

Dr. Mona Sharma

M. Sc., UGC-NET, Ph.D. (Environmental Science), PGDISM (Gold Medalist)

Curriculum Vitae

ACADEMIC QUALIFICATIONS

- **Ph. D. (January, 2012)** in Environmental Sciences, Department of Environmental Science & Engineering, Guru Jambheshwar University of Science & Technology, Hisar (India) under the supervision of **Prof. Anubha Kaushik**
- **M.Sc.** in Environmental Sciences with **Distinction (Second Topper)** from Guru Jambheshwar University of Science & Technology, Hisar (India) in **2006**.
- **B.Sc.** in Biology with **First Division** from Maharishi Dayanand University, Rohtak (India) in **2004**.
- **Higher Secondary (10+2)** from Board of School Education Haryana, Bhiwani in **2001** with **First Division**. Major subjects were Biology, Physics and Chemistry (**Distinction in Biology**)
- **Matriculation Examination (10th)** from Board of School Education Haryana, Bhiwani in **1999** with **First Division**.
- **Post Graduate Diploma in Industrial Safety Management (PGDISM)** with **First Division** from Guru Jambheshwar University of Science and Technology, Hisar in 2008 (**Topper and Gold Medalist**).

TEACHING EXPERIENCE

- **Presently** working as **Assistant Professor** in the Department of Environmental Sciences, **Central University of Haryana, Mahendergarh since August, 2015**
- As an **Assistant Professor**, conducted UG and PG classes at **Amity University** Uttar Pradesh, Noida, during academic session **2013-2015**
- As a **Research Scientist**, had under taken **Ph.D.** Environmental Sciences classes (**Pre Ph.D. Course work**) at the **Amity University** Uttar Pradesh, Noida, during academic session **2012-2013**
- As a **Teaching Associate**, conducted U.G. and P.G. Environmental Sciences classes (theory and labs) at **G.J.U.S. & T.**, Hisar from **August, 2011-May, 2012**

- As a **Research Fellow**, had under taken M.Sc. Environment Science classes (theory and labs) in the Department of Environmental Science and Engineering, **G.J.U.S. & T.**, Hisar, during **2007-2010**, assigned by the Department as per UGC and CSIR rules.

RESEARCH FELLOWSHIPS

- Recipient of **Senior Research Fellowship (SRF)** from Center of Scientific and Industrial Research (**CSIR**), New Delhi during **Ph.D.** from April, 2010- August, 2011
- Recipient of **Research Fellowship from** University Grant Commission (**UGC**) during **Ph.D.** under SAP (DRS-II) programme during December, 2007-March, 2010.

PRIZES/AWARDS/ACHIEVEMENTS

- **Project** entitled “*Screening of Indigenous Heavy Metals Tolerant Algal Strains from Recent Indian Station, Bharati, Antarctica for Bioremediation and Hydrogen production*” has been sanctioned by **Council of Scientific and Industrial Research (CSIR), New Delhi** in June-2016
- **Won Best Paper Award in** National Seminar on “**Strategies for Mitigation of Environmental Degradation and Climate Change**” held on 2nd – 3rd March, 2012 in Guru Jambheshwar University of Science & Technology, Hisar
- **Topper (Gold Medalist)** in P.G. Diploma in **Industrial Safety Management** from Guru Jambheshwar University of Science & Technology, Hisar (India)
- **Second Topper** in **M.Sc.** in Environmental Sciences from Guru Jambheshwar University of Science & Technology, Hisar (India)
- **UGC-National Eligibility Test (NET)** for Lectureship qualified in **June, 2007** in Environmental Sciences
- Recipient of **Meritorious Fellowship** during M.Sc. Programme from 2005-2006
- **Distinction** in Biology in Senior Secondary Examination

TRAININGS AND FACULTY DEVELOPMENT PROGRAMMES (FDP)

- Completed the course on “*Geospatial Technologies for Urban Planning*” conducted by **Indian Institute of Remote Sensing (IIRS)**, Dehradun, UK, India from February 11, 2016- March 15, **2016** (Off-campus outreach programme)

- Faculty Development Programme on “*Urban Environmental Challenges and Their Control Strategies (UECCS-2015)*” organized by **Department of Environmental Engineering, Delhi Technological University, Delhi** during July 13-17, **2015**
- Faculty Development Programme on “*Tools & Techniques for Environmental Monitoring & Management*” organized by **Amity University Uttar Pradesh, Noida** on May 20, **2013** (P-2013-26-013)
- Faculty Development Programme on “*Amity Academic Structure & System-2012-2013*” organized by **Amity Academic Staff College, Amity University Uttar Pradesh, Noida** during July 4-5, **2012** (P-2012-08-053)
- Faculty Development Programme on “*Global Environmental Issues*” organized by **Amity Academic Staff College, Amity University Uttar Pradesh, Noida** on June 8, **2012** (P-2012-04-002)
- Training on “*Blue Green Algae: Application in Agriculture and Industry*” from Centre for Conservation and Utilization of Blue Green Algae, **Indian Agricultural Research Institute (IARI), New Delhi** during 12-18 May **2010**
- “*Implementation of occupational health and safety management system - A case study*” from **SKH Metals, Gurgaon** during March to April **2008** as a minor project of Industrial health and safety diploma
- National training programme on “*Basics of Bioinformatics for Biology Teaching*” organized by **Bioinformatics Centre and Department of Biotechnology & Nanotechnology, Guru Jambheshwar University of Science & Technology, Hisar** during 28-29 March **2008**
- “*National training programme in Electron Microscopy for Scientific investigators*” organized by Department of Anatomy (E.M. Facility), **All India Institute Of Medical Science (AIIMS), New Delhi** during 12-17 November **2007**
- “*Lead Auditor – Environmental Management System*” organized by VEXIL BPS, Delhi during 10-14 September 2007
- “*Study of Effluent Treatment Plant of an Electroplating Industry*” from Neel Metal Products Limited, Gurgaon during June to July 2005 as a minor project of M.Sc.

AREA OF INTEREST

- Ecotechnology
- Bioremediation
- Microbial culturing
- Bioenergy and biofuel
- CO₂ sequestration
- Wastewater Treatment Technology

MAJOR INSTRUMENTS HANDLED

Gas chromatograph (GC), Atomic Absorption Spectrophotometer (AAS), Flame photometer, SDS-PAGE, Agarose gel electrophoresis, Nephlo Turbidity Meter, Scanning Electron Microscope (SEM), Transmission Electron Microscope (TEM), UV/VIS Spectrophotometer

TOTAL NUMBER OF M.Sc. STUDENTS GUIDED SO FAR : 04

PUBLICATIONS

Total Number of Publications/Presentations	:	45
a) Total Research Papers (Published/accepted)	:	13
<i>International</i>	:	13
b) Book with ISBN number	:	01
c) Edited Book with ISBN number	:	01
d) Research papers in Proceedings of conferences with ISBN number	:	02
e) Chapters (published/accepted) in Edited Book	:	06

Research Papers in International Journals

1. **Mona, S., Kaushik, A. 2015.** Chromium and Cobalt Sequestration using Exopolysaccharides Produced by Freshwater Cyanobacterium *Nostoc linckia*, *Ecological Engineering* (Elsevier) 82: 121-125 [IF: 3.041]
2. **Mona, S. and Kaushik, A. 2015.** Screening metal-dye-tolerant photoautotrophic microbes from textile wastewaters for biohydrogen production. *Journal of Applied Phycology* (Springer) 27: 1185-1194 [IF: 2.492]
3. **Bansal, D., Narsi R. Bishnoi, and *Mona, S. 2015.** Challenges and benefits of implementing an Environmental Management System: A review. *International Journal of Advanced Scientific and Technical Research* (RS Publication) 5 (2), 159-180 [IF: 3.94]

4. **Mona, S.,** Kaushik, A. Kaushik, C.P. **2013.** Prolonged hydrogen production by *Nostoc* in photobioreactor and multi-stage use of the biological waste for column biosorption of some dyes and metals. *Biomass & Bioenergy* (Elsevier) 50, 27-35 [IF: 3.411]
5. Anjana, K., Kiran, B., **Mona, S.,** and Kaushik, A., **2012.** Biological photohydrogen production by cyanobacteria: future prospects as a fuel, *Journal of Environmental Research and Development* 6 (3A), 779-783 [IF: 4.301]
6. **Mona, S.,** Kaushik, A. and Kaushik, C.P. **2011,** Hydrogen Production and metal-dye bioremoval by a *Nostoc linckia* strain isolated from textile mill oxidation pond. *Bioresource Technology* (Elsevier) 102, 3200-3205 [IF: 5.039]
7. Kaushik A., ***Mona, S.** and Kaushik, C.P. **2011.** Integrating photobiological hydrogen production with dye-metal bioremoval from simulated textile wastewater, *Bioresource Technology* (Elsevier) 102, 9957-9964 [IF: 5.039]
8. **Mona, S.,** Kaushik, A. and Kaushik, C.P. **2011.** Biosorption of Reactive Dye by Waste Biomass of *Nostoc linckia*, *Ecological Engineering* (Elsevier) 37, 1589-1594 [IF: 3.041]
9. **Mona, S.,** Kaushik, A. and Kaushik, C.P. **2011,** Biosorption of Chromium(VI) by Spent Cyanobacterial Biomass from a Hydrogen Fermentor using Box-Behnken Model. *International Biodeterioration & Biodegradation* (Elsevier) 65, 656-663 [IF: 2.429]
10. **Mona, S.,** Kaushik, A. and Kaushik, C.P. **2011.** Sequestration of Co(II) from aqueous solution using immobilized biomass of *Nostoc linckia* waste from a hydrogen bioreactor. *Desalination* (Elsevier) 276, 408–415 [IF: 4.412]
11. **Mona, S.,** Kaushik, A. and Kaushik, C.P. **2011,** Waste biomass of *Nostoc linckia* as adsorbent of crystal violet dye: Optimization based on statistical model. *International Biodeterioration & Biodegradation* (Elsevier) 65, 513-521 [IF: 2.429]
12. **Sharma, M.,** Rani, N., Kamra, A., Bala, K. and Kaushik, A. **2009,** Growth, Exopolymer Production and Metal Bioremoval by *Nostoc Punctiforme* in Na⁺ and Cr(VI) Spiked Medium. *Journal of Environmental Research and Development* 4(2), 372-379 [IF: 4.301]

13. Sharma, M., Kaushik, A., Somvir, Bala, K. and Kamra, A., 2008, Sequestration of Chromium by exopolysaccharides of *Nostoc* and *Gloeocapsa* from dilute aqueous solutions. *Journal of Hazardous Materials* (Elsevier) 157, 315-318 [IF: 4.836]
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**Corresponding author*

EDITED BOOK

1. Mona Sharma, Deepak Bansal and Abhishek Chauhan, 2016, “**Microalgae: Windows of Opportunity**”. SBW Publishers, New Delhi, India (ISBN: 978-81-85708-64-5).

BOOK CHAPTERS

1. Mona, S., Kaushik, A. 2016. Biohydrogen Economy: Present scenario and future perspective, in: Biohydrogen Production: Sustainability of Current Technology and Future Perspective, Publisher: **Springer Science + Business Media** (ISBN: 978-81-322-3575-0) and Editors: Dr. Anoop Singh and Dr. Dheeraj Rathore (Accepted).
2. Kaushik, A. Mona, S., 2016. Exploiting Biohydrogen Production Pathways of Cyanobacteria and Green algae: An Industrial Approach, in: Biohydrogen Production: Sustainability of Current Technology and Future Perspective, Publisher: **Springer Science + Business Media** and Editors: Dr. Anoop Singh and Dr. Dheeraj Rathore (Accepted).
3. Mona, S., Deepak, B., Chauhan, A. 2016. Biohydrogen Production: A Step towards clean environment, in: Microalgae: Windows of Opportunity 2016, **SBW Publishers**, New Delhi, pp. 1-15 (ISBN: 978-81-85708-64-5).
4. Chauhan, A., Mona, S., Kaushik, P. 2016. World of Microalgae: A comprehensive applied scientific approach, in: Microalgae: Windows of Opportunity 2016, **SBW Publishers**, New Delhi, pp. 16-37 (ISBN: 978-81-85708-64-5).
5. Tuteja, G., Mona, S. 2016. Algal photobioreactors for biomass production, in: Microalgae: Windows of Opportunity 2016, **SBW Publishers**, New Delhi, pp. 97-109 (ISBN: 978-81-85708-64-5).

6. **Mona, S.**, Yadav, A., Singh, M., Kumar, V. **2016**. Role of microalgae in bioremoval of dyes from wastewaters, in: *Microalgae: Windows of Opportunity 2016*, SBW Publishers, New Delhi, *pp.* 304-307 (ISBN: 978-81-85708-64-5).
7. **Mona, S.**, Kaushik, A. and C.P. Kaushik, **2012**, Potential of exopolysaccharides of a cyanobacterial consortium for sequestration of metal-dye from aqueous solution Published in proceeding of National Seminar on “Strategies for Mitigation of Environmental Degradation and Climate Change” Arihant Publications, New Delhi (ISBN No. 978-93-80872-61-2) *pp.* 101-104.
8. Anjana, K., Kiran, B., **Mona, S.**, and Kaushik, A., **2008**, Heavy Metal Tolerance and Biosorptive Potential in Microalgae and Cyanobacteria Isolated from Contaminated Sites. In: Proceedings of National Seminar on “**Environment (ISBN No. 978-81-906518-5-1/ Vayu Education of India Publications, New Delhi)**” *pp.* 331-336.

BOOK

Mona, S., Kaushik, A. **2015**, **Biohydrogen Production and biosorption of textile dye from wastewater**. Publisher: Lambert Academic Publishing, Germany (ISBN No. 978-3-659-69996-2) *pp.* 01-133.