

## CURRICULUM VITAE

**Dr GYAN PRAKASH GUPTA, M.Sc., Ph.D.**

**Assistant Professor  
Department of Botany  
D.A-V (PG) College, Kanpur  
CSJM University  
Kanpur, UP  
India**

Nationality: Indian

Phone: +91- 9650949986

E-mail: greet.gyan12@gmail.com



### **Research Interest:**

I am interested to study/analyses of role/stress of Heavy metals (HMs) and Nanoparticles (NPs) in plant growth and development through physio-biochemical changes and their phytoremediation.

### **Educational Qualifications:**

Degrees	Board/University	Year Passed	Division	% Marks	Subjects Study
<b>B.Sc.</b>	DDU Gorakhpur University, Gorakhpur, India (NAAC-B++ grade)	2000	I	76	Chemistry, Botany, Zoology
<b>M.Sc.</b>	DDU Gorakhpur University, Gorakhpur, India (NAAC-B++ grade)	2002	I	69	Botany
<b>PhD</b>	Jawaharlal Nehru University, New Delhi (NAAC- A grade)	Awarded (December-2015)			<b>Thesis Title:</b> "Study of dry deposition of particulates on foliar surface and its effect on biochemical constituents of selected plant species of national capital region, India"

## Research Experience:

- ❖ Relationship of Heavy metals and Nanoparticles in plants
- ❖ Biochemical and enzyme analysis of foliar part of plants viz. pH, RWC, chlorophyll, carotenoids, soluble sugar, ascorbic acid, proline amino acid, phenol, and antioxidant enzymes antioxidant activity, etc.
- ❖ Foliar surface analysis i.e. trichome and stomata.
- ❖ Sampling of dust aerosols, bioaerosols, traces of gases (like NO<sub>2</sub>, SO<sub>2</sub>, and NH<sub>3</sub>) and heavy metals.
- ❖ Aerosols sample preparation and particle size analysis.
- ❖ Chemical and Heavy metal analysis of samples by IC (Ion Chromatograph) and AAS (Atomic Absorption Spectrophotometer).

## Handling Techniques:

- Ion chromatography (IC)
- UV-Vis Spectrophotometer
- Atomic Absorption Spectrophotometer (AAS)
- Gas Chromatography-Mass Spectrophotometry (GCMS)
- Scanning Electron Microscope (SEM).
- pH meter
- Ultracentrifuge
- BOD Incubator
- Laminar Flow
- Autoclave
- Plant Growth Chamber

## Software Skills:

- Microsoft Office 2013-14, R Software, Image-J software, SPSS-20, Sigma Plot, Photoshop, MS-Visio, Snagit software, Filmora etc.

## Paper Published in Peer Reviewed International/National Journal

1. Prasenjit Acharya & Sreedharan Sreekesh & Umesh Kulshrestha and **Gyan Gupta** (2018). Characterisation of emission from open-field burning of crop residue during harvesting period in north-west India. **Impact factor. 1.95**. Environmental Monitoring Assessment. 190:663.1-19. ISSN: 0167-6369 (print); 1573-2959 (web).
2. **Gupta, G. P.**, Kumar, B., Singh, S., Kulshrestha, U. C. (2016). Impact and pollution indices of urban dust on selected plant species for green belt development: mitigation of the air pollution in NCR Delhi, India. **Impact factor. 1.22**. *Journal Arabian Geosciences*. 9:136, 1-15. ISSN: 1866-7511 (print version) 18 66-7 538 (electronic version).

3. **Gupta, G. P.**, Kumar, B., Singh, S., Kulshrestha, U. C. (2015). Deposition and impact of urban atmospheric dust on two medicinal plants during different seasons in NCR Delhi. **Impact factor. 2.39.** *Aerosol and Air Quality Research-Index.* 10.4209/aaqr.2015.04.0272. ISSN: 1680-8584 print / 2071-1409 online.
4. Reema Tiwari; **Gyan Prakash Gupta**; Umesh Chandra Kulshrestha. (2016). Summer time dustfall fluxes of reactive nitrogen and other inorganic species over the tropical megacity of Indo-Gangetic plains. **Impact factor. 1.84.** *Earth Interactions.* doi:10.1175/EI-D-15-0053.1.
5. **Gupta, G. P.**, Kumar, B., Singh, S., Kulshrestha, U. C. Urban climate and its effect on biochemical and morphological Characteristics of Arjun (*Terminalia arjuna*) plant in NCR Delhi. (2015). *Chemistry and Ecology.* 187:67. <http://dx.doi.org/10.1080/02757540.2015.1043286>. **Impact factor-1.18.** ISSN. 0275-7540 (Print), 1029-0370 (Online).
6. **Gupta, G. P.**, Singh, S., Kumar, B., Kulshrestha, U. C. Industrial dust sulphate and its effects on biochemical and morphological characteristics of Morus (*Morus alba*) plant in NCR Delhi. *Environmental Monitoring Assessment.* 187 (2015), 67. **Impact factor- 1.95.** ISSN: 0167-6369 (print version): 1573-2959 (electronic version).
7. Bablu Kumar, **Gupta GP**, Sudha Singh, Lone FA and Kulshrestha UC. (2016). Atmospheric deposition of reactive nitrogen and other species in relation with long range transport and land use and land cover changes in North Western Himalayas. *International Journal of Environmental Science.* DOI: 10.21770/0905-3005.001, 2.2, 1-17.
8. Bablu Kumar, **Gupta GP**, Sudha Singh, Lone FA and Kulshrestha UC. Snow Chemistry at Mukteshwar in Central Himalayan Region of India. 2015. *Modern Chemistry & Applications.* 3: 1-7. <http://dx.doi.org/10.4172/2329-6798.1000160>. 3:3, ISSN: 2329-6798.
9. Bablu Kumar, Sudha Singh, **Gupta GP**, Lone FA and Kulshrestha UC. (2015). Long Range Transport and Wet Deposition Fluxes of Major Chemical Species in Snow at Gulmarg in North Western Himalayas (India). **Impact factor. 2.39.** *Aerosol and Air Quality Research-Index.* X: 1-12. ISSN: 1680-8584 print/2071-1409 online doi: 10.4209/aaqr.2015.01.0056.
10. Sudha Singh, Bablu Kumar, **Gyan Prakash Gupta**, U.C. Kulshrestha. (2014). Signatures of Increasing Energy Demand of Past Two Decades as Captured in Rain Water Composition and Airmass Trajectory Analysis at Delhi (India). *Journal of Energy, Environment & Carbon Credits.* 4, 43-61. ISSN: 2249 – 8621
11. Sudha Singh, **Gyan Prakash Gupta**, Bablu Kumar and U C Kulshrestha. (2014), Comparative study of indoor air pollution using traditional and improved cooking stoves in rural households of Northern India. *Energy for sustainable development,* 9: 1-6, **Impact factor-2.37**, ISSN 0973-0826.

12. Bablu Kumar, Y Meena, **Gyan Prakash Gupta**, Sudha Singh and U C Kulshrestha. (2013). Identification of nature and sources of dustfall at Mukteshware in kumaon region of central Himalayas, *India. International journal of chemistry and chemical engineering*. 3,149-154. ISSN 2248-9924.
13. Bablu Kumar, **Gyan Prakash Gupta**, Sudha Singh and U C Kulshrestha. (2013). Study of abundance and characterization of culturalble bioaerosols at Delhi, India. *International journal of environmental engineering and management*. 4, 219-26. ISSN 2231-1319.
14. U C Kulshrestha, B Kumar, **Gyan P Gupta**, Sudha Singh. (2012). Defining criteria for good habitats- Importance of bioaerosols, black carbon and trace gases. *Indian Journal of air pollution and control*, 12, 1, 24-30. ISSN 0250-5231.

#### Book Chapter:

1. **Gupta, G. P.**, Kulshrestha, U. C (2016). **Biomonitoring and Phytoremediation**, book entitled "Plant Response to Air Pollution" Springer Publisher. ISBN 978-981-10-1201-3.
2. **Gupta, G. P.**, Kulshrestha, U. C (2017). **Effect of air pollution on plants**, book entitled "Air Pollution and Climate Change in South Asia" Athena Academic Ltd, London.ISBBN:978-19-1039-034-4.
3. **Gupta, G. P.** (2020). **Climate Change and effect on crop yield productivity** book entitled "Air pollution and Environmental Health", Springer Publisher. ISBN 978-981-15-3480-5 ISBN 978-981-15-3481-2 (eBook), <https://doi.org/10.1007/978-981-15-3481-2>.
4. **Gupta, G. P.** (2021). **Impact of salinity stress on biological nitrogen fixation of terrestrial plants** Book entitled "Salt Stress Responses in Plants: Perception, Signaling, Omics and Tolerance Mechanism" published by Nova Science Publishers (U.S.A.). ISBN: 978-1-53619-889-8.

#### Article in Magazines:

1. Climate change: The science of new business opportunities. Prof. U C Kulshrestha and **Gyan Prakash Gupta**. March, 2010, World Focus.ISSN-2230-8458.
2. Disaster scenario and our preparedness. **Gyan Prakash Gupta** and Yashpal Meena. March, 2011, World Focus. ISSN-2230-8458
3. Know about bioaerosols in the air you breathe. Bablu Kumar, **Gyan Prakash Gupta**, Sudha Singh and U C Kulshrestha SES, JNU Magazine, 2012.

## Conference/Seminar Presentations:

1. **Gyan Prakash Gupta**, 'Climate change v/s crop plant response'. 6<sup>th</sup> International conference of Environment and Ecology organised by International Foundation for Environment and Ecology at Central University of Allahabad, Prayagraj, UP, India. 24-26 Feb, 2020. (**Oral Presentation**).
2. **Gyan Prakash Gupta**, Covid-19 and its implications on Global Environment, 2<sup>nd</sup> Annual meet of GESA, 2<sup>nd</sup> International conference on Environment and society (ICES 2020) jointly organised by GESA, New Delhi, NESA, New Delhi and ABRF, Prayagraj (UP), India.
3. **Gyan Prakash Gupta**. Air quality of Kanpur, Uttar Pradesh. 1<sup>st</sup> International Conference on Environment and Society (ICES 2019), Socio-economic challenges of agriculture, Biodiversity and Environment, Organized by Global Environment and social Association (GESA), New Delhi, HBTU, DG (PG), Kanpur and ABRF, India. December, 22 and 23<sup>rd</sup> 2019. (Poster Presentation).
4. **Gyan Prakash Gupta**. 8TH National Seminar on Ancient Indian Science and Technology. IIT Kanpur, UP, 12th November, 2019.
5. **Gyan Prakash Gupta**. "Effect of particulate matter on medicinal plants". National seminar on Food chemistry processed food and toxicology, Organized by Department of Chemistry, DAV College Kanpur, UP. 25-26th September, 2019. (**Oral Presentation**)
6. **Gyan Prakash Gupta**. National seminar on "Role of sciences and technology with relevance to national swachhata abhiyaan" in Dayanand Girls PG College, Kanpur. Sponsored by department of higher education Govt. of UP. 29-30 March, 2018.
7. **Gyan Prakash Gupta** and U.C. Kulshrestha. Urban Dustfall: Affecting Foliar Surface and Biochemical Constituents of Economically Important Plant Species of Delhi Region, India. Sixth international conference on Plants & environmental pollution (ICPEP-6), 27–30 November 2018; Organized by International Society of Environmental Botanists (ISEB) & National Botanical Research Institute (NBRI), Lucknow (India). (**Oral Presentation**).
8. **Gyan Prakash Gupta**, Bablu Kumar, Sudha Singh, U.C. Kulshrestha. Study of dust pollution stress on medicinal plants in Delhi region. National seminar on New Frontiers in Plant Sciences and Biotechnology' Department of Botany, Goa University, Goa. 29-30, Jan, 2015. (**Poster presentation**).
9. **Gyan Prakash Gupta**, Bablu Kumar, Sudha Singh, U.C. Kulshrestha. Urban dust aerosols and their impact on the biochemical constituents of five selected medicinal plants in Delhi region. Tropical Ecology Congress 2014 "Tropical ecosystems in a changing world". 10-12, December, 2014. SES, JNU, New Delhi (**Poster presentation**).

10. **Gyan Prakash Gupta**, Bablu Kumar, Sudha Singh, U.C. Kulshrestha. Urban industrial Dust: SO<sub>2</sub> sink affecting foliar surface and biochemical constituents of economically important plant species in National Capital Region of Delhi, India. DUST-2014 - 1<sup>st</sup> International Conference on Atmospheric Dust – Associazione Italiana per lo Studio delle Argille – onlus (AISA) and Istituto di Metodologie per l'Analisi Ambientale (IMAA - CNR), **Italy (Oral presentation)**. 1-6, June, 2014.
11. **Gyan Prakash Gupta**, Bablu Kumar, Sudha Singh and U C Kulshrestha. Dust pollution affecting foliar surface and biochemical constituents of medicinally important plant species in National Capital Region of Delhi. International conference on environmental technology and sustainable development: challenges & remedies. BBA University, Lucknow. 21-23, Feb, 2014. **(Oral Presentation)**.
12. **Gyan Prakash Gupta**, Bablu Kumar, Sudha Singh and UC Kulshrestha. Urban dust aerosols and their deposition at residential and industrial sites of NCR Delhi. 50<sup>th</sup> annual convention on “sustainability of earth system - the future challenges”. Indian Geophysical union. Hyderabad. 08, Jan 2014. (Poster Presentation).
13. Bablu Kumar, Y Meena, Sudha Singh, **Gyan Prakash Gupta** and UC Kulshrestha. Deposition of mineral aerosols as dustfall components at Mukteshwar in kumaon region of central Himalayan, INDIA. 50<sup>th</sup> annual convention on “sustainability of earth system - the future challenges”. Indian Geophysical union. 275, 2014. (Poster Presentation).
14. **Gyan Prakash Gupta**, Bablu Kumar, Sudha Singh and U C Kulshrestha. Urban-industrial dust and its influence on the foliar of a medicinal plant (*Morus alba*) in NCR Delhi, National seminar on climate change environment and sustainable development, NESI and Jamia Hamdard, New Delhi. 143, 9-10, Dec, 2013. **(Poster Presentation, Win, IInd prize)**.
15. Bablu Kumar, **Gyan Prakash Gupta**, Sudha Singh and UC Kulshrestha. Dustfall chemistry vis a vis influence of non-marine sources in central Himalayan region of India. National seminar on climate change environment and sustainable development, NESI, New Delhi. 52, 2013. (Poster Presentation).
16. **Gyan Prakash Gupta**, Sudha Singh, Bablu Kumar and U C Kulshrestha, Air pollution stress affecting foliar properties and biochemical constituents of selected plants at residential and industrial sites in the NCR Delhi. International Humboldt kolleg on management of water, energy and bio-resources in changing climate: emerging and environment challenges. 8-9, Feb 2012. SES, JNU, New Delhi. (Poster Presentation).
17. Sudha Singh, Bablu Kumar, **Gyan Prakash Gupta** and U C Kulshrestha, Signature of increasing demand of past two decades as captured in rain water composition at Delhi (India). International Humboldt Kolleg (IHK), 8-9 February 2013 (Poster Presentation). SES, JNU, New Delhi.
18. Sudha Singh, **Gyan Prakash Gupta**, Bablu Kumar and UC Kulshrestha, Role of Crustal Aerosols In Determining The Nature of Rain Water And Need of Direct

Measurements of Bicarbonate In India. IGU conference, 29-31 October, 2012 (Oral Presentation).

19. Bablu Kumar, Yashpal Meena, Ankush Chauhan, Sudha Singh, **Gyan Prakash Gupta** and U C Kulshrestha, Geochemical and anthropogenic influence on snow composition in kumauon region of Himalaya, IGU conference, 29-31 October, 2012 (Oral Presentation).
20. Bablu Kumar, Yashpal Meena, Ankush Chauhan, Sudha Singh, **Gyan Prakash Gupta** and UC Kulshrestha, Chemistry of snowfall in relation to air mass trajectory at Nainital site in Himalayan region, IASTA conference, Mumbai, December 11-13, 2012 (poster presentation).
21. B Kumar, S Singh, **G P Gupta**, U C Kulshrestha, Short-term high-level accumulation of air pollutants due to pyrotechnics: a case study during Diwali festival, National seminar on JNU, SES, India. (Poster Presentation).
22. B Kumar, Sudha Singh, **Gyan Prakash Gupta**, U C Kulshrestha, Effect of Fireworks Air Pollution on Microbial Population during Diwali Festival at Delhi, EBI conference during 30-31 December, 2011. (Oral Presentation).
23. B Kumar, Sudha Singh, **Gyan Prakash Gupta**, U C Kulshrestha, Effect of Fireworks Air Pollution on Microbial Population during Diwali Festival at Delhi, EBI conference during 30-31 December, 2011. (Oral Presentation).

#### **Resource Person/ Special Invitee/ Guest Speaker:**

1. Invite lecturer as a Guest on “Climate Change adaptation and remediation” in workshop 19 September, **2021**, Organize by Forestry Training Institute, Kanpur. UP.
2. Invited lecturer on “Climate change their impact on C3/C4 Crop productivity” on world Environment Day, 5<sup>th</sup> June, **2021**, Organize by the science Departments under the aegis of Eco Club, Science Club and IQAC of Govt. V.Y.T. PG Autonomous College, Durg, Chhattisgarh, India.
3. Invited lecturer on ‘Dustfall fluxes on foliar surface of plants at urban city of Kanpur’ in 1<sup>st</sup> International Conference on Environment and Society (ICES 2019), Socio-economic challenges of agriculture, Biodiversity and Environment, December, 22 and 23<sup>rd</sup> **2019**. Organise by GESA, New Delhi, DG College, Kanpur and ABRF, Prayagraj, UP.
4. Invited Speaker on world Environment Day, 5<sup>th</sup> June, **2018**, Organize by Bagwan Welfare Society (Regtd.), Kanpur, UP.

### Workshop Attended:

1. 4<sup>th</sup> International Training School on atmospheric brown Clouds (ABC) Kathmandu in Kathmandu **Nepal**, sponsored by **UNEP** RRC.AP (Bangkok) and International Centre for Integrated Mountain Development (ICIMOD), 21-26 March, 2011.
2. Workshop on Application of Gas Chromatography and mass spectrometry at Advanced Instrumentation Research Facility, JNU, New Delhi.13-14, August,2012.
3. Workshop on scientific writing and bioethics in School of life Sciences, JNU, New Delhi. 20-21, September, 2012.
4. National workshop on scientific/ research paper writing organized by the national academy of Sciences India at Mohanlal Sukhadia University, Udaipur, Rajasthan. 5-7, April.2013.
5. Workshop on discovering statistics by MS-Excel and SPSS in Department of mathematics, BHU, Varanasi. 11-18, August, 2013.
6. Workshop on Electron Microscopy at Advanced Instrumentation Research Facility, JNU, New Delhi. 30-31, March, 2015.
7. 3<sup>rd</sup> National workshop on statistical methods and R programming organized by Agricultural and Ecological research unit, Indian Statistical Institute, Kolkata and Department of mathematics, Institute of chemical technology, Mumbai. 10-15, Feb, 2016.
8. National workshop on basic technique in microbiology, Faculty of Sciences, DG College, Kanpur,11-17th October, 2018.
9. National workshop on Quantitative and Qualitative analysis of protein and lipids Department of Zoology, DG College, Kanpur, 25-31st October, 2017.

### Fellowships:

1. Qualified CSIR-UGC-JRF Fellowship in 2008. (Total five times qualified).

### Awards/Recognitions:

1. **Kalp- Excellence in Research award (2020)** given by Kalp laboratories and IFSC, Ghaziabad, BS Mthura, IBT&EP Society, HAR&EP Society Agra, UP.
2. **ABRF Excellence Award for Environment Research (2020)** Given Asian Biological Research Foundation Prayagraj, UP (India)
3. **Research Excellence award (2020)**, Given by Institute of scholar (InSc), Bengaluru-560091, Karnataka, India. An ISO 9001:2015 certified institute by international accurate certificate, accredited by USAL.



4. **Young scientist of the year award (2019)** given by International Foundation for Environment and Ecology, Kolkata, India.
5. **2<sup>nd</sup> prize** in poster presentation organize by National Environmental Sciences Academy (NESA), New Delhi, India, 9-10, December, 2013.
6. **Best Poster award** in poster presentation organize by International Conference on Environment and Society (ICES 2019), Socio-economic challenges of agriculture, Biodiversity and Environment, Organise by GESA, New Delhi, DG College, Kanpur and ABRF, Prayagraj, UP. December, 22 and 23<sup>rd</sup> 2019.

#### Positions Held:

1. Worked as the **Vice-President** of MGPG College Student Union 1999-2000.
2. Conducted Jawaharlal University Student Union (JNUSU) election as a **Chairperson** of University Election Committee 2013 - 14.
3. Worked as Project Fellow in UGC Major Project at School of Environmental Sciences, JNU, New Delhi.

#### Travel Grant:

1. DST travel grant under IST scheme for attending International Conference on Atmospheric Dust-2014 at Italy organized by Dept. Geoenvironmental & Earth Sciences University, Aldo Moro–Bari, **Italy**.
2. Prof Jagdeo Singh and Dr. S. Balakrishna memorial grant-2013 for attending 50<sup>th</sup> Annual Convention on “Sustainability of earth system- the future challenges” of Indian Geophysical Union at National Geophysical Research Institute, Hyderabad.

#### Scholarships:

- Senior Research Fellowship (SRF) of Council of Scientific and Industrial Research (CSIR), Government of India (Jul 2011-July 2014).
- Junior Research Fellowship (JRF) of Council of Scientific and Industrial Research (CSIR), Government of India (Jul 2009-Jun 2011).

#### Membership:

- Member of International Society for Tropical Ecology, BHU, Varanasi, India.
- Life Member of Indian Sciences Congress association (ISCA), Kolkata, India
- Member of Young Earth System Scientists (YESS) Community, Buenos Aires, Argentina.
- Member of ICP Forest, United Nations Economic Commission for Europe (UNECE).
- Life Member of Asian Biological Research Foundation (ABRF), Prayagraj, India.

- Life Member of International Foundation for Environment and Ecology, Kolkata, WB, India.

#### Organizer:

- Organise the international conference and outreach programme on “environment and ecology: sustainability and challenges” (ENCON2017) held at Sri Venkateshwara college, New Delhi as a part of organising committee.
- Organise the earth day celebration (2015, 2016) in SES, JNU New Delhi as a part of organising committee.

#### Teaching Experience:

- Teaching assistant in taking classes for the course “Introduction to Environmental Sciences” for BA students of SLL&CS, JNU, New Delhi for the monsoon semester (2014-2015).
- Worked as Assistant Professor (Adhoc) in **Botany Department at Sri Venkateshwara College, South Campus, Delhi University (25<sup>th</sup> July-, 2016-14<sup>th</sup> Oct, 2017).**

#### Orientation/ Refresher/Training Course:

- UGC-HRDC Sponsored “**Orientation programme**” (15July-2August, 2019) at HRDC-JNU, New Delhi.
- Participated a “**Rural Immersion Programme in Rural community Engagement** (24<sup>th</sup>-25<sup>th</sup>, 2019) organised by UGC-HRDC, JNU, New Delhi.
- Participated in the “**Yoga Classes**” for three weeks (16July-2August, 2019) organised by UGC-HRDC, JNU, New Delhi.
- One-week online faculty development Programme on “**Research Methodology: Tools and Techniques**” under PMMNMTT Scheme of MHRD organise by Atma Ram Sanatan Dharma College, Delhi University from 5<sup>th</sup> June – 11<sup>th</sup> June, 2020.
- Two-week online faculty development Programme on “**Managing Online Classes and Co-Creating MOOCS 3.0**” under PMMNMTT Scheme of MHRD organise by Teaching learning Centre, Ramanujan College, Delhi University from July 25-August 10, 2020.
- One-week online hands-on training programme on “**Advanced data analysis using SPSS**”, July, 15<sup>th</sup>- 21<sup>st</sup>, 2020. Organised by Department of Statistics, University of Lucknow (UP).
- Two-week online “faculty development Programme” on “**ICT Based New Paradigms of E-Teaching and E-Learning: Digital Pedagogy**” under

PMMNMTT Scheme of MHRD organise by Department of Computer Science, Mata Sundri College for women in collaboration of Teaching learning Centre, Ramanjuan College, Delhi University from September 15-september 30, 2020.

- One-week Workshop on “**MOOCs, Online Courses & Open Educational Resources' (WS3-20)**” organised by UGC-HRDC, Dr. H. S. Gour Vishwavidyalaya Sagar 470 003 (MP) from November 28- 05<sup>th</sup> December, 2020.
  - Two-week online refresher course/faculty development Programme on “**Advanced Research Methodology: Tools And Techniques**” under PMMNMTT Scheme of MHRD organise by Teaching learning Centre, Ramanjuan College, Delhi University from 30 January-14 February, 2021.
  - Two-week online interdisciplinary refresher course on “**21st Century Environmental Issues, Challenges and Solutions**” under PMMNMTT Scheme of MHRD organise by Teaching learning Centre, Ramanjuan College, Delhi University from 15 July- 29 July, 2021.
  - Two-week online interdisciplinary refresher course on “**Advanced Concept in Developing MOOCs**” under PMMNMTT Scheme of MHRD organise by Teaching learning Centre, Ramanjuan College, Delhi University from 06- 20 October, 2021.
-