

CURRICULUM VITAE

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Present Post and Address for Correspondence : Lecturer (SFS), Department of Biotechnology
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Date of Birth : 14 October, 1983

ACADEMIC QUALIFICATIONS :

Class/ Degree	Year	Division	Board/ University
High School	1998	II	U.P. Board, Allahabad
Intermediate	2001	II	U.P. Board, Allahabad
B.Sc.	2004	II	C.C.S. University, Meerut
M.Sc. (Ind. Biotech.)	2006	I	C.C.S. University (Campus), Meerut
M.Phil. (Biotech.)	2008	I	V.M. University, Tamilnadu
M.Sc. Botany	2010	I	V.M. University, Tamilnadu
*Ph.D. (Ind. Biotech.)	2012		C.C.S. University (Campus), Meerut

*As per UGC Regulation 2009 & 2016.

Topic of Ph.D. Thesis: "STUDIES ON CERTAIN BIOTECHNOLOGICAL ASPECTS OF MICROBE-METAL INTERACTIONS"

Topic of M.Sc. (Ind. Biotech.) Project: "STUDIES ON ANTIMICROBIAL ACTIVITY OF *LANTANA INDICA* ROXB."

Topic of M.Phil. (Biotech.) Project: "INFLUENCE OF ZINC ON ADSORPTION OF BASIC FUCHSIN BY *RHIZOPUS NIGRICANS*"

Topic of M.Sc. (Botany) Project: "STUDIES ON CERTAIN MEDICINAL PLANTS OF DISTRICT SAHARANPUR AND ADJACENT AREA"

ACADEMIC AWARDS:

- (1) Awarded "**Third Prize**" in poster presentation in National Seminar on "**Modern Trends in Plant and Environmental Sciences**" at Department of Botany, DN (PG) College, Meerut from Jan. 30-31, 2010.
- (2) Awarded "**Young Scientist Associate Award**" in National Conference on "**Emerging Problems and Recent Advances in Applied Sciences: Basic to molecular Approaches**", by

- Society for Scientific Development in Agriculture and Technology for outstanding contribution in the field of Industrial Biotechnology, Meerut from Feb. 8-9, 2014.
- (3) Awarded “**Young Scientist Award**” in National Conference on “*Global Research Initiatives for Sustainable Agriculture and Allied Sciences*”, by Society for Scientific Development in Agriculture and Technology for outstanding contribution in the field of Industrial Biotechnology at RVSKVV, Gwalior (MP) from Dec. 12-13, 2015.
 - (4) Awarded “**Scientific Initiator Award**” in International Conference on “*Global Initiatives in Applied Sciences and Green Technologies*”, by Scientific Educational Research Society for outstanding contribution in the field of Nano-Biotechnology at SRM University, Modinagar (UP) from Sep. 09-11, 2016.
 - (5) Awarded “**Young Scientist Award**” in National Conference on “*Innovative and Current Advances in Agriculture and Allied Sciences*”, by Society for Scientific Development in Agriculture and Technology for outstanding contribution in the field of Nano-Biotechnology at PJTSAU, Hyderabad (Telangana) from Dec. 10-11, 2016.
 - (6) Awarded “**Excellence in Research Award**” in National Conference on “*Global Research Initiatives for Sustainable Agriculture and Allied Sciences*”, by Astha Foundation for outstanding contribution in the field of Nano-Biotechnology at MPUAT, Udaipur (Rajasthan) from Dec. 02-05, 2017.

MEMBERSHIP OF SCIENTIFIC BODIES/ TEAMS:

- (1) **Laboratory Training In-charge at BASE Association, Meerut (July 2010-August-2017).**
- (2) **Member of Editorial Board** (since 2013) of “**Progressive Research- an International Journal**”.
- (3) **Member of Editorial Board** (since 2013) of Research Journal “**Frontiers in Crop Sciences**”.
- (4) **Editor-in-Chief** of Research Journal “**International Journal of Applied and Current Research**”.
- (5) **Member of Expert Team in “Annual Bird Census” at Harike Wildlife Sanctuary, Panjab** on Feb. 23-24, 2013.
- (6) **Member of Organizing Committee (Joint Coordinator) of International Conference on “Global IPR System and WTO Issues (GIPRS-2013)”**, Intellectual Property Cell, CCS University, Meerut from Nov. 16-17, 2013.
- (6) Organized a two days workshop “**Applications of basic laboratory tools in biosciences**”, at Department of Biotechnology, C.C.S. University, Meerut, from May 18-19, 2015.

M.PHIL. AND M.SC. PROJECT GUIDED:

5 M.Phil and 80 M.Sc. Projects (July 2010 to June 2022)

BOOKS PUBLISHED:

- (1) **Advances in Life Sciences** (2017). S.R. Scientific Publications, Agra. (ISBN:- 978-9383774-289)
- (2) **Beverages Technology** (2020). Random Publications, New Delhi. (ISBN:- 978-93-5269-540-9)
- (3) **Food Microstructure and Texture** (2020). Random Publications, New Delhi. (ISBN:- 978-93-5269-541-6)
- (4) **Clinical Microbiology** (2020). Book Enclave, Jaipur. (ISBN:- 978-81-8152-529-1)
- (5) **Fundamentals of Ecology and Environmental Science** (2021). Pratham Publications, New Delhi. (ISBN:- 978-93-80742-19-1)

RESEARCH PUBLICATIONS:

- (1) Kumar, A. and **P. Kumar** (2005-2008). Effect of some nitrogenous fertilizers on bacteroidal and cortical area of pea nodules. *Acta Bot. Ind.* **33-36**: 87-88.
- (2) **Kumar, P.** and M.U. Charaya (2011). Antimicrobial activity of *Lantana camara* L. *Acta Bot. Ind.* **39**: 17-21.
- (3) **Kumar, P.** and M.U. Charaya (2012). Effect of treatment of lead sulphate on soil mycobiota. *J. Plant Dev. Sci.* **4**: 89-94.
- (4) Singh, J., **Kumar, P.**, Kumar, V. and M.U. Charaya (2012). Quorum quenching for the management of dental plaque microbes. *Inter. J. Mole. Clin. Microbiol.* **2**: 180-184.
- (5) Tanwar, A., Aggarwal, A., Charaya, M.U. and **P. Kumar** (2013). Enhancement of lead uptake by Fenugreek using EDTA and *Glomus mosseae*. *Comm. Soil Sci. Plant Anal.* **44**: 3431-3443.
- (6) Tyagi, S., **Kumar, P.**, Tyagi, A. Kumari, N. and Y. Kumar (2013). Evaluation of microbial quality of khoa and channa based sweet samples sold in Western Delhi. *Prog. Res. Int. J.* **8**: 839-843.
- (7) Singh, M., **Kumar, P.**, Kumar, P. and H. Singh (2013). Effect of sulphur dioxide on the growth and yield of *Helianthus annuus* L. *Prog. Res. Int. J.* **8**: 878-881.
- (8) Singh, S., **Kumar, P.**, Tyagi, A. and M.U. Charaya (2013). Biosorption of iron from its aqueous solutions by hyphomycetous fungi. *Prog. Res. Inter. J.* **8**: 886-889.
- (9) Bhargava, R. and **P. Kumar** (2014). Prasad-loving Drongos! *Hornbill* **30**: 30-31.
- (10) Gupta, P., Pooja, **Kumar, P.** and N. Singh (2015). Adsorption of copper metal by living *Aspergillus niger* L. biomass. *Int. J. Environ. Sci.* **5**(6): 1122-1133.
- (11) Tanwar, A. Aggarwal, A., Charaya, M.U. and **P. Kumar** (2015). Cadmium remediation by arbuscular mycorrhizal fungus–colonized celery plants supplemented with ethylene diamine tetra acetic acid. *Bioremed. J.* **19**(3): 188-200.
- (12) Kumari, N., Sharma, P., Sharma, N. and **P. Kumar** (2017). Antagonistic activity of *Bacillus* strain against fungal pathogens. *Inter. J. Appl. Curr. Res.* **1**(1): 11-18.
- (13) Pooja, Gupta, P., Kumari, N. and **P. Kumar** (2017). Biosorption of textile dye effluents using living *Aspergillus niger* van Teigham. *Inter. J. Appl. Curr. Res.* **1**(1): 19-32.
- (14) Kumari, N., Tewari, A. and P. Kumar (2017). Effects of different doses of dead fungal biomass of *Aspergillus niger* and *Humicola grisea* on the biosorption of basic fuchsin dye. *Progressive Res. Int. J.* **12** (3): 276-282.
- (15) Sunil Kumar, A.S. Ahluwalia and Pradip Kumar (2017). Adsorption of textile dye effluents through *Chara* species. *J. Sci. Engg.* **59**(2): 327-332.
- (16) Kumari, N., Yadav, B.L. and **P. Kumar** (2018). Fungal biosorption: an innovative treatment method for the removal of textile dyes. *Res. Rev. J. of Life Sci.* **8**(2): 82-89.
- (17) Kumari, N., Yadav, B.L. and **P. Kumar** (2018). Equilibrium Studies on Sorption of Basic Fuchsin Dye Using Living Biomass of *Aspergillus niger* and *Humicola grisea*. *BioSci. Res. Bull.* **34**(1): 19-26.
- (18) Kumari, N., Yadav, B.L. and **P. Kumar** (2018). Fungal biosorption: an innovative treatment method for the removal of textile dyes. *Prog. Res. Inter. J.* **8**: 9.
- (19) Sharma, A. and **Kumar, P.** (2019). Biodecolorization of Textile Dye Effluent by Biosorption on Plant Biomass and Equilibrium Modelling. *Research & Reviews: A Journal of Life Sciences.* **9**(1): 15-25.

OTHER PUBLICATIONS:

- (19) Tyagi, A., Bhati, H.P., Kumar, A., Kumar, P., Malik, S, Kumari, N., Pooja and **P. Kumar** (2014). Mycosorption: a solution to water pollution. In: “*Souvenir & Conference Book of National Conference on Emerging Problems and Recent Advances in Applied Sciences: Basic to Molecular Approaches (EPRAAS-2014)*”, Progressive Publication, Jhansi, India, pp: 118-120.
- (20) Kumari, N., Pooja, Kumar, P., Bhati, H.P., Tyagi, A., Malik, S. and **P. Kumar** (2014). Development of resistance against antibiotics in microbes. In: “*Souvenir & Conference Book of National Conference on Emerging Problems and Recent Advances in Applied Sciences: Basic to Molecular Approaches (EPRAAS-2014)*”, Progressive Publication, Jhansi, India, pp: 121-124.
- (21) Pooja, **Kumar, P.**, Bahuguna, D. and S.P. Singh (2013). Nanofertilizers: a revolution in fertilizers. In: “*Souvenir & Conference Book of National Conference on Emerging Problems and Recent Advances in Applied Sciences: Basic to Molecular Approaches (EPRAAS-2014)*”, Progressive Publication, Jhansi, India, pp: 125-127.
- (22) Kumar, A., Bhati, H.P., Tyagi, A. and **P. Kumar** (2013). Next-generation RNA-sequencing: an advance approach in transcriptomics. In: “*Souvenir & Conference Book of National Conference on Emerging Problems and Recent Advances in Applied Sciences: Basic to Molecular Approaches (EPRAAS-2014)*”, Progressive Publication, Jhansi, India, pp: 128-133.
- (23) Bahuguna, D.K., Kumar, R., Gaurav, S.S., **Kumar, P.**, Kumar, N. and A. Bansal (2014). Potential capacity for supporting grain filling from stem reserves. In: “*Souvenir & Conference Book of National Conference on Emerging Problems and Recent Advances in Applied Sciences: Basic to Molecular Approaches (EPRAAS-2014)*”, Progressive Publication, Jhansi, India, pp: 136-137.
- (24) Kumar, A., Sharma, P., Tyagi, N. **Kumar, P.**, Bansal, A. and S.S. Gaurav (2014). Nanotechnology and its role in crop improvement. In: “*Souvenir & Conference Book of National Conference on Emerging Problems and Recent Advances in Applied Sciences: Basic to Molecular Approaches (EPRAAS-2014)*”, Progressive Publication, Jhansi, India, pp: 138-142.
- (25) **Kumar, P.**, Dandsena, N. and S.S. Gaurav (2014). Quantum dots and their applications. In: “*Souvenir & Conference Book of National Conference on Emerging Problems and Recent Advances in Applied Sciences: Basic to Molecular Approaches (EPRAAS-2014)*”, Progressive Publication, Jhansi, India, pp: 143-145.

DEVELOPMENT OF SCIENTIFIC & OTHER FILMS:

- (1) Developed and submitted scientific film “**Bird’s Call**” to **7th National Film Festival-2017** held at Kolkata (14-18 February, 2017), Organized by **Vigyan Prasar, Department of Science & Technology**, New Delhi.
- (2) Developed and submitted scientific film “**The Man Who Cannot Die**” to **7th National Film Festival-2017** held at Kolkata (14-18 February, 2017), Organized by **Vigyan Prasar, Department of Science & Technology**, New Delhi.
- (3) Developed and submitted scientific film “**Magical Weeds**” to **7th National Film Festival-2017** held at Kolkata (14-18 February, 2017), Organized by **Vigyan Prasar, Department of Science & Technology**, New Delhi.
- (4) Developed and submitted short film “**Beyond The Affliction**” to **Short Film Competition on Divyangjan Sashaktikaran 2017** by The Department of Empowerment of Persons with Disabilities (Divyangjan) (DEPwD), Ministry of Social Justice & Empowerment, Govt of India.
- (5) Developed and submitted short film “**Me and My Crutch**” to **Short Film Competition on Divyangjan Sashaktikaran 2017** by The Department of Empowerment of Persons with

Disabilities (Divyangjan) (DEPWD), Ministry of Social Justice & Empowerment, Govt of India.

- (6) Developed and submitted scientific film “**Hariman Apple- A Hope for India**” to **India International Science Festival-2017** held at Chennai (13-17 October, 2017).
- (7) Developed and submitted scientific film “**Root Stock- Revolution in Apple**” to **India International Science Festival-2017** held at Chennai (13-17 October, 2017).
- (8) Developed and submitted scientific film “**Pahal- Dream of Clean India**” to **India International Science Festival-2017** held at Chennai (13-17 October, 2017).
- (9) Developed and submitted scientific film “**NCD Stroke- Lets Fight Together**” to **Delhi Film Festival, 2018**.
- (10) Developed and submitted scientific film “**Plum- Remedy for Cancer**” to **India International Friendship Festival, New Delhi, 2018**.
- (11) Developed and submitted scientific film “**The soul freedom**” to **8th National Film Festival-2018** held at Guwahati (20-24 February, 2018), Organized by **Vigyan Prasar, Department of Science & Technology, New Delhi**.
- (12) Developed and submitted scientific film “**Crain- the Bird of Mythology and Symbolism**” to **8th National Film Festival-2018** held at Guwahati (20-24 February, 2018), Organized by **Vigyan Prasar, Department of Science & Technology, New Delhi**.
- (13) Developed and submitted scientific film “**Naza Naza- Indian Cobra**” to **8th National Film Festival-2018** held at Guwahati (20-24 February, 2018), Organized by **Vigyan Prasar, Department of Science & Technology, New Delhi**.
- (14) Developed and submitted scientific film “**The Plant’s Gnomon**” to **9th National Film Festival-2019**, scheduled to be held at Mohali (27-31 January, 2019), Organized by **Vigyan Prasar, Department of Science & Technology, New Delhi**.
- (15) Developed and submitted scientific film “**Astha- The Face of Solace**” to **9th National Film Festival-2019**, scheduled to be held at Mohali (27-31 January, 2019), Organized by **Vigyan Prasar, Department of Science & Technology, New Delhi**.
- (16) Developed a film on History, Achievements, Present status and Future Goals of “**Ch. Charan Singh University, Meerut**”, Uttar Pradesh, India.
- (17) Developed scientific film “**Beyond Newton**” for National & International Science Film Festivals (Under Post Production).

RESEARCH FIELDS OF INTEREST: (1) Microbial Nanotechnology (2) Biosorption Technology
(3) Microbial Fermentation (4) Rhizosphere Technology

TEACHING EXPERIENCE:

1. Two-sessions (2006-2008) teaching experience as guest faculty for B.Sc. Biotechnology and Microbiology in BCMT, Meerut.
2. Four semester (2008-2010) experience in M.Sc. Industrial Biotechnology, Department of Botany, C.C.S. University, Meerut.
3. Two semester (2010-2011) experience in M.Sc. Biochemistry, Department of Chemistry, C.C.S. University, Meerut.
4. Four sessions (2013-2017) experience in Seed Science & Technology (M.Sc.), C.C.S. University, Meerut.
4. **Presently Working** (since 2011) in Department of Biotechnology (M.Sc.), C.C.S. University, Meerut.

WORKSHOP ATTENDED:

- (1) Workshop on “**Recombinant DNA Technology**” at Center Facility for Biotechnology Teaching and Research, Madurai (Tamilnadu) from May 21-31, 2007.

- (2) Workshop on “**Immunotechnology**” at College of Applied Education and Health Sciences, Meerut on Dec. 1, 2007.
- (3) Workshop on “*Novel and Innovative Biochemical and Molecular Tools for Characterization of Agriculturally Important Microorganisms*” at NBAIM, Kusmaur, Mau Nath Bhanjan from Jan. 12 to Feb. 01, 2009.
- (4) Workshop on “*Techniques for In Vitro Pharming and Characterization of Secondary Metabolites for Sustenance of Medicinal Plants*” at Department of Botany, C.C.S. University, Meerut, from March 7-12, 2011.
- (5) Seminar cum Workshop on “*Bioresource Conservation and Utilization*” at Department of Botany, C.C.S. University, Meerut from March 27-29, 2009.
- (6) Workshop on “**Biotechnology & Bioinformatics**” at College of Applied Education and Health Sciences, Meerut on Nov. 21-22, 2011.
- (7) Workshop on “*Innovations in Microbial Interventions Targeting Remediation of Toxic Contaminants*” at Centre for Rural development & Technology, IIT Delhi on November 30, 2012.
- (8) Workshop with hands-on-training on “*Use of Bioinformatics in Crop Biotechnology*” at Bioinformatics Infrastructure Facility (BIF), Department of Genetics & Plant Breeding, C.C.S. University, Meerut, from Jan. 6-8, 2014.
- (9) Workshop on Scientific Films “**National Science Film Festival-2017** held at Kolkata (14-18 February, 2017).
- (10) Workshop on Scientific Films “**India International Science Festival-2017** held at Chennai (13-17 October, 2017).

PAPER PRESENTATION IN DIFFERENT CONFERENCES/ SEMINARS/ SYMPOSIA:

INTERNATIONAL:

- (1) International Conference on “*Perspectives in Vibrational Spectroscopy*” at Department of Physics, Meerut College, Meerut, from Feb. 25-28, 2006. (**Presented a Paper entitled: Feasibility of Spectroscopy in the Utility of Microbes**).
- (2) International Conference on “*Global IPR System and WTO Issues (GIPRS-2013)*” at Intellectual Property Cell, C.C.S. University, Meerut, from Nov. 16-17, 2013. (**Oral Presentation on paper entitled: Global scenario of farmers and plant breeders’ rights**).
- (3) International Conference on “*Global Initiatives in Applied Sciences and Green Technologies (GiAgT-2016)*” at SRM University, Modinagar (Ghaziabad), from Nov. 09-11, 2016.

NATIONAL:

- (4) National Symposium on “*Biology in the Service of Mankind in Post Genomic Era*” at Department of Botany, R.G. (P.G.) College, Meerut on Nov. 18, 2005. (**Presented a paper entitled: Comparative Assessment of DNA Isolation Protocols for Medicinal Plants**).
- (5) National Seminar on “*New Strides in Microbiology, Biochemistry, Biotechnology and Agriculture Science*” at Doon (PG) Paramedical College and Hospital and Doon (PG)

- College of Agriculture Science and Technology, Dehradun from Feb. 3-4, 2007. (**Presented a paper entitled: Antimicrobial Activity of *Lantana indica* Roxb.**).
- (6) National Symposium on “*Environment and Sustainable Development*” at Department of Botany, Meerut College, Meerut on 14 Nov., 2008. (**Presented a paper entitled: Influence of Zn on adsorption of Basic Fuchsin by *Rhizopus nigricans*.**).
- (7) National Symposium on “*Achieving Millennium Development Goals: Problems and Prospects*” at Society for Scientific Development in Agriculture & Technology, Jhansi (U.P.) India, from Oct. 25-26, 2009. (**Presented a paper entitled: Biosynthesis of nanoparticles from soil fungi**).
- (8) Open House Ceremony “**I² Tech**” at IIT, Delhi on April 24, 2010. (**Presented a paper entitled: Different aspects of Biosorption Technology**).
- (10) National Conference on “*Emerging Problems and Recent Advances in Applied Sciences: Basic to molecular Approaches*” at Society for Scientific Development in Agriculture and Technology, Meerut from Feb. 8-9, 2014. (**Presented a paper entitled: Nanotechnology and its role in crop improvement**).

OTHER ATTENDED CONFERENCES/ SEMINARS/ SYMPOSIA:

- (11) National Seminar on “*Recent Advances in Bio-Sciences*”, Science Faculty, G.V.M. Girls College, Sonapat, Haryana from Feb. 10-11, 2006.
- (12) National Conference on “*Recent Advances in Applied Zoology*”, Department of Zoology, C.C.S University, Campus, Meerut from March 24-25, 2006.
- (13) National Symposium on “*Integrated Disease Management of Plants in Service of Mankind*”, Department of Botany, J.V. College, Baraut (Baghpat) on Jan. 28, 2007.
- (14) Annual Biotech Fest “*Surya-2008*”, ITS Paramedical College, Muradnagar, Feb. 29 and March 1, 2008.
- (15) National Seminar on “*Emerging Trends in Biotechnology, Microbiology and Physiotherapy*”, IIMT College of Medical Sciences, Meerut on March 14, 2010.
- (16) National Symposium on “*Modern Approaches and Innovations in Biotechnology*” at College of Applied Education and Health Sciences, Meerut, from Nov. 14-15, 2010.
- (17) National Seminar on “*Role of Ion Beam in Materials Science and Acquaintance Programme on Ion Beam Facilities at IUAC, New Delhi*” at Department of Physics, C.C.S. University, Meerut on Sep. 20, 2013.

TECHNIQUES KNOWN/INSTRUMENTS HANDLED:

Isolation, Cultivation & Purification of Microbes	Microbial Assays
Sterilization and Incubation Techniques including LAF and BOD incubator	Quorum Sensing/ Quenching Techniques
Autoclave	Centrifugation
Protein Estimation	UV/Vis Spectrophotometry
Carbohydrate Estimation	Gel Electrophoresis
DNA Isolation	ELISA Techniques

Plant tissue culture techniques
Column Chromatography
FT-IR Spectrophotometer
Biosynthesis of Metal Nanoparticles
Biosorption Technology
Microbial Fermentation
Hot Air Oven
PCR
HPLC

Paper/Thin Layer Chromatography
Atomic Absorption Spectrophotometer
Image Analyzer
Characterization of Nanoparticles
Rhizosphere Technology
Antimicrobial Activity of Microbes
pH Meter
Lyophilizer
Gel Doc

EXTRA CURRICULAR ACTIVITIES:

- (1) III position (**Bronze Medal**) in Interstate Karate Championship, Shimla (H.P.), Aug. 11-12, 2001.
- (2) **“Runner Champion”** in Annual Sports Championship, G.M.V College, Rampur Maniharan held on Dec. 22-23, 2002.
- (3) Attended **“Inter Group Competition Camp”** at Lucknow from Nov. 8-19, 2002.
- (4) Attended **“National Integration Camp”** at Nagrota (Jammu) from Nov. 20 - Dec. 1, 2013.
- (5) NCC **‘B’** and **‘C’** Certificate with **‘A’ Grade**.
- (6) **Treasurer Student Union** (2005-2006), C.C.S University (Campus), Meerut.

Languages Known : Hindi and English
Computer Literacy : Basic Knowledge of Computer including MS Word, MS Excel, MS Powerpoint and Internet etc.
Hobbies : Athletics, Lab Work, Reading Magazines, Social Service
Objective : To built a strong career in my field of interest using my capabilities, creativity and commitment so as to develop worthwhile products/techniques/technology
Strengths : Excellent team leader with team building capability, creativity, sincerity, good judgment, determination, self development, flexibility, commitment, loyalty, Good motivator and disciplined.

Place: Meerut
Date:

(PRADIP KUMAR)