (Formerly International College for Girls), Jaipur	Sr.Asst Prof. & Head Deptt. of Biotechnology (Full Time)	Enzymology, Microbiology, Bioinformatics, Molecular Biology, Microbial Physiology, Biophysics, Bioprocess Engineering, Biochemistry	Sept 2003	18 <sup>th</sup> Dec 2010	7y 4 m PG,UG. MPhil
3.	Deptt. of Biochemistry,	Lecturer (Full Time)	Biophysics, Enzymology, Practical Tissue Analysis	Aug 2000	May 2003	2y 10m PG

4.	Maharaja Sayajirao University of Baroda, Vadodara, Gujarat & Deptt of Geography, Maharaja Sayajirao University of Baroda, Vadodara, Gujarat		& Microbial Ecology, Food Microbiology & associated practicals			
5.	Deptt. of Foods and Nutrition, Maharaja Sayajirao University of Baroda, Vadodara, Gujarat	Lecturer (Full Time)		Jul 1999	Dec 1999	6m UG
6.	Deptt. of Foods & Nutrition, Maharaja Sayajirao University of Baroda, Vadodara	Guest Lecturer (Part Time)	Instrumentation, Food Sanitation & Hygiene, Food Toxicology	Jan 1998	April 1999	1y 3m UG
7.	Prof. B.B. Chattoo's Lab, Deptt of Microbiology & Biotechnology Centre Maharaja Sayajirao University of Baroda Vadodara,Gujarat	Research Associate (DBT Program,Full Time)	Lab work on"Molecular genetics of Alkane utilization in the yeast <u>Yarrowia lipolytica</u>	Aug 1995	May 1997	1y 9m

8.	Deptt. of Microbiology,M.D .S. University Ajmer, Rajasthanr	Asst Prof. (Full Time)	Industrial Microbiology, Methods in Microbiology	Sept 1994	Nov 1994	3m PG
9.	Deptt. Of Microbiology, Barkatullah University, Bhopal	Senior Research Fellow	Full time Lab work on 'Effect of pesticides on Cyanobacterial metabolism'	1992	1994	2y
1 0.	Deptt. of Microbiology, Barkatullah University, Bhopal	"Direct" Junior Research Fellow of UGC, Govt. of India	Full Time Lab work on 'Effect of pesticides on Cyanobacterial metabolism'	1990	1992	2y

# 5. ACADEMIC QUALIFICATIONS

S.N.	Qualification	% / Division	Year	Board/University
1.	I.C.S.E. (Std.X)	82.0%	1984	Sacred Heart School, Jamshedpur, affiliated to the Board of Indian School Certificate Examinations, New Delhi.
2.	I.S.C.E. (Year 12) Plus two	70.0%	1986	D.B.M.S. School, Jamshedpur, affiliated to the Board of Indian School Certificate Examinations, New Delhi.
3.	B.Sc. (Previous) (Chemistry, Botany, Zoology)	I (64.0%)	1987	University of Lucknow, Lucknow, U.P.
4.	B.Sc. (Final) (Chemistry, Botany, Zoology)	I (65.5%)	1988	Bhopal University, Bhopal (M.P.)
5.	M.Sc. (Microbiology)	I (69.5%) 2 <sup>nd</sup> University position in order of merit	1990	Barkatullah University, Bhopal (M.P.) formerly Bhopal Univ.
6.	Ph.D. (Microbiology)		1994	Barkatullah University, Bhopal (M.P.)

- 7. Qualified **UGC-CSIR NET** for **JRF & Lecturership** (1989) in first attempt.
- 8. Postgraduate Diploma in Environment and Sustainable Development from Vardhaman Mahaveer Open University, Kota 2007.

9. Post Doc work as DBT ,Govt of India, R.A.at Dept. of Microbiology and Biotechnology Center, MSU Baroda.

### 6. AWARDS & ACHIEVEMENTS

- i. **PATENT NO.358213 GRANTED on 10<sup>th</sup> Feb 2021.** Method of Biosurfactant Production Using a Novel Bacterial Isolate *Bacillus thuringiensis* SMT2 and Agroindustrial Wastes .Patent Application no. 35/DEL/2013.
- ii. **YOUNG SCIENTIST AWARD** at 82nd annual session of Indian Science Congress Association held at Jadavpur University, Kolkata, Jan. 1995.
- iii. Qualified NET (UGC-CSIR) for JRF and lecturership in first attempt in Dec. 1989.
- iv. Awarded Summer Research Fellowship of Indian Academy of Sciences-INSA-NASI, Bangalore for 2017.
- v. Received award "Abhinandan Patra' from Chief Minister Shri Ashok Gehlot for record sales of book written 'Dharti par Paani' published by Rajasthan Hindi Granth Academy. August 2019
- vi. Two new bacteria (accession nos. JX559761 and JX559762) isolated, sequence
- vii. deposited in GenBank, the nucleotide repository of NCBI (USA)
- viii. Obtained Grade A at Refresher course in Microbiology organized by UGC & Academic Staff College University of Rajasthan, Jaipur, from 13-2-06 to 4-3-06.
  - ix. Obtained admission to carry out post doctoral research in Prof B.A.Whitton's laboratory **Dept. of Biological Sciences**, **University of Durham**, **U.K**.
  - x. Three students received prizes in conferences for presentation of papers in National conferences.
  - xi. First Prize on poster entitled 'The Role of Autodidactism in Higher Education' at National conference on 'Issues and Challenges in Doctoral Research'. held on August 25, 2022 organized by the Amity University Rajasthan, Jaipur
- 7. PAPERS PUBLISHED: Total 16, Scopus listed 09, SCI 06, UGC approved 01, Corresponding/Cocorresponding author=07, first author=06. Highest SCI IF 11.8. Total IF= 26.9

#### 8.BOOKS PUBLISHED - 03

1. Shruti Mathur and Rajendra Kumar. 'Water on Earth: The Story of Its Origin, Habitats, their Neglect and Regeneration' (ISBN 978-81-316-0804-3) Rawat Publishers, Jaipur, Bangalore, Pune. (2017)



 $\frac{https://www.google.co.in/search?q=Water+on+earth+by+Shruti+Mathur+and+Dr}{+rajendra+Kumar\&oq=Water+on+earth+by+Shruti+Mathur+and+Dr+rajendra+K}\\ umar\&aqs=chrome..69i57.18045j0j8\&sourceid=chrome\&ie=UTF-8\#$ 

2. Rajendra Kumar and Shruti Mathur. Dharti par Pani. Published by Rajasthan Hindi Granth Academy, Jaipur. ISBN 978-93-5131-348-9 (2018).

Book received award by The Hon'ble Chief Minister,Mr Ashok Gehlot for record sales.14-08-2019 More about the book is available on <a href="https://hindi.indiawaterportal.org/content/dharatai-para-paanai/content-type-page/1319333034">https://hindi.indiawaterportal.org/content/dharatai-para-paanai/content-type-page/1319333034</a>

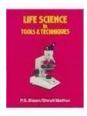
https://www.google.co.in/search?ei=KTszW87iEsWm9QOWm5ugDQ&q=Dharti+par+pani+rajendra+kumar+rajasthan+hindi+granth+academy&oq=Dharti+par+pani+rajendra+kumar+rajasthan+hindi+granth+academy&gs\_l=psy-ab.3...767332.792145.0.793171.114.74.0.1.1.0.340.11201.0j39j16j2.57.0....0...1c.1.64.psy-

<u>ab..61.42.8121...0j33i21k1j0i67k1j0i131i67k1j0i131k1j0i22i30k1j0i22i10i30k1j0i13i30k1j0i8i13i30k1j33i160k1.0.2EhKJiVM2FI#</u>





# Popular text book



Bisen P.S. and **Mathur Shruti**. 'Tools and Techniques' in Life Sciences' ISBN:81-239-0318-9 Published by CBS Publications, New Delhi (1998).

## 9. DETAILS OF PAPERS PUBLISHED

(Total 16, Scopus listed 09, SCI 05, UGC approved 01, Corresponding/Cocorresponding author=07, first author=06. Highest SCI IF 11.8. Total IF= 27.8)

- (1) Bisen PS, **Mathur Shruti\***. (1993) Adaptive Response of Wild and Mutant Type *Synechococcus cedrorum* to a Polychlorinated Pesticide Endosulfan. Biomedical and Environmental Sciences. ISSN 0895-3988,6, 264 272. Elsevier. PMID 8292271 **Scopus listed .SCI IF 3.5** https://www.ncbi.nlm.nih.gov/pubmed/8292271
- \*(2) Gayatri Jeph, **Shruti Mathur** Pritesh K. Relekar, P. H. Nakhate, D. K. Parecha, Hemant Gautam(2015). Management of Solid Waste from edible Oil Industry. Journal of Environmental and Applied Bioresearch ISSN 2319-8745, Vol 03, 92-96.
- \*(3) Ravneet Chug and **Shruti Mathur.** (2013). Extracellular Polymeric Substances from Cyanobacteria: Characteristics, Isolation & Biotechnological Applications-A Review.

- Internat. J. of Advances in Engineering Science and Technology.Vol 3, No.2, pp49-53.ISSN:2249-913X.
- \*(4) Gayatri Jeph & **Shruti Mathur**(2015) Correlation between Growth and Biosurfactant Production in Bacteria Isolated from Oil Contaminated Sites. International Journal of Trends in Research and Development, Volume 2(4), ISSN 2394-9333. URL: http://www.ijtrd.com/papers/IJTRD12.pdf
- (5)\* **Shruti Mathur** (2015) Changes in Hysteretic Kinetics and Properties of Key Regulatory Enzymes of Wild type and Mutant Strains of *Synechococcus cedrorum* during Pesticide (endosulfan) Stress Combat. Annals of Plant Sciences Vol4 No.11, 1208-1216. ISSN:2287-688X. **UGC approved**
- (6) \*Shruti Mathur, Kush Modi & Gayatri Jeph (2016) Production of Biosurfactants from Agro-Industrial Wastes-A Review. International Journal of Current Research Vol. 8, Issue, 03, 27339-27344. ISSN: 0975-833X
- (7) \*Mathur S., Talan A., Paudel D., Pokhrel S. and Chug R. (2016)Assessment of Bacteriological Quality of Industrial Waste Water: A Word of Caution. Indian J of Environmental Protection Vol 36.No.3,227-233.ISSN:0253-7141 Publisher:Kalpana Corporation, Varanasi.. Scopus Listed
- (8)\* Shruti Mathur and Ravneet Chug (2016) Bacterial Extracellular Polymeric Substances and Heavy Metal Bioremediation: Challenges and Possibilities. Pollution Research . 35(4):861-868.ISSN0257-8050. Publishers: EM International http://www.envirobiotechjournals.com/article\_abstract.php?aid=7507&iid=223&jid=4 Scopus Listed
- (9) Ravneet Chug, Vinod Gour, Shruti Mathur, S.L. Kothari. (2016) Optimization of extracellular polymeric substances production using *Azotobacter beijreinckii* and *Bacillus subtilis* and its application in chromium (VI) removal. Bioresource Technology. 214.604-608. ISSN:096-8524. Scopus Listed. SCI IF 11.88 https://doi.org/10.1016/j.biortech.2016.05.010
- (10) \*Shruti Mathur and Priyanka Jain. (2016). Comparative Study of Decolorisation of an Azo Dye By A Single Bacterial Isolate and Soil Consortia in Defined and Complex Media. Journal of Environmental Science and Pollution Research.35(4):861-868.ISSN:0257-8050
- \*(11) Santosh K Upadhyay and **Shruti Mathur** (2017) Role of Prokayotic P-Type ATPases. International Journal of Cell Science and Molecular Biology. Volume 3 Issue 1.

p005-008.DOI: 0.19080/IJCSMB.2017.03.555602. ISSN:2572-1100.Juniper Publishers Inc.Newbury Park, CA 91320 United States,USA.

- \*(12) Baby Sharma, Sandhya Menon, Shruti Mathur, Nilima Kumari and Vinay Sharma (Sept 2020). Decolorization of malachite green dye from aqueous solution using biosurfactant-stabilized iron oxide nanoparticles: process optimization and reaction kinetics. Int. J. Environ. Sci. Technol. volume 18, pages1739–1752.Springer <a href="https://doi.org/10.1007/s13762-020-02901-y">https://doi.org/10.1007/s13762-020-02901-y</a> Electronic ISSN 1735-2630 Print ISSN 1735-1472. **Scopus listed.SCI IF 3.5**
- (13) Ravneet Chug, Shruti Mathur, S.L. Kothari, Harish, Vinod Singh Gour (2021) Maximizing EPS production from Pseudomonas aeruginosa and its application in Cr and Ni sequestration. Biochemistry and Biophysics Reports (26)100972. ISSN 24055808 https://doi.org/10.1016/j.bbrep.2021.100972.https://authors.elsevier.com/sd/article/S2405-5808(21)00066-2 Scopus listed
- \*(14) Baby Sharma, Shruti Mathur, Nilima Kumari and Vinay Sharma (2022) A systematic review on iron-based nanoparticle-mediated clean-up of textile dyes: challenges and prospects of scale-up technologies. Environmental Science and Pollution Research. 29, 312–331.ISSN 0944-1344. <a href="https://doi.org/10.1007/s11356-021-16846-3">https://doi.org/10.1007/s11356-021-16846-3</a>. Scopus listed. SCI IF 5.19
- \*(15) Baby Sharma, Shruti Mathur, Nilima Kumari and Vinay Sharma (2022) Kinetics and optimisation of azo-dye decolorisation using green synthesised iron oxide nanoparticles: A pilot scale study. International Journal of Environmental Research. 16(4):38.Print ISSN:1735-6865 Electronic ISSN 2008-2304 DOI:10.1007/s41742-022-00418 https://link.springer.com/article/10.1007/s41742-022-00418-5. https://www.springer.com/journal/41742 Scopus listed. SCI IF 3.2
- \* (16) Baby Sharma Nilima Kumari Shruti Mathur, Vinay Sharma(2023) Development of an effective strategy using green synthesized nanoparticles to decolorize a representative dye used in textile industries of Sanganer, Jaipur (India). Vegetos ISSN 2229-4473<a href="https://doi.org/10.1007/s42535-022-00551-8">https://doi.org/10.1007/s42535-022-00551-8</a> <a href="https://www.springer.com/journal/42535">https://www.springer.com/journal/42535</a> <a href="https://www.springer.com/journal/42535">Scopus listed.</a>

<sup>\*</sup> corresponding author/co- corresponding author

#### 10. BOOK CHAPTERS

- Rajendra Kumar & Shruti Mathur\* (2022) Natural Reserves of Water on Earth.In:.Handbook of Research on Water Sciences and Society. ISBN10: 1799873560; ISBN13:9781799873563; Publishers: IGI Global Hershey, Pennsylvania, USA. Scopus listed
- 2. Baby Sharma, Nilima Kumari, Shruti Mathur\* & Vinay Sharma (2022) Dyeing Industry & Dying Rivers: An environmental and socio-cultural perspective of global textile dye pollution. In: Handbook of Research on Water Sciences and Society. ISBN10: 1799873560; ISBN13:9781799873563; Publishers: IGI Global Hershey, Pennsylvania, USA. Scopus listed
- 3. Baby Sharma & Shruti\_Mathur\* (2021) Edible Mushrooms as Nutraceuticals: Boon or Bane p 67-86, Recent Advances in Mushroom Cultivation Technology and Its Application. Editors Dr. Shweta Kulshreshtha & Ukaogo, Prince Onyedinma & Dr. Siddhant. Bright Sky Publications New Delhi ISBN 9788195245178
- **4.** Baby Sharma, Nilima Kumari, Shruti Mathur\* and Vinay Sharma \* (2023) Advances in Nano-remediation of Textile Dyes in Textile Industry Effluents: Current Developments and Future Prospects in "Nanobiotechnology: Principles and Applications ", Editors: Juhi Saxena, Abhijeet Singh, Anupam Jyoti, Bentham Science Publishers (2023). <a href="https://doi.org/10.2174/97898151235551230101">https://doi.org/10.2174/97898151235551230101</a> Bentham Science Publisher.Print ISBN978-981-5123-56-2Online ISBN 978-981-5123-55-5
- **5.** A.N.Pathak,Ravneet Chug,**Shruti Mathur**, Nidhi Mathur (2013) Microbial Extrapolymeric Substances as Prospective Compounds for Drug development' in'Biologix' Vol II,p 143-147, ISBN No. 81-88919-15-2.Published by K.S. Enterprises, Shahadra,Delhi

#### 11. RESOURCE PERSON

- Invited talk on 'Habitats of Water on Earth' at University of West of England, Bristol, U.K. on Dec 14th, 2021 (online)
- Invited talk during National Seminar on 'Sustainable Innovations in Biotechnology' at RNB Global University, Bikaner on Feb 13<sup>th</sup>,2021. (online)

- Invited talk on 'How Important is Water Conservation to Solve the Water Crisis' aired on ALL INDIA RADIO on 09-08-2022, FM101.2.
- Delivered Lecture on 'Overview of Organic farming with special reference to Vermicomposting' at Training of Field Functionaries/Extension Officer on Organic Farming organized at Amity University Rajasthan, Jaipur from 24 to 25 July 2013 sponsored by National Centre of Organic Farming, Ministry of Agriculture, Govt. of India
- Visiting Faculty, Centre for Converging Technologies, University of Rajasthan, Jaipur (2011).
- Reviewer Biomedical Research International. Hindawi Press 2022.

# 12. Students guided

Ph.D. 03
M.Sc. 33 (6 months)
M.Phil. 04 (6 months)
BTech. 01 (3 months)
B.Sc 03 (6 months)

1.	Isolation of Biosurfactant -producing	Gayatri Jeph	PhD awarded in
	Bacteria and Media Optimisation for	(Rajiv Gandhi	2016
	Production of Biosurfactants from Agro-	Fellowship _UGC)	
	industrial Wastes		
2.	Studies on Bioremediation Potential of	Ravneet Chug	PhD awarded in
	Bacterial Extrapolymeric Substances on		2017
	Heavy Metal Contaminated Water Samples		
3.	Studies on various strategies of textile dye	Baby Sharma	PhD awarded in
	bioremediation using bacterial extracellular		2023
	polymeric substances (EPS).		
4.	Production and Characterization of Bacterial	Pallavi Sharma	BSc(H)
	Extracellular Polymeric Substances (EPS)	(Enrolment No:	Biotechnology
		A2020411)	2017-20
5.	A Study on Stabilisation of Municipal	Vanlalduhsaki	BSc (H)
	Wastewater using Paenibacillus	Enrolment no. :	Biotechnology
	dendritiformis	A20204420007	2020-23
6.	A Study on Stabilisation of Municipal	Simran Aleen Beck	BSc(H)
	Wastewater using Alcaligenes faecalis	Enrolment no. :	Biotechnology
		A20204420006	2020-23
7.	Studies on optimal production of bio-	Sandhya Menon	B.Tech.Biotech
	surfactants and their characterization with		2013-17

respect to chemical properties and surface	
activity	

# Student Projects guided

- (a) Screening of Mushrooms for Immunomodulatory Compounds. Dept. of Science & Technology, Govt of Rajasthan. 2007-08.
- (b) Evaluation of some Babycare Products as Cancer causing Agents. Dept. of Science & Technology, Govt of Rajasthan.. 2009-10.

#### 13. EXTRA – CURRICULAR AWARDS

Awards: School: (1984) 1. All-Rounder 2. Leadership

3. Achievement

College: (1986-1990) 1. Creative writing 2. Distinction

in Computer Prog. Course

#### 14. PAPER SETTER AND EXAMINER

B.Sc. (Home) M.S. University of Baroda 1999 – 2003.

BSc Biotechnology Banasthali University Banasthali 2006 - 2017.

M.Sc. Biotechnology Barkatullah Universty, Bhopal

M.Sc. Microbiology MDS University, Ajmer 2010.

M.Sc. Biotechnology, University of Rajasthan, Jaipur 2022

03 Ph.D Synopses evaluated Banasthali University 2017,2019,2021,2022

02 Ph D Thesis examiner, Barkatullah University, Bhopal 2021, 2022

#### 15. MEMBERSHIP IN BODIES

Life Member: Association of Microbiologists of India. No.4136-2015.

Life Member: Biotech Research Society, India. No. LM2266

#### 16. POSITIONS HELD

- 1. School (1984) Vice Head Girl, Secretary Adventure club, Treasurer Interact club,
- 2. University (1992-94) Editor in-house journal of BU Researchers' Association (1992-94)
- 3. Head of Dept of Biotechnology, The IIS University (2003-2010).
- 4. Member, Departmental Research Committee, The IIS University, Jaipur.
- 5. Member, Internal Quality Assurance Cell( IQAC), The IIS University, Jaipur.

- 6. Member Board of Studies, Deptt of Biotechnology, The IIS University, Jaipur and Amity Institute of Biotechnology, Amity University, Rajasthan, Jaipur.
- 7. Coordinator Amity Centre for Water Studies and Research
- 8. Coordinator, Board of Studies in Biotechnology, AIB, AUR
- 9. Coordinator, Board of Studies in Food Technology, AIB, AUR
- 10. Coordinator, Board of Studies in Bioinformatics, AIB, AUR
- 11. Coordinator, MoU of AUR with University of West England, Bristol, U.K.
- 12. Coordinator, Ph.D. Programme AIB, AUR

#### 17. CONFERENCES AND WEBINARS ORGANISED

- **1.** Coordinator, Webinar by Dr Mark Everard, Assoc Professor, University Of West of England, Bristol, UK. On 'Water and Ecosystem Services' on 11<sup>th</sup> Aug, 2021.
- **2. Coordinator, Webinar** by Dr Sudipti Arora Research Scientist and Asst Director, Dr. B. Lal Institute of Biotechnology, Jaipur on 'Sustainable Entrepreneurship in Environmental Biotechnology' on 8<sup>th</sup> Sept,2021
- **3. Organising Secretary** of a National Conference on 'Application of biotechnology in Sustaining the Environment' held on 5<sup>th</sup>-6<sup>th</sup> February 2008 organised in cosponsorship with Indian Science Congress association, Jaipur Chapter and Dept of Science and Technology, Govt of India, New Delhi...
- **4. Organising Secretary** of a UGC-sponsored National Conference on Recent Trends in Environmental Toxicology and Biotechnological Approach to Conserve the Environment organized jointly by The Association of Microbiologists of India, Jaipur Chapter and International College for Girls, Jaipur on 30<sup>th</sup>-31<sup>st</sup> Jan 2009.
- **5. Joint Organising Secretary** of International Conference on'Green Biotech:Recent Trends and Innovations' held at Amity University Rajasthan on Nov 12<sup>th</sup>- 13<sup>th</sup> 2011.
- **6. Coordinator** of National Conference on Impact of Climate Change on Air Quality, Biodiversity and Agriculture, Amity University Rajasthan 13<sup>th</sup>-15<sup>th</sup> October,2016.

#### 18. REGULAR ATTENDANCE IN FDPs WORKSHOPS & SEMINARS

- 1. FDP on "Bibliometric Analysis, Systematic Literature Review and Meta Analysis" organized by Amity Business School, Amity University Haryana, Gurugram from May 08-12, 2023.
- **2.** Workshop on 'Managing Research Literatuture using Mendeley' organized by Amity University Madhya Pradesh and Elsevier on 5<sup>th</sup> Feb,2022.
- **3.** e-Workshop on Water Quantity and Quality Conservation,organised by IIT Kharagpur 23-24<sup>th</sup> July,2021

- **4.** Successfully completed online FDP on Entrepreneurship organized by Centre for Science and Environment 'Making Data Meaningful', New Delhi from 16<sup>th</sup>-24<sup>th</sup> Feb 2021.
- **5.** Successfully completed FDP on entrepreneurship organized by IIT Madras and DST, Govt of India from 15<sup>th</sup> -27<sup>th</sup> March,2021.
- **6.** TEQUIP-III- sponsored short term course on 'Technological Developments in Bioprocessing' organized by Bipin Tripathi Kumaon Institute of Technology, Almora from 23<sup>rd</sup>-27<sup>th</sup> Sept ,2020.
- **7.** NGS Analytics workshop organized at Birla Institute of Scientific Research and Bionivid Technologies Pvt. Ltd. On 23-02-2020.
- **8.** Twelve days online workshop on online teaching entitled 'Transiting from Physical to Virtual Classrooms' organized by Socrates Foundation of Enhanced Learning ,Pune from 18-05-2020 to 30-05-2020.
- **9.** Three month online training programme on Bioinformatics and Biomedical Data Science Next Generation Sequencing Data Types and Analysis Methods from Jul-Sept 2018 organised by T-Bioplatform.
- 10. Summer Research Fellowship of Indian Academy of Sciences INSA-NASI, Bangalore for 2017.
- **11.** Workshop on 'Application of Bioinformatics Tools and Databases in Virus Genomics and Evolution Research'organised on 17<sup>th</sup> -18<sup>th</sup> March, 2017 at Desert Medicine and Research Centre(ICAR) Jodhpur.
- 12. 15 Days Entrepreneurship Development Programme (EDP) conducted by National Institute for Entrepreneurship and Small Business Development (Ministryof Skill Development and Entrepreneurship, Govt of India) from March 11<sup>th</sup> to 25<sup>th</sup>, 2016 in Jaipur District of Rajasthan.
- **13.** National Workshop on 'Relevance of Microscopy in Microbial Characterisation, Aug 11<sup>th</sup>-14<sup>th</sup>, 2015, Sponsored by ICAR held at Amity University NOIDA.
- **14.** Workshop and Training on 'Molecular Docking, Virtual screening and biologics Discovery , Feb 18-20<sup>th</sup>,2015, organized by Schrodinger and Amity University Rajasthan .
- 15. Hands- on training in some techniques in molecular biology at Genome Research Centre under the guidance of Prof. B. B. Chattoo, Director Genome Research Centre, M. S. University of Baroda, Vadodara, from Dec15<sup>th</sup> -30<sup>th</sup> 2009.
- 16. Workshop on Bioprocess Engineering at Birla Institute of Scientific Research,

- Jaipur from 14<sup>th</sup> -16<sup>th</sup> September 2009.
- **17.** National Workshop on Biological Sequence Analysis on 9<sup>th</sup>-10<sup>th</sup> Jan 2009, organized by Bioinformatics Infrastructure facility, Centre for Converging Technologies, Univ of Rajasthan, Jaipur.
- **18.** Workshop on 'Concepts and Techniques in Evaluation and Measurement 'on 21-22 April 2008, organised by ICG Jaipur.
- **19.** Orientation course in computers held at India Institute of Information Technology Jaipur, from 15<sup>th</sup> May –30<sup>th</sup> May 2006.
- **20.** UGC Sponsored Refresher course in Microbiology held at the Dept of Zoology, Univ. of Rajasthan, Jaipur, from 13<sup>th</sup> Feb 4<sup>th</sup> March 2006.

# 19. PAPER ABSTRACTS PUBLISHED AND PAPERS PRESENTED (including in international conferences held abroad)

- (1) Mathur Shruti. Changing Hysteretic Properties of G6PDH in Wild and Mutant Type *Synechococcus cedrorum*. Proc. of 82nd annual session of ISCA, Jadavpur Univ. Kolkatta. (1995)
- (2) Mathur Shruti, Jain Priyanka and Gupta Neha. Role of Biodiversity in Bioremediation-Comparative Study of a Single Isolate and Consortia from Contaminated Soil. Proc. of National Conference on Biodiversity and Conservation 10<sup>th</sup>-11<sup>th</sup> Dec 2007 held at Govt. College Jhunjhunu, Rajasthan.
- (3) Mathur Shruti and Gupta Neha . Biochemical Characterisation of an Azo-dye-decolorizing Bacterial Isolate from Contaminated Soil Sample. Proc. of DBT- Sponsored National Conference on Application of Biotechnology in Sustaining the Environment 5<sup>th</sup>-6<sup>th</sup> Feb 2008 at ICG, Jaipur
- (4) Mathur Shruti & Jain P. Transformation and Removal of a Xenobiotic azo Dye-Comparative Study by a Bacterial Isolate and Soil Consortia. Proc . of DBT- Sponsored National Seminar on Application of Biotechnology in Sustaining the Environment.2008 at ICG, Jaipur.
- (5) Mathur Shruti. Changes in Hysteresis of G6PDH and Nature of Nitrate Reductase in WT and Mutant Strains of *Synecchococcus cedrorum* during Pesticide Stress Combat. Proc. of **International Conference on Molecular Biology and Biotechnology,** 19<sup>th</sup> –21<sup>st</sup> Oct 2008. Banasthali University, Banasthali, Rajasthan.
- (6) Mathur Shruti and Ankita Shah. Toxicity Potential of Food Colours Sweeteners Proc. of UGC-Sponsored national Conference on Recent Trends in Environmental Toxicology

- and and Biotechnological Approach to Conserve the Environment,,organized by Assocn. of Microbiologists of India(Jaipur chapter) and ICG. On 30<sup>th</sup>-31<sup>st</sup> Jan2009.
- (7) Mathur Shruti and Neelam Sharma .Abatement of Groundwater Pollution by Biotechnological Methods.Proc. of Workshop on Water Scenario, Efficient Use and Management in Rajasthan, organized by Central Groundwater Pollution Board , Western Region, Jaipur, on 13<sup>th</sup>-14<sup>th</sup> March 2009.
- (8) Mathur Shruti. The Role of Self in Quality Education in Proc. of the NAAC-Sponsored National Conference on Quality-Management in Institutions of Higher Education March 16<sup>th</sup>-17<sup>th</sup> 2009 at ICG Jaipur.
- (9) Mathur Shruti and Divya Bhandawat. Mushrooms as non-pharmaceutical intervention in type-2 diabetes A word of caution!. Proc. Of International conference on Multidisciplinary Approaches to Diabetes Research and Health held at The Department of Zoology, University of Rajasthan, Jaipur, on November 14<sup>th</sup>-16<sup>th</sup> 2010.
- (10) Nidhi Mathur, Ravneet Chug and Shruti Mathur. 'Phylogenetic Analysis of Biofilm-producing Pathogenic Bacteria' at International Conference on Green Biotech: Recent Trends and Innovations at Amity University Rajasthan on 12th -13th Nov 2011
- (11) Nidhi Mathur, Ravneet Chug and Shruti Mathur. Toxicoinformatics studies on Biofilm -Producing Pathogenic Bacteria at International Symposium on Current Trends in Environmental Toxicology organised by Society of Toxicology ,India held at IIS University , Jaipur on 22nd 24th Dec 2011
- (12) Shruti Mathur, Gayatri Jeph and Dr. Hemant K. Gautam
- Production of Biosurfactant by Growth of bacterial Isolates on Agro-Industrial wastes International Conference on Green Biotech: Recent Trends and Innovations at Amity University Rajasthan on 12th -13th nov 2011.
- (13) SHRUTI MATHUR, Gayatri Jeph, Seema Dhail. Isolation of biosurfactant- producing Bacteria and Product Characterisation at International Symposium on Current Trends in Environmental Toxicology organized by Society of Toxicology, India held at at IIS University, Jaipur on 22<sup>nd</sup>-24<sup>th</sup> Dec 2011.
- (14) Ravneet Chug, SHRUTI MATHUR, Nidhi Mathur, Saptarshi Bagchi. Microbial EPS as Prospective Compounds for Drug Development at National Conference on Emerging Trends in Biotechnological Research ETBR-2012, organized by Mewar Institute of Management, Ghaziabad, U.P. on 28<sup>th</sup> Oct 2012.
- (15) **Shruti Mathur**, Gayatri Jeph, Seema Dhail and Hemant K. Gautam Effect of Carbon and Nitrogen Sources on Efficacy of Biosurfactants Produced by Various BacterialIsolates. **4th** Interdisciplinary Conference on **"Biologically active substances and materials: fundamental and applied problems of production and application"**, held from **May 27th –1st June 2013** at Novy Svet (Crimea, Ukraine).
- (16) Ravneet Chug and Shruti Mathur. Microbial Extracellular Polymeric Substances (EPSs) as Possible Drug Alternatives to Mitigate Loss of Medicinal Plant Biodiversity. Proc of National Conference on Biodiversity Conservation, The IIS University, Jaipur,

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- (17) Kishan Bhayani,Monica Bhatnagar Gayatri Jeph and Shruti Mathur.Isolation and Partial Characterisation of an Antifungal EPS Produced by Bacterial Isolates from Oil Contaminated Soil. Proc. of National Conference on Fungal Biotechnology,Nov 16<sup>th</sup>-18<sup>th</sup>,2016, organized by Mycological Society of India, at BISR, Jaipur.
- (18) Gayatri Jeph and Shruti Mathur. Production of Biosurfactant from Bacteria using Agrowaste. Proc. of National Conference on Biotechnology and Environment for Sustainable Development, March 29<sup>th</sup>-30<sup>th</sup>,2019 at Dr. B. Lal Institute of Biotechnology, Jaipur.
- (19) Baby Sharma, Shruti Mathur and Vinay Sharma. Decolorisation of textile dye using iron –oxide nanoparticles as an effective bioremedial tool. Proc. of 2<sup>nd</sup> Biomedical Research Competition organized by PGIMER Chandigarh and Society of Young Biomedical Scientists, Nov 17<sup>th</sup>, 2019, Chandigarh. Student received award of appreciation.
- (20) Baby Sharma, Shruti Mathur , Nilima Kumari and Vinay Sharma Process optimization for EPS stabilized iron-oxide nanoparticles synthesis and its application in bioremediation of commercial dye, Malachite Green. 2nd International Conference on Environmental, Agricultural, Chemical and Biological Sciences". Organized by: Voice Of Indian Concern for the Environment (VOICE)In association with Murray State University, Murray, Kentucky, USA,Dept of Biotechnology, GLA University, Mathura, Uttar Pradesh, India,Dept of Zoology, Mercy College, Palakkad, Kerala, India,Dept of Environmental Science, DM College of Science, Dhanamanjuri University,Imphal, Manipur, India,Dept of Biochemistry, Vels University, Chennai, Tamilnadu, India held from 24th to 26th Jan 2021. Student received award for Best Oral presentation
- (21) Baby Sharma, Shruti Mathur , Nilima Kumari and Vinay Sharma Kinetics of Bacterial Extracellular Polymeric Substance (EPS) mediated decolorisation of textile dye-Malachite Green at the 61st Annual International Conference of the Association of Microbiologists of India (AMI) and the 5th Annual International Conference of Indian Network for Soil Contamination Research (INSCR) held online from 3<sup>rd</sup>-5<sup>th</sup> Feb 2021.
- (22) Shruti Mathur, Abhipsa Pani, Shreya Singh, Surbhi Agarwal and Sandhya Menon 'Sequestration of Heavy Metals from Aqueous Solutions by Biosurfactant Produced by Marine Bacteria Isolated from Oil Contaminated Site.' at the 61st Annual International Conference of the Association of Microbiologists of India (AMI) and the 5th Annual International Conference of Indian Network for Soil Contamination Research (INSCR) held online from 3<sup>rd</sup>-5<sup>th</sup> Feb 2021.

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