

## Department of Environmental Studies

The Department of Environmental Studies, established in 2014 at the orders of the Supreme Court, teaches a compulsory paper “Environmental Science” as an Ability Enhancement Compulsory Course (AECC) under Choice Based Credit System (CBCS), to first year students w.e.f. session 2015-16. The course aims to provide knowledge and understanding of the natural environment, its importance and various environmental issues, to the first-year students of all disciplines.

### 1. Departmental Activities:

#### 1.1 Nadi ko Jano Yamuna Trip

During 2021-2022, the Department of EVS organized a short trip to the River Yamuna near Wazirabad as part of the NADI KO JANO CAMPAIGN on 10th March, 2022. A total of 56 students volunteered for the program and learnt about the River Yamuna in Delhi, its religious and economic importance as well as the level of pollution. The students were accompanied by Ms. Ifrah Rehman and Dr. Deepak Rawat.





## 1.2 Nadi Ko Jano Workshop

The Department of Environmental Studies, Janki Devi Memorial College, University of Delhi in collaboration with Bhartiya Shikshan Mandal (BSM), Delhi Prant organized a workshop on ‘Nadi Ko Jano’ campaign for all the students of the college on 20<sup>th</sup> January, 2022 at 3:30 PM. The workshop was conducted using virtual mode. The chief guest of the workshop was Prof. Ranjan Kumar Tripathi, Gurukul Prakalp Pramukh BSM (Delhi), Mahasanchalak "Nadi ko jano" abhiyan (Delhi). The expert of the technical session was Dr. Shambhu Nath Mishra. The webinar was also joined by the Principal, Prof. Swati Pal, members of BSM, Dr Jitender Gill, faculty members of EVS and college, and more than 450 students.



**JANKI DEVI MEMORIAL COLLEGE**  
UNIVERSITY OF DELHI

in association with  
**BHARATIYA SHIKSHAN MANDAL, Delhi Prant**

presents a workshop on  
**"NADI KO JANO"**



**SPEAKER**  
Prof. Ranjan Kumar Tripathi  
Gurukul Prakalp Pramukh BSM (Delhi)  
Mahasanchalak "Nadi ko jano" abhiyan (Delhi)

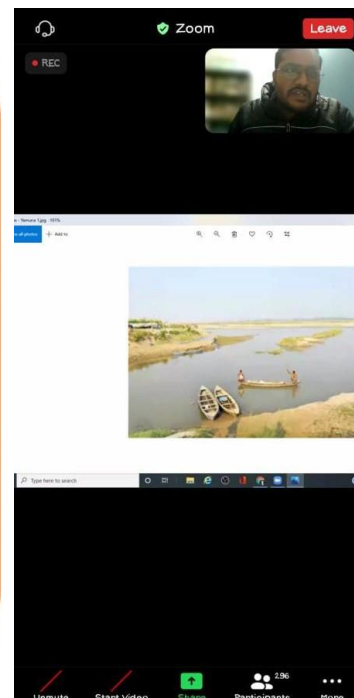
**Technical Expert**  
Dr. Shambhu Nath Mishra

**Special Thanks**  
Prof. Ravi Prakash Tekchandani  
Prant Adhyaksh BSM, Delhi Prant  
Nodal Officer – "Nadi ko Jano", University of Delhi

**Date:** January 20<sup>th</sup>, 2022, **Time:** 3:30 PM  
**Platform:** Zoom Meeting  
**Meeting ID:** 817 2406 9291, **Passcode:** 123456  
**Link:** <https://us06web.zoom.us/j/kcZq50QcX>

**Prof. Swati Pal**  
Principal JDMC

**Contact (Department of Environmental Studies)**  
Dr. Deepak Rawat ([deepakrawat@jdm.du.ac.in](mailto:deepakrawat@jdm.du.ac.in)), Ms. Irfah Rehman ([irfah@jdm.du.ac.in](mailto:irfah@jdm.du.ac.in))



## 1.3 Add on courses

### 1.3.1 KNOW YOUR CITY: DELHI AND ITS ENVIRONS

The Department of EVS under the aegis of IQAC-JDMC and Centre for Career Counseling, Career Opportunities and Skill Enhancement organized a Certificate Course on KNOW YOUR CITY: DELHI AND ITS ENVIRONS from 15th February, 2022 in collaboration with Unzip Delhi and Brunt Official for Heritage and Nature Walks respectively. The course is currently running in blended mode with 28 students.

**JANKI DEVI MEMORIAL COLLEGE**  
University Of Delhi

**Department of Environmental Studies**  
(Under the Aegis of JDMC-IQAC and Centre for Career Counselling, Career Opportunities and Skill Enhancement)

presents a

**30 Hours Certificate Course**

**Know your city:  
Delhi and its  
Environs**

Course Contents:-

- Explore the History of Delhi
- Yamuna and the Delhi Ridge
- Delhi- An open urban ecological laboratory

**Duration:  
Feb-March 2022**

**Fees:  
JDM Students -Rs300/-  
Others- Rs 500/-**

Course coordinator  
Ifrah Rehman (8527214592)

Prof. Swati Pal  
Principal

### 1.3.2 Multidisciplinary Aspect of Environmental Sustainability–Towards Sustainable Fashion and Wildlife Conservation

The skill and knowledge-based course offered by EVS department was designed to challenge the emerging threats to urban and natural ecosystems. The interdisciplinary course addressed the socio-economic-environment impacts of the unsustainable fashion industry, excessive consumerism and the resultant environmental pollution, and wildlife biodiversity loss. It introduced students to the concept of environmental sustainability and helped them to understand, analyse, and contribute to finding solutions for environmental problems arising due to unsustainable human activities. The course started in September, 2021 and was finished in February, 2022.







**JANKI DEVI MEMORIAL COLLEGE**  
UNIVERSITY OF DELHI  
**DEPARTMENT OF ENVIRONMENTAL STUDIES**  
Under the Aegis of IQAC-JDMC



IS ORGANISING A LECTURE SERIES  
ON

### "PEOPLE IN ENVIRONMENT"



**Dr Ramachandra Guha**  
*Historian & Sociologist*  
On topic  
"Memories of Indian Environmentalists"

#### ABOUT THE SPEAKER

Dr Ramachandra Guha is a historian and sociologist based in Bengaluru. He has taught at the universities of Yale and Stanford, held the Arne Næss Chair at the University of Oslo, and served as the Philippe Roman Professor of History and International Affairs at the London School of Economics and as the Satish Dhawan Visiting Professor at the Indian Institute of Science.

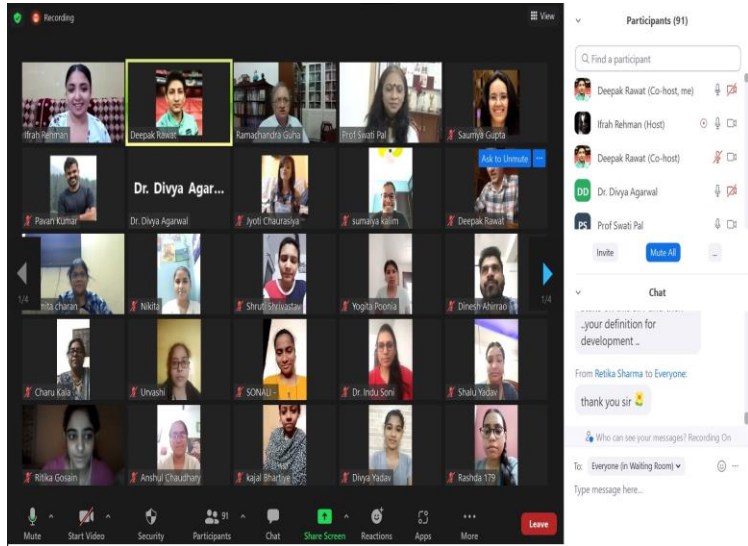
Ramachandra Guha's awards include the Leopold-Hilff Prize of the American Society of Environmental History, the Daily Telegraph Cuckoo Society prize, the Malcolm Adiseshiah Award for excellence in social science research, the Ramnath Goenka Prize for excellence in journalism, the Sahitya Akademi Award, and the R. K. Narayan Prize. In 2009, he was awarded the Padma Bhushan, the Republic of India's third highest civilian honour.

Date: October 18<sup>th</sup>, 2021  
Time: 12 noon  
Platform: Zoom Meeting

E-certificates will be provided to all participants

Contact  
Ibrahim Rehman ([ifrah@jdm.du.ac.in](mailto:ifrah@jdm.du.ac.in))  
Deepak Rawat ([deepakrawat@jdm.du.ac.in](mailto:deepakrawat@jdm.du.ac.in))

Prof. Swati Pal  
Principal JDMC



The Department of EVS under the aegis of IQAC-JDMC organized a lecture on CLIMATE CHANGE: LOCAL vs GLOBAL by Strategy and Policy Advisor Mr. Sanjay Gupta under the lecture series PEOPLE IN ENVIRONMENT on 8th October, 2021.

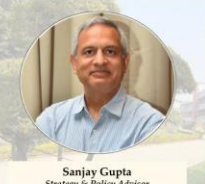


**JANKI DEVI MEMORIAL COLLEGE**  
UNIVERSITY OF DELHI  
**DEPARTMENT OF ENVIRONMENTAL STUDIES**  
Under the Aegis of IQAC-JDMC



IS ORGANISING A LECTURE SERIES  
ON

### "PEOPLE IN ENVIRONMENT"



**Sanjay Gupta**  
*Strategy & Policy Advisor*  
On topic  
"Climate change: local vs global"

#### ABOUT THE SPEAKER

Mr Sanjay Gupta is an independent international consultant on issues of climate change and socio-economic development. He has over two decades of senior-level experience in strategy advice and policy advocacy in the areas of water resources management, environment and climate change, water & sanitation, gender, and livelihoods across South and Central Asia, in Europe and the USA.

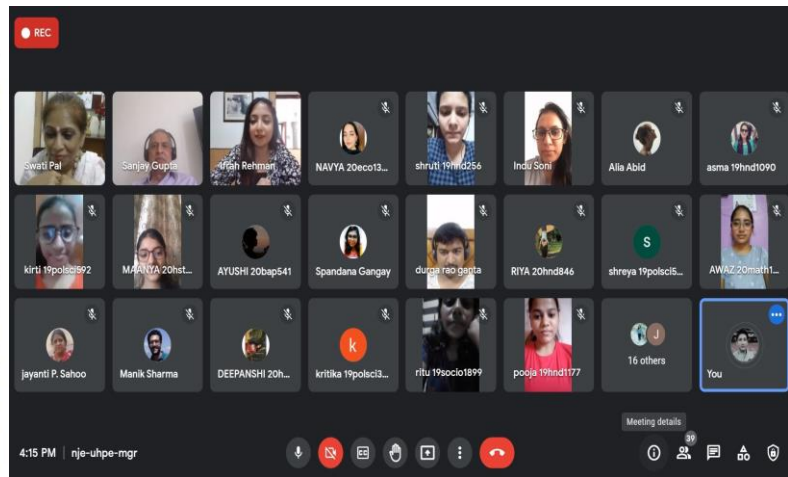
He has worked for the World Bank, Bill & Melinda Gates Foundation, Asian Development Bank, and United States House of Representatives. He has also been a member of the Track 2 dialogue on Indus River cooperation between India and Pakistan.

Date: October 8<sup>th</sup>, 2021  
Time: 3 pm  
Platform: Google Meet

E-certificates will be provided to all participants

Contact  
Ibrahim Rehman ([ifrah@jdm.du.ac.in](mailto:ifrah@jdm.du.ac.in))  
Deepak Rawat ([deepakrawat@jdm.du.ac.in](mailto:deepakrawat@jdm.du.ac.in))

Prof. Swati Pal  
Principal JDMC



## 2. Society activities

The Department of EVS also engages in various programmes alongside AVANI, like Create from Waste in which students recycle household waste materials and create something useful; Green Matters: The Annual Inter-College Debate Competition to raise awareness about the growing environmental issues.

- Dr. Deepak Rawat has also been the resource person for the ongoing ADD-on Course conducted by AVANI on 'Striking a balance: Environment and society.'




**JANKI DEVI MEMORIAL COLLEGE**  
**UNIVERSITY OF DELHI**  
**AVANI, THE ENVIRONMENT CLUB**




UNDER THE AEGIS OF JDMC- IQAC AND CENTRE FOR CAREER  
 COUNSELLING, CAREER OPPORTUNITIES AND SKILL ENHANCEMENT

**PRESENTS**  
**A 30-HOUR ADD-ON COURSE**  
**ON**  
**STRIKING A BALANCE: ENVIRONMENT AND SOCIETY**  
**DURATION: JANUARY- MARCH 2022**

**MODULES TO COVER:**  
 MODULE 1: PLUG THE LEAK AND GO GREEN ( WATER MANAGEMENT AND GREENERY)  
 MODULE 2: SMELL NOT, WASTE NOT ( WASTE MANAGEMENT)  
 MODULE 3: LIGHT UP YOUR LIFE (ENERGY CONSERVATION)

*(The pedagogy will include lectures, case studies, practical sessions, movies,  
 documentaries and internships)*

**LIMITED SEATS**

**IN COLLABORATION WITH**







**FEEs:**  
 FOR AVANI MEMBERS : Rs 400 /-  
 FOR OTHERS : Rs 600 /-

**COURSE COORDINATORS:**  
 MS. BHAWNA PAL  
 MS. ANURADHA GOEL  
 MS. KARISHMA AHLAWAT  
**CONTACT US AT: [avani@jdm.du.ac.in](mailto:avani@jdm.du.ac.in)**

**PROF. SWATI PAL**  
**PRINCIPAL**

- Dr Deepak Rawat as a nodal officer of Swachhta action plan, JDMC along with the students of NCC conducted a water audit of the campus under the swachhta Action Plan activities.



- Dr Deepak Rawat as a nodal officer of Swachhta action plan, JDMC organized the 'each one plant one' activity under the MGNCRE district green champion award
- Dr Deepak Rawat as a nodal officer of Swachhta action plan, JDMC organized the 'gandhi chhadi' activity under the MGNCRE district green champion award
- Dr Deepak Rawat as a member of AVANI organized a virtual tour of Yamuna biodiversity park on October 6, 2021 as a part of wildlife week

**JANKI DEVI MEMORIAL COLLEGE**  
**University of Delhi**

**AVANI**

**Avani, The Environmental Club**  
**in coordination with**  
**Yamuna Biodiversity Park**  
**is organising a**  
**'Virtual Tour of**  
**Yamuna Biodiversity Park**  
**as a part of**  
**Wildlife Week (1 to 7 Oct)**

(E-Certificate will be provided to each participants)

**Date - 6 October**  
**Time-10:30 a.m**  
**Platform-Google meet**

**Co-ordinator**  
Dr. Deepak  
Ms. Pouriangthanliu

**Prof. Swati Pal**  
**(Principal)**

- Dr Deepak Rawat as a member of AVANI organized a quiz competition on September 6, 2021 to create awareness about swachhta pakhwada 2021





- Dr Deepak Rawat as a member of AVANI organized a seminar on People-centric urban ecosystem restoration in India on June 5, 2021 as a part of World Environment Day



- Ms. Ifrah Rehman and Dr. Deepak Rawat, Assistant Professor of the Department also performed the annual Green Audit – the Environmental Self-Assessment Report of Janki Devi Memorial College in August 2021.
- The Department completed a students' research project on "Awareness on Environmental and Health Hazards of Sanitary Napkins and Factors that Impact College Students' Choice of Menstrual Products" by Barkha Arora and Sonali Chauhan under the guidance of Ms. Ifrah Rehman.



- The faculty members actively participate in various societies that they are a part of, like, the Canteen Committee, AVANI- the Eco-club, ENACTUS-JDMC.
- The Department of EVS also updated the tree and butterfly census of the college in July 2021.

### 3. Faculty Achievements:

#### 3.1 Dr. Deepak Rawat

- Appointed as the nodal Officer for 'Sustainable Campus' Program by Mahatma Gandhi National Council of Rural Education (MGNCRE), Ministry of Education, India. The JDMC won the district green champion award for the year 2021-2022. Dr Deepak rawat, along with the Swachhta action team made the report on the swachhta activities of the JDM college.



MGNCRE

महात्मा गांधी राष्ट्रीय ग्रामीण शिक्षा परिषद  
Mahatma Gandhi National Council of Rural Education  
Department of Higher Education, Ministry of Education, Government of India



Lr. No. MHRD/GOI/SAP/2021-22/295

Date: 08.03.2022

SUB: MGNCRE-DHE-MoE-GOI/ Appreciation Letter/ Nodal Officer /Swachhta Activities-2021-22

Dear Deepak ji,

At the outset, we congratulate you for participating in the Swachhta activities in your college which speaks volumes of your dedication and commitment to make not only your Institution exemplary, but also is an inspiration to your students towards making India a Clean and Green place to live in.

We also appreciate the best work done by you in the areas of Sanitation, Hygiene, Waste Management, Water Management, Energy Management and Greenery Management.

Your ideas and your commitment are greatly appreciated. We wish you all the best in your future endeavours.

Please accept my heartfelt gratitude. Hoping this association continuous.

*Warm Regards*

Samarth Sharma  
Consultant  
MGNCRE, Ministry of Education  
Government of India

Copy to:  
Dr Deepak Rawat, Assistant Professor, Janki Devi Memorial College, University of Delhi



*The principal, nodal officer, and the members of the Swachhta Action team of JDMC with the inspection team from MGNCRE*

- Presented as a speaker at the European Chlorella Conference 2021 organized by European Algae Biomass Association (EABA) – September 14-15, 2021



**BIG  
THANKS TO  
OUR  
SPEAKERS!**



Anabela Carvahlo  
Lisa Schöler  
Katerina Bisova

Jörg Ullmann  
Helene Marfaing  
Deepak Rawat

Haim Trebes  
Reka Mocsai  
Bruno Ferreira

- Won COVID-19 Phycological Research Recovery Award 2021 of 2500 pounds in June, 2021 by the British Phycological Society, UK to conduct research work on bioremediation potential of microalgae.

### 3.2 Ms. Ifrah Rehman

- Completed five days online FDP on “*Mentoring for Institutional Social Responsibility and Facilitation for Community Engagement*” conducted by MGNCRE, Department of Higher Education, Ministry of Education, Gol from 2nd to 6th February, 2022.



- Participated in the webinar titled “*Gaining Proficiency in Online Admission Procedures and Redressal of Student Grievances*” organised by IQAC, Janki Devi Memorial College on 30th September, 2021.



- Participated in the National Webinar titled “*National Education Policy 2021: Opportunities and Challenges in Implementation*” organised by the NEP Committee and the IQAC, Janki Devi Memorial College in collaboration with Shiksha Sanskriti Uthhan Nyas (SSUN) on 28th August, 2021.

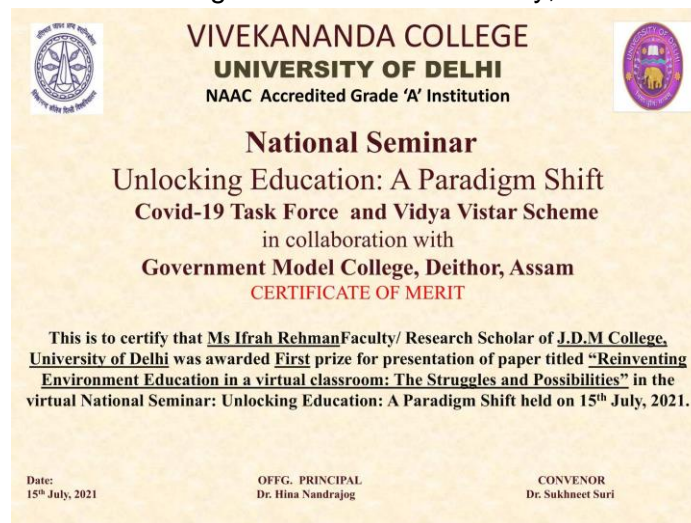




- Participated in the webinar titled “Code of Conduct and Professional Ethics” organised by IQAC, Janki Devi Memorial College on 23rd July 2021.



- Awarded First Prize for presentation of paper titled “Reinventing Environment Education in Virtual Classrooms: the struggles and possibilities” in the virtual National Seminar Unlocking Education: A Paradigm Shift held on 15th July, 2021.



- Participated in the webinar titled “Enhancing Quality in OBE Evaluation” organized by the IQAC, Janki Devi Memorial College on 16th June, 2021.



- Participated in UGC stride virtual 10 days FDP on “Mitigating climate change” organized by the Central University of Tamil Nadu from 26th April to 6th May, 2021.

#### 4. Faculty Publications

Dr. Deepak Rawat published a research paper titled "Microbial fuel cells for mineralization and decolorization of azo dyes: Recent advances in design and materials" in the Science of the Total Environment (Elsevier).

<https://www.sciencedirect.com/science/article/abs/pii/S0048969722011305>





Science of The Total Environment

Volume 826, 20 June 2022, 154038



Review

## Microbial fuel cells for mineralization and decolorization of azo dyes: Recent advances in design and materials

Archana Yadav <sup>a</sup>, Pankaj Kumar <sup>a, 1</sup>, Deepak Rawat <sup>a, b, 1</sup>, Shafali Garg <sup>a</sup>, Paromita Mukherjee <sup>a</sup>, Furqan Farooqi <sup>a</sup>, Anurag Roy <sup>c</sup>, Senthilarasu Sundaram <sup>c, d</sup>, Radhey Shyam Sharma <sup>a, e</sup>, Vandana Mishra <sup>a</sup>  

Yadav, Archana, et al. "Microbial fuel cells for mineralization and decolorization of azo dyes: Recent advances in design and materials." Science of The Total Environment (2022): 154038.

### 5. Faculty Development Programme(s)

Name of faculty	Department	Title of the FDP	Organizing Inst	Duration
Ms. Ifrah Rehman	EVS	Mentoring for Institutional Social Responsibility and Facilitation for Community Engagement	MGNCRE, Department of Higher Education, Ministry of Education, Gol	2nd to 6th February 2022



## 6. Faculty research projects

### Dr Deepak Rawat

- Principal Investigator (PI) in a British Phycological Society, UK funded project on “*Iron-dependent mutualism between Chlorella sorokiniana and Ralstonia pickettii forms the basis for a self-sustainable bioremediation system.*” The project was initiated in July 2021 and completed in December 2021.
- Co-PI in an ongoing project on “*Environmental fate of textile dye based on its partitioning in sediment- water phases*” under Faculty Research Programme of the Institute of Eminence scheme, University of Delhi.

## 7. Student-faculty research projects

### 7.1 Dr Deepak Rawat

- Mentor of the ongoing student research project on “How extinction of bees will have an economic impact on agriculture production” by Anisha Yadav, Vedika Jha, and Ekta Yadav
- Mentor of the ongoing student research project on “Road to establish a cost-effective and eco-friendly hydrogen economy in India” by Aditi, Aarti, Sakshi Sharma, Aarti Yadav, Soniya Yadav, Tannu, and Aruni Saxena

### 7.2 Ms. Ifrah Rehman

- Completed a students’ research project on “Awareness on Environmental and Health Hazards of Sanitary Napkins and Factors that Impact College Students’ Choice of



