

# DEPARTMENT OF BOTANY DYAL SINGH COLLEGE, UNIVERSITY OF DELHI FACULTY DETAIL



Title Dr.	First Name	DINAKARAN	Last Name	J	Photograph
Designation	Assistant Profes	sor			
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Web-Page	https://scholar.google.co.in/citations?user=ZLnshYgAAAAJ&hl=en				
Educational Qualifica	ations				
Degree	Institution				Year
Ph.D.	The Maharaja S	ayajirao Universi	ty of Baroda, Va	dodara. Gujarat.	2011
M.Sc.	Ayya Nadar Jan	aki Ammal Colleg	ge, Madurai Kam	araj University.	2006
B.Sc.	Ayya Nadar Jan	aki Ammal Colleg	ge, Madurai Kam	araj University.	2004
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### Career Profile

- Working as an Assistant Professor in the Department of Botany, Dyal Singh College, University of Delhi, New Delhi from May 2023 to till date.
- Worked as an Assistant Professor (Adhoc) in the Department of Botany, Bhaskaracharya College of Applied Sciences, University of Delhi, New Delhi from 23-07-2019 to 18-05-2023.
- Worked as a UGC DSK Post Doc fellow (UGC) in the Department of Botany, University of Delhi, Delhi, from 12-04-2017 to 22-07-2019.
- Worked as a Post Doc Fellow in the Partnerships for enhanced engagement in research (PEER), USA project
  entitled "The Banni grasslands in a time of change: Ecological and socioeconomic resilience in a coupled
  human-natural system" in Ashoka Trust for Research in Ecology and the Environment (ATREE), Bangalore and
  US partner: USDA-Forest Service Institute of Pacific Islands Forestry, from 07-03-2016 to 31-03-2017.
- Worked as a DST-SERB-Young Scientist in the Department of Botany, University of Delhi, Delhi, from 01-01-2013 to 31-12-2015.
- Worked as a Guest faculty in the Department of Botany, Sri Venkateswara College, University of Delhi, Delhi, from 13-2-2012 to 30-5-2012 and 1-9-2012 to 31-10-2012.
- Senior research fellow (SRF) in DST project entitled "Carbon sequestration and sink potential of the soils of Baroda window, Gujarat", from July 2008 to march 2011, at Department of Botany, Faculty of Science, The M.S.U of Baroda, Vadodara, Gujarat, India.
- Junior research fellow (JRF) in the DST project entitled "Carbon sequestration and sink potential of the soils of Baroda window, Gujarat", from July 2006 to June 2008 at Department of Botany, Faculty of Science, The M.S.U of Baroda, Vadodara, Gujarat. India.

### Administrative Assignments (From 1st July 2019 onwards)

- Member of IQAC (Botany), Dyal Singh College, University of Delhi, New Delhi.
- Member DBT-Star College Scheme, Dyal Singh College, University of Delhi, New Delhi.
- Member of the Admission Committee for B.Sc. Life Sciences, Dyal Singh College, University of Delhi, New Delhi.
- Member, Anti Ragging Committee, Dyal Singh College, University of Delhi, New Delhi.
- Convener of the Botanical Society, Dyal Singh College, University of Delhi, New Delhi.

- Member, Environmental Club, Dyal Singh College, University of Delhi, New Delhi.
- Member, Green Audit, Sustainability Forum, Dyal Singh College, University of Delhi, New Delhi.
- Co-coordinator of the Parent Teacher Association (Department of Botany), Dyal Singh College, University of Delhi, New Delhi (up to May 2024).
- Coordinator of the Feedback collection team (Department of Botany), Dyal Singh College, University of Delhi, New Delhi (up to May 2024).
- Department coordinator of the Student Advisory Committee, Bhaskaracharya College of Applied Sciences, University of Delhi, from 2021 to 2023 (up to May 18, 2023).
- Member of the NSS committee, Bhaskaracharya College of Applied Sciences, University of Delhi, from 2021 to 2023 (up to May 18, 2023).
- Member of the Career Counselling Cell, Bhaskaracharya College of Applied Sciences, University of Delhi, from 2022 to 2023 (up to May 18, 2023).
- Member of the Annual Report Committee, Bhaskaracharya College of Applied Sciences, University of Delhi, for the year 2023 (up to May 18, 2023).
- Member of the IQAC committee (2019–2020), Bhaskaracharya College of Applied Sciences, University of Delhi, Delhi.
- Member of the placement and training cell, Bhaskaracharya College of Applied Sciences, University of Delhi, from 2019–2021.
- Member of the Proctorial and Anti Ragging Committee, Bhaskaracharya College of Applied Sciences, University of Delhi, from 2019–2021.

## Areas of Interest / Specialization

Ecology / Carbon sequestration in soils

# Subjects Taught

Ecology, Plant Physiology, Plant Metabolism, Reproductive Biology of Angiosperms, Plant Systematics, Bryophytes, Pteridophytes and Gymnosperms, Natural Resource Management, Biofertilizers, Biostatistics, Plant anatomy, Intellectual Property Rights, Sustainable Ecotourism and Entrepreneurship, Basic Analytical Techniques, Medicinal Botany etc.

### Research Guidance

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### Publications Profile (From 1<sup>st</sup> July 2019 onwards)

- Hina Chaudhary, J. Dinakaran, Krati Vikram, Tenzen Notup and K.S. Rao. 2023. Comparison of adsorption performance of biochar derived from urban biowaste materials for removal of heavy metals.
   Environmental Management. https://doi.org/10.1007/s00267-023-01866-1 (ISSN No. 1432-1009).
   (Publisher: Springer; IF: 3.5).
- J. Dinakaran, Abhishek Chnadra, K.P. Chamoli, K.S. Rao. 2024. Evaluation of organic manure amendments on soil carbon saturation deficit in a rainfed agriculture system of Himalaya, India. Communications in Soil Science and Plant Analysis. DOI: 10.1080/00103624.2024.2385597. (Publisher: Taylor & Francis; IF:1.580).
- Hina Chaudhary, J. Dinakaran, and K. S. Rao. 2024. Comparative analysis of biochar production methods and their impacts on biochar physico-chemical properties and adsorption of heavy metals. Journal of Environmental Chemical Engineering. https://doi.org/10.1016/j.jece.2024.113003. (ISSN No. 1432-1009). (Publisher: Elsevier; IF: 7.7).
- Hina Chaudhary, **J. Dinakaran**, Krati Vikram, Tenzen Notup and K.S. Rao. 2023. Evaluation of physicochemical and structural properties of biochar produced from pyrolysis of urban biowastes. Accepted in Journal of Materials Cycles and Waste Mangement. (ISSN No.1611-8227). (Publisher: Springer; IF: 3.579).
- Krati Vikram, Tenzen Notup, Hina Chaudhary, J. Dinakaran and K. S. Rao. 2022. Changes of soil physicochemical and enzymatic parameters at different days after sowing of barley and wheat in the

- Central Himalayan region, India. Vegetos. https://doi.org/10.1007/s42535-022-00513-0. (ISSN No.2229-4473). (Publisher: Springer).
- Krati Vikram, Hina Chaudhary, Tenzen Notup, J. Dinakaran and K. S. Rao. 2022. Soil Respiration under Different Land Use Systems in Kumaon Region of Central Himalaya, India. International Journal of Ecology and Environmental Sciences 48: 649-661. (Publisher: National Institute of Ecology). (ISSN: 0377-015X (Print); 2320-5199 (Online)).
- J. Dinakaran, N.S. Abbas, Sujata Bhardwaj and Babeeta C Kaula. 2022. Soil Carbon Sequestration Potential of Terrestrial Ecosystems: Trends and Soil Priming Effects. Current World Environment. 17(1):161-170. (Publisher: Enviro Research Publishers). (ISSN:0973-4929, Online ISSN:2320-8031).
- Abhishek Chandra, Vikram Singh Negi, Laxman Singh Kandari, J. Dinakaran, R.K Maikhuri and Kottapalli Sreenivasa Rao. 2021. Conservation and Sustainable Management of Traditional Agro-ecosystems in Central Himalaya, India. International Journal of Ecology and Environmental Sciences 47: 355-368. (Publisher: National Institute of Ecology). (ISSN: 0377-015X (Print); 2320-5199 (Online)).
- J. Dinakaran, N.S. Abbas, Shvetambri Arora, Sujata Bhardwaj, Babeeta C Kaula. 2021. Assessment of Heavy Metals in ground water of different locations of national capital region, Delhi, India. Current World Environment. 16 (1); 143-150. (Publisher: Enviro Research Publishers). (ISSN:0973-4929, Online ISSN:2320-8031).
- Archana Meena, M.Hanief, **J. Dinakaran**, K.S. Rao. 2020. Soil moisture controls the spatio-temporal pattern of soil respiration under different land use systems in a semi-arid ecosystem of Delhi, India. Ecological Processes. 9-15. https://doi.org/10.1186/s13717-020-0218-0 (ISSN No.2192-1709). (Publisher: Springer; IF: 4.394).
- Subramaniyan Divya, Peddisetty Sharmila, J. Dinakaran, Gupta Yamal, Kottapalli S. Rao and P. Pardha-Saradhi. 2020. Specific H+ level is crucial for accurate phosphate quantification using ascorbate as a reductant. Protoplasma. 1-12. (ISSN No.1615-6102) (Publisher: Springer; IF:3.186).
- J. Dinakaran, Abhishek Chandra, Krati Vikram, K.P. Chamoli, Subodh Tambat, and K.S. Rao. 2019. Responses of soil carbon, nitrogen, microbial activity, bacterial community composition and grain yield to farmyard manure amendments in a rainfed agriculture (Paddy) system of Himalaya, India. Vegetos. 32 (4), 620-634. (ISSN No.2229-4473). (Publisher: Springer).
- J. Dinakaran, Krati Vikram, Mohd Hanief, Ankita Bidalia, Subodh Tambat, and K.S. Rao. 2019. Changes in vegetation cover and soil intrinsic properties influence the soil bacterial community composition and diversity across different climatic regions of India. Vegetos. 32 (3), 288-302. (ISSN No.2229-4473). (Publisher: Springer).
- Archana Meena, Ankita Bidalia, M.Hanief, J. Dinakaran, K.S. Rao. 2019. Assessment of above and belowground carbon pools in a semi-arid forest ecosystem of Delhi, India. Ecological Processes. 8(8), 1-11. (ISSN No.2192-1709). (Publisher: Springer; IF: 4.394).
- **J. Dinakaran** and K.S. Rao. 2019. Soil Organic Matter pools: a conundrum. The Botanica 68, 86-88. (ISSN No. 0045-2629). (Publisher: Department of Botany, University of Delhi, Delhi).

## Conference Organization/Presentations(From 1st July 2019 onwards)

- Co-convenor for the "Science Fair" organized by The Internal Quality Assurance Cell of the college in collaboration with Shriram Institute for Industrial Research, New Delhi, and the Indian Council of Medical Research, New Delhi, from 28 29 February 2024.
- Co-convenor for the events organized by the Botanical Society of the college.
- Coordinator of an Awareness Programme on "Know Your Soil" organized by the Phytomics: The Botanical society of Bhaskaracharya College of Applied Sciences (University of Delhi), Delhi on 22nd April 2023.
- Coordinator of an International workshop on "Millets: Solution for Climate Resilient Agriculture" organized by Phytomics-The Botanical Society, Bhaskaracharya College of Applied Sciences (University of Delhi), Delhi in collaboration with Kansas State University, USA on March 21, 2023.
- Coordinator of an International workshop on 'Managing Soil Ecosystem for Food Security' organized by Phytomics-The Botanical Society, Bhaskaracharya College of Applied Sciences (University of Delhi), Delhi in collaboration with Kansas State University, Manhattan, Kansas, USA on December 05 22, 2022.
- Coordinator of the two days' workshop on 'Vata Dosha Its Types and Imbalances' organized by Phytomics-The Botanical society of the college on June 21 & 22, 2022.

- Coordinator of an International webinar on 'Managing Soil Biology for Enhanced Ecosystem Services' organized by Phytomics- The Botanical society of the college in collaboration with Kansas State University, Manhattan, Kansas, USA on May 22, 2022.
- Coordinator of an international seminar on 'International Seminar on "Sustainable Agriculture Practices under Climate Change: A Global Perspective" by Phytomics-The Botanical society of the college on April 11, 2022.
- Coordinator of an online two-days International workshop on 'Ayurveda: Wellness Begins with Understanding yourself' by Phytomics- The Botanical society of the college from February 22-23, 2022.
- Coordinator of an online Alumni Interactive Session on 'Reminisce, Reconnect and Reflect' by Phytomics- The Botanical society of the college on February 20, 2022.
- Coordinator of an online career counseling session on 'Fostering for higher studies: preparation and practices for entrance examinations' exclusively for the third-year students by Phytomics- the Botanical society of the college from February 10-18, 2022.
- Coordinator for an Inter-college poster-making and collage-making competitions on the theme 'Raise Awareness about
  the Importance of Wetlands' on the occasion of The World Wetlands Day by Phytomics- The Botanical society of the
  college on February 2, 2022.
- Coordinator an online short-term course for 40 hours on 'Climate Change & Food Security: Issues, Challenges & Strategies' by Phytomics- The Botanical society of the college from January 3, 2022, to February 12, 2022.
- Coordinator for an eco-friendly-rangoli competition on the occasion of Diwali, November 4, 2021 by Phytomics-The Botanical society of the college.
- Coordinator of a National webinar on 'Present and Past Scenario of Ozone Depletion: Consequences and Montreal Protocol' by Phytomics- The Botanical society of the college to commemorate International Ozone Day on September 16, 2021.
- Coordinator for an inter-college poster-making and nature photography competitions on the occasion of the World's Environment Day, on June 5, 2021.
- Organizing member of the workshop on "Screening of Natural Compounds by Molecular Docking, ADMET and Toxicity Studies: Hands-on Training" organized by Phytomics-The Botanical Society, Bhaskaracharya College of Applied Sciences (University of Delhi), Delhi on February 27, 2021.
- Organizing member of the two days' workshop on "Bioinformatics: Sequence Analyses to Model Building" organized by the Phytomics: The Botanical society of Bhaskaracharya College of Applied Sciences (University of Delhi), Delhi on November 21, 2020 and November 22, 2020.
- Organizing member of the two days' workshop on "Design of Experiments (DOE) using statistical tools" organized by the Phytomics: The Botanical society of Bhaskaracharya College of Applied Sciences (University of Delhi), Delhi on November 06, 2020 and November 07, 2020.
- Organizing member of the live webinar on "Botanical Secrets for Wellness: Clued From Nature's Signature" organized by the Phytomics: The Botanical society of Bhaskaracharya College of Applied Sciences (University of Delhi), held on May 16, 2020.
- Served as Co-Convenor in the workshop on "Intellectual Property Rights" held on 26th August 2019 at Bhaskaracharya college of Applied Sciences, University of Delhi, Delhi.
- Organizing committee member of the National Seminar on "Challenges in Climate Change and Sustainable Development" held at Sri Venkateswara College, University of Delhi, Delhi from April 6-7, 2019.
- Act as a chair person in the technical session of the National Seminar on "Challenges in Climate Change and Sustainable Development" held at Sri Venkateswara College, University of Delhi, Delhi from April 6-7, 2019.

# Research Projects (Major Grants/Research Collaboration) (From 1st July 2019 onwards)

- Co-principal investigator: Title: Biochar production from agricultural residues and their effect on heavy metals adsorption in agricultural soil; Funding agency: University of Delhi under IOE scheme, New Delhi; Duration: One year 2021-2022 Status: Completed; Total cost: 3.00 lakhs.
- Co-principal investigator: Title: Effect of climatic change on functional floral ecology of *Rhododendron arboreum*; Funding agency: University of Delhi under IOE scheme, New Delhi; Duration: One year 2022-2023 Status: Completed; Total cost: 5.00 lakhs.

Awards and Distinctions	(From 1 <sup>st</sup> Jul	v 2019 onwards`	۱
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### Association with Professional Bodies

- Commission Member of IUCN CEM South Asia from 2021-2025.
- Member of the International Association for Ecology (INTECOL).
- Member of Delhi University Botanical Society (DUBS), Delhi, India.
- Member of International Society of Tropical Ecology, BHU, India.
- Member of Society for Environment and Development (SED), Delhi, India.

# Other Activities like MOOCs/ Patents etc. (From 1st July 2019 onwards)

- Successfully completed one week Faculty Development Programme on "Academic Research Writing", organized by Teaching Learning Centre Ramanujan College, University of Delhi under the aegis of Ministry Of Education Pandit Madan Mohan Malaviya National Mission On Teachers And Teaching, from 01 07 January, 2024.
- Successfully completed a four week Faculty Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education", organized by Teaching Learning Centre Ramanujan College, University of Delhi under the aegis of Ministry Of Education Pandit Madan Mohan Malaviya National Mission On Teachers And Teaching, from 22 July – 20 August, 2023.
- Attended the inaugural ceremony of Faculty Induction Programme "NEP 2020: Pedagogical Imperatives of Higher Education", organized by University of Delhi on December 1, 2023.
- Participated in one day National Webinar on "Vrikshayurved" organized by Phytomics: the botanical society of Bhaskaracharya College of Applied Sciences, University of Delhi, on 28th July 2023.
- Successfully completed one week Inter Disciplinary Faculty Development Programme on "Youth & Climate Change" organised by Teaching Learning Centre, Ramanujan College, University of Delhi in collaboration with Bhaskaracharya College of Applied Sciences (University of Delhi), Delhi and Catholicate College, Kerala, from 27th October to 3rd November 2021.
- Successfully completed one week Faculty Development Programme on "Developing Multimedia enriched Powerful Presentations" organized by Guru Angad Dev Teaching Learning Centre, S.G.T.B. Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of MHRD, from 12-20 September 2020.
- Successfully completed two weeks Faculty Development Programme on "Managing Online Classes and Co-Creating MOOCs 3.0" organized by Teaching Learning Centre, Ramanujan College, University of Delhi, from July 25 August 10,2020.
- Successfully completed Two Weeks Faculty Development Programme on "Advanced Concepts for Developing MOOCS" from July 2 – July 17, 2020.
- Successfully completed One Week Faculty Development Programme on "Entrepreneurship, Incubation and Innovation" organized by Teaching Learning Centre, Ramanujan College, University of Delhi from June 23 - June 29, 2020.
- Successfully completed One Week Faculty Development Programme on "Open Source Tools for Research" organized by Teaching Learning Centre, Ramanujan College, University of Delhi from June 08 - June 14, 2020.
- Successfully completed Two Weeks Faculty Development Programme on "Managing Online Classes and Co-Creating MOOCS: 2.0" organized by Teaching Learning Centre, Ramanujan College, University of Delhi from May 18 - June 03, 2020.
- Participated in the online faculty development programme on "Understanding GOOGLE Classroom" organised by Bhaskaracharya College of Applied Sciences (University of Delhi), Delhi, held during May 13-14, 2020.
- Participated in the online faculty development programme on "Online Transaction of Courses with Moodle-LMS" organised by Bhaskaracharya College of Applied Sciences (University of Delhi), Delhi, held during May 8-10, 2020.

### **Reviewer in National/International Journals**

 Science of the Total Environment (Elsevier), Catena (Elsevier), Plant and Soil (Springer), Ecological Indicator (Elsevier), Ecological Research (Wiley), Plos One, Carbon Management (Taylor & Francis), Journal of Environmental Management (Elsevier), Agriculture, Ecosystem and Management (Elsevier), Current Science (Indian academic of sciences), Vegetos (Springer), PNAS-India (Springer publications) and National Academy Science Letters (Springer publications).

Signature of Faculty Member