# Resume

Dr. MAHEEP KUMAR (M.Sc., Ph. D.) Assistant Professor Department of Botany Rajkiya Snatkottar Mahavidyalaya Obra, Sonbhadra 231219

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# **Educational Qualifications**

Qualification	Year	Subject	University/College	Percentage/other information
Ph.D.	2013	Botany	Department of Botany, BHU., Varanasi	04 <sup>th</sup> May 2013 thesis submitted 8 <sup>th</sup> Nov 2013 (viva- voice) Ph. D. Awarded (23 <sup>rd</sup> March 2014)
M.Sc.	2007	Botany	B.H.U., Varanasi	84.80 % (8.48 CGPA)
B.Sc.	2005	Botany (Hons.) Zoology, Chemistry	B.H.U.,Varanasi	61.56 %
12 <sup>th</sup>	2001	Hindi, English, Physics, Chemistry, Biology	E.R.I. Collage, Mughalsarai, (U.P)	60.40 %
10 <sup>th</sup>	1999	Hindi, English, Math, Science, Social Science, Biology	E.R.I. Collage, Mughalsarai, (U.P)	67.67 %



#### Award/ Fellowship/ Exam

Council of Scientific and industrial research, NET (LS) Dec.2008 - Qualified

Common Research Entrance Test (2008) - Qualified

University grants Commission New Delhi Meritorious Fellowship (2008) - Qualified

Rajiv Gandhi National Fellowship (2008)- Qualified and joined.

## **Topic of Research in Ph.D.**

"Screening of antimicrobial compounds from the cyanobacteria, *Lyngbya aestuarii* and *Aphanothece bullosa*".

## **Papers/Publications**

- 1. **Kumar M**., Tripathi MK, Srivastava A, Nath G and Asthana R K (2012) A Comparative Study of Antibacterial Activity of Brackish and Fresh Water Cyanobacterial Strains, *Asian J. Exp. Biol. Sci. (ISSN 0975-5845), 3(3): 548-552.*
- Kumar M, Tripathi MK, Srivastava A, Gour JK, Singh RK, Tilak R, Asthana RK (2013) Cyanobacteria, *Lyngbya aestuarii* and *Aphanothece bullosa* as antifungal and antileishmanial drug resources, *Asian Pacific J. Tropical Biomedicine* (ISSN 2221-1691), 3(6) 458-463, DOI: <u>10.1016/S2221-1691(13)60096-9</u>.
- Tripathi, MK, Kumar M, Singh, VK, Nath, G and Asthana RK (2012) Use of Enterobacterial Repetitive Intergenic Consensus PCR in Detecting Target(s) of Hapalindole-T, From a Cyanobacterium, in *Escherichia Coli: In Silico* Validation, Current research in Bioinformatics (ISSN 2524-2180 online) (1948-9852 print) 1 (1): 30-40. *Submitted On: 12 February 2012* Published On: 3 March 2012 *https://doi.org/10.3844/ajbsp.2012.30.40*
- Kumar M (2014) Lyngbya sp.: a suitable cyanobacterium for harvesting antimicrobial compounds, Asian Journal of Pharmaceutical and Clinical Research (ISSN 2455-3891) (0974-2441print); 7(1):6-9. https://innovareacademics.in/journals/index.php/ajpcr/article/view/644.
- 5. **Kumar M** (2014) Cyanobacteria: Natural occurring untapped valuable resource, Indo American Journal of Pharmaceutical Research 4 (2): 1234-1237. ISSN **2231-6876** <u>https://www.semanticscholar.org/paper/CYANOBACTERIA%3A-NATURAL-</u>

OCCURRING-UNTAPPED-VALUABLE-Kumar/f44c65eff639320690d78856c7ff4ab906d96e40.

- 6. **Kumar M** (2014) Bacteria involving in nitrogen fixation and their evolutionary correlation, *Int.J.Curr.Microbiol.App.Sci* (2014) 3(3): 824-830. ISSN: 2319-7706.
- 7. **Kumar M** (2014) Harvesting of valuable endo and exo metabolites from Cyanobacteria: A potential source, Asian Journal of Clinical Research 7 (2) 26-30. ISSN 0974-2441.
- Kumar M, Singh P, Tripathi J, Srivastava A, Tripathi M K, Ravi AK and Asthana R K (2014) *Identification and structure elucidation of antimicrobial compounds from Lyngbya aestuarii and Aphanothece bullosa*, Cellular & Molecular Biology; 60 (5), 82-89.( ISSN 1165-158X); DOI: 10.14715/cmb/2014.60.5.14.
- Tripathi MK, Kumar M, Deepali S, Asthana RK, Nigam S (2017) Proteomic Analysis of Sensitive and Resistant Isolates of *Escherichia coli* in Understanding Target(s) of a Cyanobacterial Biomolecule Hapalindole-T, Journal of Aquaculture Research & Development 8(1):(ISSN 2155-9546), 1-5. DOI: 10.4172/2155-9546.1000467.
- Prakash V, Singh S P and Kumar M (2019) Isolation and identification of fungal species from storage seed, Journal of Environmental Science, Computer Science and Engineering & Technology; 8(3), 295-303. ISSN 2278–179X.
- Kumar M, Prakash V (2020) A Review on Solid Waste: Its Impact on Air and Water Quality. Journal of Pollution Effect and Control, vol. 8(4) No. 252 :1-3. doi:10.35248/2375-4397.20.8.252 impact factor 0.48, ISSN:2375-4397.
- 12.Kumar M (2022) A review on some ethnobotanical important trees of district Sonebhadra, Uttar Pradesh, Journal of Medicinal Plant Studies 10 (6), 95-98, P-ISSN: 2394-0530, E-ISSN: 2320-3862

#### Abstract / Symposium/ Seminar/Workshop

- 1. M. K. Tripathi, A. P. Singh, M. Kumar and R. K. Asthana (2009). Cyanobacteria as a natural source of antimicrobial substances. In: National Symposium on "Phycology in India: Basic to Applied (PIBA 2009)", February 12-13, 2009, Punjabi University, Patiala, Punjab, India.
- Manoj K. Tripathi, A. P. Singh, Arunima Srivastava, Maheep Kumar & R. K. Asthana (2009). Hap-T targeting in *Escherichia coli* DH5α. In: National Symposium on "Current Challenges in Plant Sciences: Gene to Ecosystem". March 24-25, 2009, Centre of Advanced Study in Botany, BHU, Varanasi, India.

- **3.** Maheep Kumar and R. K. Asthana (2009). A marine cyanobacterium (*Lyngbya aestuarii*) as a source of antimicrobial agent. In: National Symposium on "Emerging Paradigms in Biochemical Engineering (EPBE-09)". October 9-10, 2009, School of Biochemical Engineering Institute of Technology, BHU, Varanasi, UP, India.
- 4. Maheep Kumar and R. K. Asthana (2009). Niche Specific *Lyngbya* sp. as a Potent Source of Antibacterial Molecule. In: International symposium "7<sup>th</sup> Asia-Pacific Conference on Algal Biotechnology". December 1-4, 2009, University of Delhi, New Delhi- India.
- 5. Maheep Kumar and R. K. Asthana (2010). Antimicrobial activity of exo and endo-metabolites of marine cyanobacterium, Lyngbya aestuarii. In: International symposium on Phycological Research. February 25-27, 2010, Centre of Advanced Study in Botany, BHU, Varanasi, India.
- "DBT sponsored (Govt. of India, New Delhi), NATIONAL WORKSHOP CUM HANDS ON TRAINING PROGRAM ON "Phylogenetic Analysis: Techniques and Tools" (Under BTISnettraining Program), on March 12-18, 2011 at Department of Biotechnology, Sant Gadge Baba Amravati University, Amravati, Maharashtra, India..
- 7. Maheep Kumar, Manoj Kumar Tripathi, Akankasha Srivastava and R. K. Asthana (2011). Antimicrobial activity of exo and endo-metabolites of a niche specific cyanobacterium, *Lyngba aestuarii*. In: International conference on Microorganisms in Environmental management and Biotechnology, July 1-3, 2011, Department of Biotechnology and Bioinformatics centre Barkatullah University, Bhopal, MP, India.
- 8. Maheep Kumar, Akanksha Srivastava, Manoj Kumar Tripathi and R. K. Asthana (2013), Antimicrobial activities of *Lyngbya aestuarii* and *Aphanothece bullosa*, In National symposium on Current Status and new horizons of ecological science and environmental biotechnology (ESEB), March 1-3, 2013, Centre of Advanced Study in Botany, BHU, Varanasi, India.
- **9.** Maheep Kumar (2014) participation in one day colloquium on Recent advances in plant science (RNAi) (National seminar 8<sup>th</sup> Feb, 2014), Department of Botany, Guru Ghasidas University, Bilaspur, Chhattisgarh, India.
- Maheep Kumar (2014) participation in one day national workshop on molecular updates in biological sciences (National seminar 25<sup>th</sup> January 2014), Department of Zoology, Guru Ghasidas University, Bilaspur, Chhattisgarh, India.
- 11. Maheep Kumar and Vijay Prakash (2018), Paper presentation on "Solid waste and its impact on air and water quality", In National seminar on Environmental issues and challenges in India (4-5<sup>th</sup> February, 2018), by Department of Higher Education Uttar Pradesh, organized by Ramabai Mahila post graduate college, Akabarpur, Ambedkar nagar, UP, India.
- 12. Maheep Kumar (2022) paper presentation on "Ethanomedicinal important plants of Sonebhadra region" in NCBDES-2022, National Seminar on Biological Diversity & Environmental sustainability (25-26<sup>th</sup> March 2022) organized by Department of Botany, K. N. Govt. P. G. College, Gyanpur, Bhadohi, Uttar Pradesh, India.
- **13. Maheep Kumar** (2023) Participated in Two day **National Seminar** (**20- 21 Jan. 2023**) on :Higher Education in India: Approaches, Innovations and Quality Concerns" at 25<sup>th</sup> Annual

Covention of Uttar Pradesh Government College Academic Society, organized by Netaji Subhash Chandra Bose Govt. Girls PG College, Aliganj, Lucknow, UP, Inida.

- **14. Maheep Kumar** (2023) paper presented on "G20 and Climate Change" in **National Seminar** "Satat Vikas ke lakshya aur chunautiya" (02 Feb 2023) organized by Pt. Deen Dayal Upadhyay Rajkiya Balika Mahavidyalaya, Sevapuri, Varanasi, UP, India.
- **15. Maheep Kumar** (2023) paper presented on "Climate Change and G 20" in **International Seminar** on the "Prospects for Sustainable global growth and Indian leadership at G20" (03 March 2023) organized by Govt. P.G. College, Obra, Sonebhadra, UP, India.
- **16. Maheep Kumar** (2023) paper presented on "Digital technology in Science Education" in **International Seminar** on **Online Teaching and Higher Education** organized by Department of Political Science, Government Girls P.G. College, Bindki, Fatehpur, UP, India.

#### Book

- 1. **Maheep Kumar** (2018) Diterpenoid like compound ISBN-10 : 3639710886, ISBN-13 : 978-3639710885, Publisher : Scholars' Press (March 22, 2018), Paperback : 56 pages.
- 2. Madhushri Das Datta, Jay B. Pandya, Sagar K. Jadav and Maheep Kumar (2023)

Physiology and Metabolism: Fundamental and Principles, publisher- AGPH Books (Academic Guru Publishing House) Bhopal, M. P. India, ISBN-9788119152-056.

#### **Induction and Refresher Programme**

- 1. Maheep Kumar (2022) Completed Refresher Programme Online on the topic "Environment and Human Health" at Teaching Learning Centre and Department of Environmental Studies, Ramanujan College, University of Delhi, India.
- 2. Maheep Kumar (2023) Completed Induction/ Orientation Programme for "Faculty in Universities/ College/ Institutes of Higher Education" from 22 June- 21 July 2023,

#### Members in academic society

1. Member of Rajkiya Mahavidyalaya academic society since 07.12.2021

# **Techniques learnt**

- Spectroscopy: Ultraviolet spectrum (UV), Nuclear Magnetic Resonance (NMR), Infrared spectroscopy (IR), Liquid Chromatogrphy and Mass Spectrometry (LC MS/MS).
- Molecular Biology: Nucleic acid–Isolation, Purification and Estimation, Protein– Isolation, purification and Estimation, Electrophoresis – Agarose, SDS PAGE, 2D Gel, PCR Technique.

- Microbiological Technique: Sterilization technique, preparation of media. Bioassy methods (agar well diffusion test, disk diffusion test etc). Isolation of cyanobacteria and bacteria from it's natural habitat. Maintenance of Pure Culture, Identification and Characterization of cyanobacteria.
- Biomedical analysis: Isolation of secondary metabolites, organic and aqueous extraction, lyophilization, rotary evaporator extraction, Amberlite XAD extraction, Soxhlet extraction.

## Experience

## **Research-**

- (1) 1<sup>st</sup> July 2008 to 30<sup>th</sup> June 2014 as Ph. D. student in Banaras Hindu University, Varanasi.
- (2) from Dec. 2014 to January 2018 as research staff at Varanasi Bioresearch pvt.ltd.

## **Teaching-**

- (1) 9<sup>th</sup> July 2013 to 15<sup>th</sup> May 2014- Joined as Assistant Professor (Ad-hoc) (Botany) in Guru Ghasidas Vishwavidyalaya, Bilaspur, Chattisgarh, pin code 495009, India. (1 year)
- (2) 8<sup>th</sup> August 2014 to January 2015- joined as assistant professor (Ad-hoc) Botany in Sudhakar Mahila PG college, Varanasi-221001, India.(5 months)
- (3) February 2015 to February 2021 joined as assistant professor (approved) in Shrivishwanath pg college, sultanpur. (+5 years).
- (4) On 4<sup>th</sup> August 2021 joined as Assistant Professor (Botany) (Permanent) in Government Post Graduate College, Obra, Sonbhadra.

#### **Other activities**

- Programme Officer in National Service Scheme of Government Post Graduate College, Obra, Sonebhadra affiliated to Mahatma Gandhi Kashi Vidyapeeth, Varanasi since 07.10.2021
- 2. SC-ST Scholarship In Charge in Government Post Graduate College, Obra, Sonebhadra, since 29.10.2021

## **Personal Profile**

Date Of Birth-	5 <sup>th</sup> July 1984
Father's Name-	Late Sriwan Ram
Mother's Name-	Late Bageshwari Devi
Marital status-	Married
Wife's Name-	Mrs. Chanchala Kumari
Children-	Two (Tejas Kumar Ravi and Vivek Kumar Ravi)
Languages Known-	English, Hindi
Hobbies-	Drawing and Painting
Permanent Address-	Village- Kurhkala,
	Post- Mughalsarai,
	District- Chandauli,
	State- Uttar Pradesh
	<b>Pin Code-</b> 232101
	(India)

## Declaration

I hereby declare that all the information provided by me in this application is factual and correct to the best of my knowledge and belief.

Date : Jan. 2024

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Place: Obra, Sonbhadra

(Maheep Kumar)