



## Shivaji College Faculty Details Proforma

Title	Dr	First Name	Vijay	Last Name	Kumar	Photograph
<b>Designation</b>		Assistant Professor				
<b>Address</b>		Shivaji College (University of Delhi) Ring Road, Raja Garden New Delhi - 110027				
<b>OfficePhone No.</b>		025116644				
<b>Residence</b>		B-32, Satyawati Colony, Ashok Vihar Phase II, Delhi - 110052				
<b>Mobile</b>		09811719499				
<b>Email</b>		vijaycemde@yahoo.co.in				
<b>Web-Page</b>						
<b>Educational Qualifications</b>		M.Phil, Ph.D				
<b>Degree</b>	<b>University/Institute</b>			<b>Year</b>		
Ph.D.	University of Delhi			2004		
M.Phil./M.Tech.	University of Delhi			1996		
PG	Meerut University			1993		
UG	Meerut University			1991		
<b>Any Other Qualification</b>						
<b>Career Profile</b>						
<p><b>TEACHING EXPERIENCE: More than 13 Years</b></p> <p><b>INVOLVEMENT IN RESEARCH PROJECTS:</b></p> <ul style="list-style-type: none"> <li>• Biosystematic Studies on Selected Tree Species that Yield Non Timber Forest Products of Industrial Use</li> <li>• Rehabilitation of Bhatti Mines</li> <li>• Management of Fly ash Mound Surface Stabilization and Environmental Protection through Bio-technologies Phase II</li> </ul>						

- Development of Site Specific Restoration Technologies for Highly Degraded Ecosystems and Monitoring of Ecosystems Redevelopment Of already Rehabilitated Land
- Management of Fly ash Mound Surface Stabilization and Environmental Protection through Bio-technologies” Phase I

#### TECHNICAL REPORTS:

- Actively involved in the preparation of Technical Reports of the project entitled “*Management of Flyash Mound Surface Stabilization And Environmental Protection Through Bio-technologies*” funded by National Thermal Power Corporation’s National Capital Power Station, Dadri, India.
- Actively involved in the preparation of Technical Reports of the project entitled “*Biosystematic Studies on Selected Tree Species that Yield Non Timber Forest Products of Industrial Use*” funded by Department of Biotechnology, Govt. of India.

#### Administrative Assignments

- **Member** of Committee of Courses and Studies for Hons, Post -graduate and Research Studies in Botany, Delhi University for year 2017-2019
- Convenor, Eco club during 2018-2020
- Convenor, Eco Club during 2015 - 2017
- Convenor, Eco Club during June 2005 - April 2013
- **Teacher – In- charge** Department of Botany for 2014-2015
- **Teacher – In- charge** Department of Botany for 2008-2009
- **Convenor, Admission Committee** for BSc (H) Botany during 2014-2015
- **Convenor, Admission Committee** for BSc (P) during 2013-2014
- **Convenor, Admission Committee** for BSc (H) Botany during 2008-2009
- **Convenor, Admission Committee** for BSc (H) Botany during 2006-2007
- NSS Programme Officer during June 2005 – June 2009
- Deputy Superintendent, Examination Group B for 2005-2006
- Deputy Superintendent, Entrance Examination for BBE Admission for 2006-2007
- Election Officer, College Students’ Union Elections for 2006-2007

#### Member of Staff Council Committee:

- Member, Women Development Cell for 2019-2021
- Member, Staff Council Library Committee for 2018-2019
- Member, Staff Council Garden Committee for 2017- 2018
- Member, Staff Council Internal Assessment Committee for 2016-2018
- Member, Staff Council Garden Committee for 2014-2016
- Member, Staff Council Library Committee for 2014-2016
- Member, Staff Council Discipline Committee for 2011-2013

- Member, Staff Council Students' Advisory Committee for 2011-2013
- Member, Staff Council Library Committee for 2009-2011
- Member, Staff Council Discipline Committee for 2009-2011
- Member, Staff Council Students' Advisory Committee for 2007-2009
- Member, Staff Council Purchase Committee for 2007-2009
- Member, Staff Council Garden Committee for 2005-2007
- Member, Staff Council Sports Committee for 2005-2007

#### Areas of Interest/Specialisation

Restoration Ecology and Bioremediation, Restoration of Degraded Ecosystems, Wetland Management, Development of Vegetation Filter Strips to Control Air Pollution

#### Subjects Taught

##### Papers taught for various courses time to time

- Plant Ecology and Environment Management; Plant Ecology; Ecology
- Environmental Management; Environmental Science
- Economic Botany and Crop Improvement; Plant Resources Utilization; Economic Botany
- Plant Systematics and Evolution; Plant Systematics
- Plant Metabolism & Biochemistry; Plant Metabolism
- Plant Biotechnology
- Analytical Techniques in Plant Sciences
- Biofertilizers

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

- *Completed Project:* Innovation Project SHC-307 titled Amelioration of air quality in urban ecosystem of Delhi: role of avenue trees and use of birds as biomonitors sanctioned by University of Delhi amounting to Rs. 5,00,000/-.
- *Sanctioned Project:* Studies on Mercury Contamination of Surface and Ground Waters in and around Delhi and its Bioremediation sanctioned by University Grant Commission as MRP (ROMRP- NRCB-ENVI-2015-2016-38705) amounting to Rs. 4,25,000/-.

#### Publications Profile (*Research Papers/Books*)

- ❖ **Kumar, V., Jolli, V., & Babu, C.R.** (2019). Avenue Plantations in Delhi and Their Efficacy in Mitigating Air Pollution. *Arboricultural Journal*, 41(1), 35-47.

<https://www.tandfonline.com/doi/full/10.1080/03071375.2019.1562800>

- ❖ Editor of Abstract Book of National Seminar on Water and Air Quality in Urban Ecosystem organized by Eco Club, Shivaji College on 22 March 2016 (ISBN: 978-93-5267-174-8).
- ❖ Editor of Proceedings of National Seminar on Water and Air Quality in Urban Ecosystem organized by Eco Club, Shivaji College on 22 March 2016 (ISBN: 978-93-5267-493-0)
- ❖ Babu, C.R., Vivek Chaudhary and Kumar V (2015) Tropical Grassland Ecosystem and Climate Change. Keynote address for the Proceedings of the 23rd International Grassland Congress 2015, New Delhi: November 20-24, 2015.
- Kumar V (2015) Fibre Cotton. Institute of Life Long Learning, University of Delhi (ISSN:2349-154X).
- Kumar V (2015) Fibre Jute. Institute of Life Long Learning, University of Delhi (ISSN:2349-154X).
- Kumar V (2015) Masticatories and Fumitories. Institute of Life Long Learning, University of Delhi (ISSN:2349-154X).

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

##### Conference/ Seminar

- First WDC International Conference on Empowerment of Women in Developing World Organized by Shivaji college, University of Delhi from April 01 - 02, 2013
- Science, Spirituality and Humanity: Transcending Discipline Barriers Organized by Shivaji college, University of Delhi from February 17- 19, 2011
- International Conference on Recent trends in Developing Bioremediation Strategies for Hexachlorocyclohexane (HCH) & Other Chlorinated Contaminants Organized by University of Delhi from February 9 - 11, 2011
- National Symposia Molecular Cell Biology Organized by Shivaji college, University of Delhi from November 24 - 25, 2009
- National symposium Science of Life: The New Horizon organized by Miranda House, University of Delhi from 21th - 23rd November 2007
- Symposium on Molecular Biology Current Innovations and Future trends Organized by Shivaji college, University of Delhi from October 26- 27, 2007
- Attended 3<sup>rd</sup> International Conference on “Fly Ash Utilization and Disposal” held on 19-21 February, 2003 at New Delhi.

##### Refresher Course/ Workshop

- ❖ **3- week Refresher Course in Contemporary Issues of the World** Organized by CPDHE, Delhi University from November 27, 2018 to December 17, 2018
- ❖ **Workshop on Spiritual values and Ethics** Organized by UGC-HRDC at CPDHE, University of Delhi from March 01 to March 03, 2017

- ❖ **Workshop** on Environmental Pollution and Health in Urban Ecosystem, Department of Botany and Zoology, Shivaji College and Departmental of Environmental Studies, University of Delhi on June 23, 2016
- ❖ **3- week Refresher Course in Life Sciences** Organized by ASC, Jawaharlal Nehru University from January 13 to February 13, 2014
- ❖ **3- week Refresher Course in Environmental Studies** Organized by CPDHE, Delhi University from January 6 to January 31, 2013
- ❖ Participated in National Workshop on Ethnobotany organized by Department of Botany, Hansraj College and Institute of Life Long Learning, University of Delhi on 16-17 September, 2016.
- ❖ **Workshop** on Geometrics and Morphometrics organized by CEMDE, University of Delhi 20 to 30 March 2012
- ❖ Bioinformatics Workshop for Life Sciences Faculty organized by Bioinformatics Centre, Sri Venkateswara College from 27th to 30th July 2011
- ❖ National Workshop Evolutionary Perspectives in Modern Biological Teaching and Research organized by ILL, CSEC and ANDC, University of Delhi, from May 9 to 10, 2011
- ❖ **Workshop** on Taxonomy, Ecology and Conservation organized by CEMDE, University of Delhi from December 29 to January 7, 2010
- ❖ Participated in Workshop on “Biology Laboratory Course (Course Code : LS 306)” from October 21 – 24, 2008 at A.N.D. College organized by Institute of Life Long Learning and A.N.D College, University of Delhi, Delhi
- ❖ Participated in Workshop on “Biology Laboratory Course (Course Code :BY 106)” from September 2 – 4, 2008 at D.R. College organized by Institute of Life Long Learning and Daulat Ram College, University of Delhi, Delhi
- ❖ **Participated in a 4 – week Orientation Course** from December 28, 2006 to January 24, 2007 organised by CPDHE, University of Delhi.

#### **Research Guidance (*Supervision of Doctoral Thesis/Dissertations*)**

#### **Awards and Distinctions**

##### **Qualified Joint CSIR-UGC National Eligibility Test in Life Sciences**

#### **Memberships**

- Indian Science Congress Association (Life Member)
- The International Society of Plant Morphologists (Life Member)
- Association of Teachers in Biological Sciences (Life Member)
- Society for Ecological Research and Natural Resources Management (Life Member)

#### **Other Academic Activities**

#### **Conference/ Symposia Organized**

- ❖ **Convener**, National Seminar on Water and Air Quality in Urban Ecosystem organized by Eco Club, Shivaji College on 22 March 2016.
- ❖ **Member**, Organizing Committee for National Symposium on Frontiers and Avenues in Plant sciences organized by Department of Botany, Shivaji college, University of Delhi, from 20th to 21st January, 2011
- ❖ **Poster Presentation** on “Can we use birds as an ecological indicator of sustainable cities?” presented on National Seminar on Water and Air Quality in Urban Ecosystem organized by Eco Club, Shivaji College on 22 March 2016.

#### Resource Person

- On TLC at INSPIRE SCIENCE CAMP 2016, Department of Science & Technology (DST), Govt. of India held at Shivaji College (University of Delhi) from July 16 to 20, 2018.
- Resource Person in One day National Seminar on Environmental Sustainability and Conservation: Issues and Challenges in 21st Century on 15th November' 2017 at Satyawati College (E), University of Delhi.
- On "Collection, Preservation and Maintenance of Biological Materials in Herbarium and Museum" in Workshop held for Science Laboratory Staff at Shivaji College (University of Delhi) from July 11, 2017
- On TLC at INSPIRE SCIENCE CAMP 2016, Department of Science & Technology (DST), Govt. of India held at Shivaji College (University of Delhi) from December 14 to 18, 2016.

#### Oral Presentation

- Babu, C.R. and **Kumar, V** Paper presented on "An Integrated, Multidisciplinary and Multi institutional approach for the Management of Air Pollution in Delhi" in Networking Workshop with Academic and R&D Institutions, organized by MOEF & CC on 16<sup>th</sup> February' 2018 at Teesta Conference Hall, New Delhi.
- Babu, C.R. and **Kumar, V** Paper presented on "Vegetation Filter Strips - A Long-term Technological option in the Management of Air Pollution" in Workshop on Technologies for monitoring and abatement of air pollution, organized by MOEF & CC on 13<sup>th</sup> February' 2018 at Ganga Auditorium, New Delhi.
- Babu, C.R., Vivek Chaudhary and **Kumar V** Paper presented on “Green Highways: Problems and Prospects” in National Convention on Innovations in Green Highways organized by National Green Highways Mission and held on November 7-9, 2016.
- **Kumar V** and Jolli V. A paper on “Agroforestry: A Step Towards Sustainable Rural Development” presented in a National Conference on Accelerating Rural Growth: New Technology, Innovation and Entrepreneurship organized by Shri AatmVallabh Jain Girls (PG) College, Kota and held on September 2-3, 2016.

- C.R.Babu, Suruchi Rani Kipgen, Subhashree Subramaniam , Radhey Shyam Sharma, Arindam Bhattacharya, David. M. Kothamasi, Rajiv Janardhanan and **Vijay Kumar** (2003) Restoration Technologies in Sustainable Development. In the workshop on “*Biotechnology for Environmental Protection and Sustainable Development*” organized by MoEF and DBT, Govt of India and DoE, Govt of Canada from 5<sup>th</sup> to 6<sup>th</sup> February, 2003 at New Delhi.
- C.R.Babu, **Vijay Kumar**, Shvetank Sharma and Kallimulah (1999) Technologies for Mitigation of Environmental Hazards of Flyash. In the three day seminar on “*Integrated Approach to Development for Conserving Environment*” organized by National Capital Region Head Quarter and Corporate Environment Management from 23<sup>rd</sup> to 25<sup>th</sup> June, 1999.

#### Cultural/Extracurricular Activities

##### Convened Various Activities time to time through Eco-club:

- Eco-club's Annual Fest on March 29, 2019
- Visit to Yamuna Biodiversity Park (YBP) on Feb 2, 2019
- Activities for Green Deepawali on Nov 1, 2018
  
- Visit to Botanical Garden of Indian Republic (BGIR) on Nov 11, 2016
- Organized Lecture on 'Climate Change and India' on Nov 4, 2016
- Visit to Yamuna Biodiversity Park (YBP) on Feb 2, 2016
- Activities on "Pledge to Protect and Plant a Tree" Program on Sept 7, 2015
- Visit to Yamuna Biodiversity Park (YBP) on March 21, 2015
  
- Visit to Yamuna Biodiversity Park (YBP) on March 21, 2013
- Activities on "Pledge to Protect and Plant a Tree" Program on Sept 5, 2012
- Visit to Aravalli Biodiversity Park (ABP) on March 1, 2012
- Visit to Yamuna Biodiversity Park (YBP) on Feb 2, 2012
  
- Visit to Yamuna Biodiversity Park (YBP) on March 5, 2011
- Activities on "International Ozone Day" on September 15, 2011

##### Convened Various Activities time to time through Botany Department:

- Visit to Indian Agricultural Research Institute (IARI) on Sept 29, 2018
- Visit to Indian Agricultural Research Institute (IARI) on Sept 29, 2017
- Visit to National Bureau of Plant Genetic Resources(NBPGR) on March 16, 2011
- Organized Annual Fest: Fragrance in 2015
- Organized Annual Fest: Fragrance in 2009

Signature of Faculty Member  
(Vijay Kumar)