



# Shivaji College Faculty Details Proforma

Title	DR.	First Name	KIRAN	Last Name	BAMEL	Photograph
Designation		Assistant Pro				
Address		Department of Shivaji Collegeration Raja Garden				
Office Phone No.		011-2511664				
Residence		011-2705892				
Mobile						
Email		kbamel@yah				
Web-Pa	ge.					
Education Qualific	onal					
Degree	utions		University/	Institute		Year
Ph.D.			University of D		ni*	2003
M.Phil./	M.Tech.		-			
PG		MDU, Rohtak, Haryana**				1997
UG		MDU, Rohtak, Haryana				1994
Any Other Qualification		MDU, Rohtak, Haryana				1995
*		CSIR fellowship (JRF: 1998-2000; SRF: 2001-2003) Gold-Medalist				
Career I	Profile	•				

2007- onwards: Assistant Professor in Department of Botany, Shivaji College, DU, Delhi

2006-2007: Department of Botany (Guest Lecturer), Lady Irwin College, University of

Delhi, Delhi, India

2003-2006: Department of Botany (Contract Lecturer), MDU, Rohtak, Haryana

# Administrative Assignments

Teacher-in-charge, Department of Botany, Shivaji College for the session April 1, 2019 - April

30, 2020 (CCL: 13th Jan 2020 -25th Feb, 2020)

# Admission In-charge

B.Sc. (Hons) Botany- July' 2019

B.Sc. (P) Life sciences- July' 2018

# IQAC member

From session 2014- 15 to 2019-20

## Areas of Interest/Specialisation

Physiology and Biochemistry of Plant Growth & Development

Plant Tissue Culture

# Subjects Taught

## At post-graduate level (M. Sc. Botany):

Plant Biotechnology

Plant Systematics

Plant Resource Conservation and Utilization

## At undergraduate level (B. Sc. Hons Botany, B.Sc (P) Life Sciences):

Plant Biotechnology

Genetics

Genetics and Genomics I

Genetics and Genomics II

Molecular Biology

Plant Physiology

Plant Metabolism

**Plant Systematics** 

Plant Biochemistry and Metabolism

Analytical Techniques in Plant sciences

**Ecology** 

Environment Sciences (B. A. Prog in Annual mode)

## Innovation Project/Research Projects (Major Grants/Research Collaboration)

#### INNOVATION PROJECT, 2014-15, code: SH 204 (Completed)

Water Harvesting Techniques for Development in Nagaur District, Rajasthan

#### INNOVATION PROJECT, 2015-16, code: SH 313 (Completed)

"Comparative analysis of heavy metal toxicity and pesticide contamination in vegetables collected from local sites and organic stores in Delhi"

Publications Profile (Research Papers/Books)

#### RESEARCH PAPERS

Kiran Bamel, Rajendra Gupta, and Shrish C. Gupta. 2016. Acetylcholine suppresses shoot formation and callusing in leaf explants of *in vitro* raised seedlings of tomato, *Lycopersiconesculentum* Miller varPusa Ruby. *Plant Signaling and Behaviour*.11:6,e1187355

http://dx.doi.org/10.1080/15592324.2016.1187355

Kiran Bamel, Rajendra Gupta, and Shrish C. Gupta. 2015. Nicotine promotes rooting in leaf explants of *in vitro* raised seedlings of tomato, *Lycopersiconesculentum* Miller varPusa Ruby. *International Immunopharmacology* (29): 231-234

Tejbir Singh Rana, Bharat Ratnu, Kiran Bamel. 2015. Fluoride Toxicity of Ground Water in Makrana Tehsil, Nagaur District, Rajasthan. *DU Journal of Undergraduate Research and Innovation*; 1 (2): 386-394

Kiran Bamel, Shrish C. Gupta and Rajendra Gupta. 2007. Acetylcholine induces root formation in *in vitro* cultured leaf explants of tomato, *Lycopersiconesculentum* Miller varPusa Ruby. *Life Science* (80): 2393-2396

#### **BOOK CHAPTERS**

Kiran Bamel and Rajendra Gupta. 2018. Acetylcholine as a Regulator of Differentiation and development in Tomato. In: Neurotransmitters in Plants-Perspectives and Applications, Akula Ramakrishna and Victoria V. Roschina (Eds), CRC Press, Taylor & Francis Group, ISBN 13:978-1-1385-6077-2

Kiran Bamel and Prabhavathi V. 2017. Biological control Methods and Agents. In: *Biofertilizers*, Kojo Press. ISBN. 978-81-927567-90.

Gurjeet Kaur, V. Prabhavathi, Kiran Bamel, and Maryam Sarwat. 2017. Phosphate Signaling in Plants: Biochemical and Molecular Approach. In: Stress Signaling in Plants: Genomics and Proteomics Perspective, Volume 2, Sarwat et al. (eds.), Springer International Publishing Switzerland,pp-83-110, DOI 10.1007/978-3-319-42183-4\_4

#### **REVIEW ARTICLES**

Kiran Bamel, SeemaTalwar and PamilTayal. 2016. Science and Gender: a Retrospective. Alleviation- International Journal of Nutrition, Gender and Social Development; 3(3): 7176. p-ISSN 2348-9340.

Kiran Bamel, PamilTayal and Prabhavathi V. 2016. Reproductive Biology for Conservation of Medicinal Plants. *In: Medicinal Plants*. (ISBN: 978-81-8030-474-3) Edited by Suresh Kumar, Campus Books International Publications, New Delhi, pp. 93-102

Kiran Bamel, Aeshna Nigam, Shashi Nijhawan, Priyanka, Shalu Dagar, Himanshu Dalal, Shashank and AniketWalia. 2016. Heavy Metal Toxicity Affects Male Reproductive Health. Proceedings of the National Seminar on Water and Air Quality in Urban Ecosystem, New Delhi, 22, March-2016. Pp. 1-6 ISBN:978-93-5267-493-0

Aeshna Nigam, Kiran Bamel, Shashi Nijhawan, Shivani Bharti, ShalluDogra, HimanshuDalal, Priyanka, Shashank and AniketWalia. 2016. Effect of Heavy Metals on Reproductive Health of Women: Health Alarm!. International Journal of Basic and Applied Biology, Volume 3(4): 247-251. p-ISSN:2394-5820, e-ISSN: 2349-2539

Aeshna Nigam, Kiran Bamel, Darshan Malik and Shashi Nijhawan. 2016. Heavy Metal Contamination in Vegetables: Source of Nutrition or Health Hazard? Journal of Basic and applied Engineering Research- (p-ISSN: 2350-0077; e-ISSN: 2350-0255). 3(1): 60-65

Prabhavathi V, Kiran Bamel and SeemaTalwar. 2015. Polyamines: Role in Transgenic Plants. *Contemporary Plant Sciences* (ISSN: 2393-8676), 2(1): 4-12

SeemaTalwar, PamilTayal, Sanjeev Kumar, Kiran Bamel and Prabhavathi V. 2015. Climate change: A Threat to Biodiversity. *Proceedings of the National Conference on Climate Change: Impacts, Adaptation, Mitigation Scenario and Future Challenges In Indian Perspective*, New Delhi, 2-3 March. pp. 84-93

### Conference/Seminar/Faculty Development Programme/Workshop

Participated in the International Webinar on Biodiversity and Environmental Health organised by the Department of Environmental Studies, Shivaji College, University of Delhi held on 20th May, 2020.

Attended the webinar series 'Quality Assurance in Higher Education: Practices And Issues' organized jointly with IQAC, HANSRAJ COLLEGE Under PARAMARSH, a UGC scheme for mentoring NAAC accreditation aspirant institutions to promote quality assurance in higher education May 4th - 8th, 2020

International seminar on 'Science, Environment and Spirituality' organized by ECO CLUB, Shivaji College University of Delhi, on September 13,2019.

National seminar on 'Recent Trends in Biological Research and Career Prospects' organized by Department of Biochemistry, Shivaji college, University of Delhi on September 27<sup>th</sup>, 2019.

National seminar on 'Intellectual Property Rights' organized by Shivaji College, University of Delhi on November 6<sup>th</sup> 2019.

National Conference on 'Trends in Life Sciences & Biotechnology: Innovative Paradigms' organized by Department of Botany, Maitreyi College, University of Delhi on February 19-20, 2019.

National Symposium on 'Recent Advances in Biological Sciences' organised by Department of Biochemistry, Shivaji College, University of Delhi, on 10 th April, 2019.

National Seminar on 'Recent trends of Research in Medicinal Plants and Applied Sciences' organised by Department of Botany, Ramjas College, University of Delhi on 27th March 2019.

National Workshop titled 'Emerging Pollution Challenges on Earth Ecosystem—SAFAR, India's Novel Initiative' at the Conference Centre, University of Delhi, organized by Environment Pollution Laboratory, Department of Environmental Studies, University of Delhi and sponsored by the Ministry of Earth Sciences, Government of India, on 26<sup>th</sup> March 2019.

National Symposium on Frontiers and Avenues in Plant Sciences 2011, held in Shivaji College, University of Delhi, from 20-21st January.

National Symposium on Molecular Cell Biology- CATENANES 2009, held in Shivaji College, University of Delhi, from 24th-25th November

A symposium on Molecular Biology Current Innovations and Future Trends-SYNTENY 2007, held at Shivaji College, University of Delhi, October, 26-27, 2007.

2nd International Congress of Plant Physiology on 'Sustainable Plant Productivity Under Changing Environment', 2003, held at IARI, Delhi.

6th All India Conference on Cytology and Genetics held at MDU, Rohtak, from March 8-10, 1996.

## Workshops attended:

Workshop For Empowering Teaching Through Online Mode (JNU WETOM-II) held on May 9 – 10, 2020.

Workshop For Empowering Teaching Through Online Mode (JNU WETOM-I) held on April 18 - 19, 2020.

National Seminar cum workshop on 'e-CONTENT, MOOCS (SWAYAM) and ARPIT' organized by All India Council for Technical Education (AICTE) and Guru Angad Dev Teaching Centre of MHRD, SGTB Khalsa College, University of Delhi on 31<sup>st</sup> August, 2019.

Workshop on 'Advance Excel for Teaching and Research Data Management and Data analysis' at Guru Angad Dev Teaching Centre of MHRD, SGTB Khalsa College, University of Delhi on 30<sup>th</sup> August,2019.

Workshop on '*Introductory Evolutionary Biology and Phylogenetics*' held on January 4 & 5, 2018 at Department of Botany, University of Delhi, Delhi.

Workshop on 'Microscopy for College Teachers' organized by Department of Genetics, Delhi University, South Campus on 27th March 2018.

Workshop on 'DNA Fingerprinting' at Hindu College, University of Delhi, Delhi on 22nd January, 2016.

IPR Workshop: Training the Trainers organised by Miranda House, University of Delhi, Delhi in collaboration with MHRD IPR CHAIR (TECHNICAL), University of Delhi, Delhi on 15th January 2016.

One Day 'Workshop Ankuran on Development of Herbal Garden' organised by Shivaji College, University of Delhi, Delhi, in collaboration with NMPB, Ministry of Ayush, Govt. of India, CEE, Department of Environment, Govt of NCT of Delhi on 29 th January 2015.

A Workshop on Plant Proteomics organized by Department of Botany, University of Delhi from 26-30 December, 2013.

A Workshop on Fundamentals of Bioinformatics organized by Ramjas College at ILLL, University of Delhi from 26-30 September, 2011.

A ICT Workshop for Capacity Building of Delhi University Faculty organized by ILLL in Shivaji College from 6-12 April, 2010.

A Workshop on Biology Laboratory Course for B. Sc Programme 1st year (BY-106) at Daulat Ram College, University of Delhi, September, 2008.

A Workshop on Biology Laboratory Course for B. ScProgramme 2nd year (LS-206) in Miranda House, University of Delhi, September 24-26, 2008.

A workshop on Recent techniques in DNA Isolation, Cloning, and Characterization was attended

at Central Institute of Medicinal and Aromatic Plants (CIMAP) at Lucknow in 2001. UGC-HRD SPONSORED COURSES/ FACULTY DEVELOPMENT PROGRAMMES ATTENDED:

One week Faculty Development Programme on "Open Source Tools For Research" organised by Teaching Learning Centre Ramanujan College University Of Delhi Sponsored By Ministry Of Human Resource Development Pandit Madan Mohan Malviya National Mission On Teachers And Teaching (PMMMNMTT) of MHRD from June 8 to June 14, 2020.

Two-week Faculty Development Programme on "Managing Online Classes And Co-Creating Moocs 2.0" Organised By Teaching Learning Centre Ramanujan College University Of Delhi Sponsored By Ministry Of Human Resource Development Pandit Madan Mohan Malviya National Mission On Teachers And Teaching(PMMMNMTT) of MHRD from May 18 - June 3, 2020.

Faculty Development Program: National Webinar entitled "Towards Excellence In Higher Education In India In The 21st Century Challenges And Opportunities" Organised By Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University Of Delhi, Under The Pandit Madan Mohan Malviya National Mission On Teachers And Teaching (PMMMNMTT) of MHRD held on May 1, 2020 Equivalent to a Regular National Seminar.

Faculty Development Program: National Webinar entitled "Challenges And Opportunities before Indian Higher Education Due To Covid -19" Organised By Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University Of Delhi, Under The Pandit Madan Mohan Malviya National Mission On Teachers And Teaching (PMMMNMTT) of MHRD held on May 2, 2020. Equivalent to a Regular National Seminar.

Faculty Development Program cum National Webinar entitled "e-Content Development Methodology: Four Quadrant Model, Oers And Copyright Issues" Organised By Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University Of Delhi, Under The Pandit Madan Mohan Malviya National Mission On Teachers And Teaching (PMMMNMTT) of MHRD held on May 15, 2020. Equivalent to a Regular National Seminar.

One Week Faculty Development Program on "Research Methodology and Data Analysis using SPSS/R" organized by Shivaji College, University of Delhi, in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi, from "14th- 20th November, 2019.

Faculty Development Programme on "Agriculture, Health and Society" conducted by Mahatma Hansraj Faculty Development Centre at Hansraj College, University of Delhi, from 15-16th March, 2019.

Two week Faculty Development Programme in "University functioning and Blended learning" conducted by Guru Angad Dev Teaching Learning Centre of MHRD, SGTB, Khalsa College, University of Delhi from December 8, 2018 to December 20, 2018.

One week Faculty Development Programme in "Emerging Areas of Engagement in Pedagogy & Research" organized by Shyam Lal College, University of Delhi, from November 24, 2018 to

November 30, 2018.

A UGC sponsored Refresher Course in Winter School (ID) of three weeks duration held at CPDHE, University of Delhi from 28th November - 19th December 2017.

A UGC sponsored Refresher Course in Research Methodology of three weeks duration held at CPDHE, University of Delhi from 15th June - 4th July 2015.

A UGC sponsored Orientation Programme (OR-78) of four weeks held at CPDHE, University of Delhi from 10th November -6th December 2014.

# Research Guidance (Supervision of Doctoral Thesis/Dissertations)

Nil

## Awards and Distinctions

Gold Medal in M.Sc Botany 1997

CSIR fellowship (JRF: 1998-2000; SRF: 2001-2003) Best Innovative Idea Award in Antardhwani, DU - 2015 Teaching Excellence Award for Innovation, DU - 2015

Certificate of Most Significant Societal Impact for Project SHC-313, DU – 2017

# Memberships

Life Member of DUBS

## Other Academic Activities

#### AS CONVENER:

Convenor, of a one day Workshop on "Algae and Microbiology" 2019, at Department of Botany, Shivaji College, University of Delhi in collaboration with CCUBGA, division of Microbilogy, ICAR-Indian Agricultural Reasearch Institute, New Delhi on October 1<sup>st</sup>, 2019.

Convenor, of a one day workshop on "Plant Physiology" 2019, at Department of Botany, Shivaji College, University of Delhi on 24<sup>th</sup> September.

Convenor, of a one day Seminar on "Traditional Knowledge and Recent Trends in Plant Sciences" 2019 at Department of Botany, Shivaji College, University of Delhi on 27<sup>th</sup>August.

Convenor for an Awareness Workshop cum Outreach Programme "Floristic walk" on 30<sup>th</sup> June 2019, for the children of Commonwealth Games Village to generate awareness about the local vegetation.

Convener in 'Beginners hands-on Bonsai workshop' held on November 2, 2018 organised by Garden Committee, Shivaji College, University of Delhi, Raja Garden, New Delhi – 110027.

#### AS RESOUCE PERSON:

Resource person for an Awareness Workshop cum Outreach Programme 'Floristic walk' for the children of Commonwealth Games Village to generate awareness about the local vegetation on 30<sup>th</sup> June, 2019.

Resource person, Inter College Laboratory Skill Training Programme for Assistant/Attendants in Chemical and Life Scicence Laboratories 2019 at Shivaji College, University of Delhi on 27<sup>th</sup> November to 3<sup>rd</sup> December, 2019.

Resource Person for 'Summer Training Programme on Microscopy and Herbarium Techniques' for students organized by Department of Botany, Shivaji College, University of Delhi under DBT sponsored Star College Scheme, held from June 21- July 19, 2019.

Resource person for a five day, Intra College, Laboratory Skill Training Programme For assistant /Attendants in The Chemical And Life Sciences Laboratories Under DBT, Star College Scheme of Shivaji College from May 20-24, 2019.

Resource person in INSPIRE Science Camp 2018 held from July 16-20, 2018 at Shivaji College, University of Delhi.

Resource person in the Workshop entitled "3rd Lab Skill Training Workshop for Laboratory Attendants /Assistants of Chemical and Life Sciences" under Internal Quality Assurance Cell (IQAC) from July 10-14, 2017 in Shivaji College, University of Delhi.

Resource person in the Workshop for Laboratory Attendants /Assistants in Chemical and Life Sciences organised by Shivaji College from 10-14 July, 2017.

Resource person in the INSPIRE Science Camp held at Shivaji College, University of Delhi, Delhi, 2016.

Resource person in the INSPIRE Science Camp held at Shivaji College, University of Delhi, Delhi, from 19-23 December 2015.

Resource person in a National Seminar organised by a Women Cell on Gender Sensitization: Different aspects in Present Scenario held at Govt College for Women, Hisar (KU) on 13th February, 2014.

Judge for the Annual Inter School Science Fest Accolades 2015-Innovations at Venkateshwar Global School, Delhi.

Resource person in the Workshop for Laboratory Attendants /Assistants in Chemical and Life Sciences organised by Shivaji College from 16-18 July, 2014.

Organized a 3- Day Educational Excursion with B.Sc (Hons.) and B. Sc. (P) Life Science

students, to Dehradun and Chakrata from 19-21st October, 2019.

# **ORGANIZING COMMITTEE MEMBER:**

Cultural/Extragurrigular Activities

Organized a visit of B. Sc. (Programme) Life Sciences students to Department of Microbiology and Blue Green Algae division at IARI, Delhi, 2017.

Organized a visit of B. Sc. (Hons) Botany and B. Sc. (Programme) Life Sciences students to Yamuna Biodiversity Park, Delhi, 2016.

Organized a One Day Workshop "Ankuran" on Development of Herbal Garden with other faculty members under the Eco-Club on 29th January, 2015.

Organized Visit to Tilyar Lake Resort with other faculty members, under the Eco-Club, 2014.

Organized Planet keRakhwale Take Back and Recycling Campaign in the college with other team members under the Eco-Club.

Organized visits for B. Sc. (Hons) Botany and B. Sc. (Programme) Life Sciences students to Yamuna Biodiversity Park, Delhi, 2007-2009.

Organized visits for B. Sc. (Hons) Botany 2nd year students to Seed Bank, Molecular and Biotechnology laboratories at NBPGR, Pusa Campus, Delhi from 2007-2010.

Cultural/Extraculticular Activities								

Signature of Faculty Member