



NEHRU GRAM BHARATI

(Deemed to be University)
[Estd. U/s-3 of UGC Act 1956]



Department of Botany, the Central Instrumentation Facility, Waste Management Committee, Green Audit Committee and Institutional Innovation Councils Cells Nehru Gram Bharati (Deemed to be University), Prayagraj, Jointly organize:

National Training

On

Exploring bio-techniques to assess the role of Biodiversity Ecosystem Functioning and Services

(August 23-29, 2024)

Seat Available-30

Registration Last Date- August 20, 2024

Registration Fees-2000

::About the Nehru Gram Bharati (Deemed to be University), Prayagraj::

Nehru Gram Bharti (Deemed to be University) occupies an esteemed place among the ruler universities of India for over decades now. Established on 27th June 2008, it is one of the promising institutes in the state of Uttar Pradesh situated at the bank of river Ganges. It was basically conceived by our 1st Prime Minister of India, Late Pt. Jawahar Lal Nehru, who laid the foundation stone of Nehru Gram Bharti on 26th July 1962 in the village of “Rishi Durvasha Ashram” Kotwa, Jamunipur, Dubawal Complex of his popular consultancy in Prayagraj district. His dream translated into reality by Shri. J.N. Mishra, who had a clear vision and dedication to the cases of upliftment of ruler message through education. As on date, the campus has emerged as a prominent establishment of professional, technical education and traditional education for meeting the aspirations of youth from ruler as well as urban areas. To begin with “Rajiv Gandhi Degree College” was established in the year 1996 and upgraded to “Rajiv Gandhi Post Graduate College” from the academic session 2000 -01 which subsequently merge into the ‘Nehru Gram Bharti (Deemed to be University)’ in 2008-09 after University Grants Commission recommended to the Ministry of Human Resources and Development for granting it Deemed to be university status. The MHRD noticed vide its gazette Notification no: F.9-42/2005-43(A) dated as 27th June 2008 bestowing the Deemed to be university status to Nehru Gram Bharti. University is composed of 6 campuses in encircling approximately 76 acres of land spread over within a radius of about 5 km.

About the Programme:

The most unique feature of Earth is the existence of life, and the most extraordinary feature of life is its diversity. Approximately 9 million types of plants, animals, protists and fungi inhabit the Earth. So, too, do 7 billion people. Two decades ago, at the first Earth Summit, the vast majority of the world’s nations declared that human actions were dismantling the Earth’s ecosystems, eliminating genes, species and biological traits at an alarming rate. This observation led to the question of how such loss of biological diversity will alter the functioning of ecosystems and their ability to provide society with the goods and services needed to prosper. Ecosystem services are the suite of benefits that ecosystems provide to humanity. Here we focus on two types of ecosystem services—provisioning and regulating. Provisioning services involve the production of renewable resources (for example, food, wood, fresh water). Regulating services are those that lessen environmental change (for example, climate regulation, pest/disease control).

Consensus statement one: There is now unequivocal evidence that biodiversity loss reduces the efficiency by which ecological communities capture biologically essential resources, produce biomass, decompose and recycle biologically essential nutrients.

Consensus statement two: There is mounting evidence that biodiversity increases the stability of ecosystem functions through time.

Consensus statement three: The impact of biodiversity on any single ecosystem process is nonlinear and saturating, such that change accelerates as biodiversity loss increases.

Consensus statement four: Diverse communities are more productive because they contain key species that have a large influence on productivity, and differences in functional traits among organisms increase total resource capture.

Consensus statement five: Loss of diversity across trophic levels has the potential to influence ecosystem functions even more strongly than diversity loss within trophic levels.

Consensus statement six: Functional traits of organisms have large impacts on the magnitude of ecosystem functions, which give rise to a wide range of plausible impacts of extinction on ecosystem function.

::Patrons::

Sri Manish Mishra
Honorable Chancellor NGB (DU)

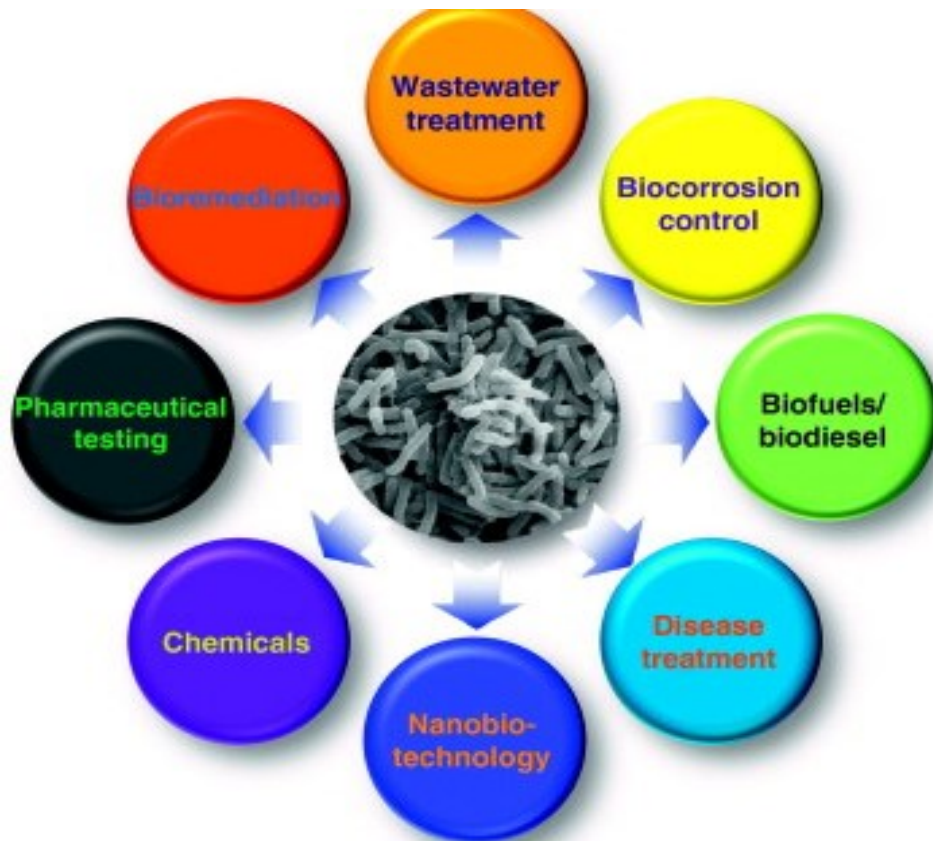
Prof. Rohit Ramesh
Vice Chancellor NGB (DU)

Dr. S.C. Tiwari
Pro Vice Chancellor NGB (DU)

Organizing Secretary I:
Dr Shakti Nath Tripathi
Head, Department of Botany
Course Coordinator
Herbal Product Processing
NGB (DU) Prayagraj

Organizing Secretary II:
Mr. Pradeep Upadhyay
Faculty, Department of Botany
Course Coordinator
Mushroom Cultivation Technology
NGB (DU) Prayagraj

Convener:
Dr. Adi Nath
Faculty, Department of Botany
Member Convener -WMC, GAC, ICs
In charge- Central Instrumentation
Faculty, NGB (DU) Prayagraj



::Advisory Committee::

1. Prof. R.C. Tripathi, Prof. Incharge R&D, NGB
2. Sri R.L. Vishwakarma, Registrar, NGB
3. Dr. Asheesh Shivam, Director, Research Centre
4. Dr. Rudra P. Ojha, Dean, Faculty of Science, NGB
5. Dr. S.S. Mishra, Director IQAC, NGB
6. Dr. R.C. Mishra, Director , Jamunipur Campus, NGB
7. Dr. Himanshu Tandon, Joint Registrar, NGB

Organizing Committee

1. Dr. Asheesh Shivam Mishra, Director, Research, NGB
2. Dr. Rudra P. Ojha, Deptt. of Zoology, NGB
3. Dr. Amitabh Chandra Dwivedi, Deptt. of Zoology, NGB
4. Dr. Archana Suhukla, Deptt. of Mathematics, NGB
5. Dr. Vikram Singh, Deptt. of Physics, NGB
6. Dr. Anita Singh, Deptt. of Chemistry, NGB

REGISTRATION FORM
N.B: Mode of Payment:
online/NEFT/RTGS/DD Account Details:
Nehru Gram Bharati University Account
Number: 66630200000126
IFSC Code: BARB0VJHGNJ
(Fifth character is zero)
Bank Name :Bank of Baroda, Hanumanganj

NAME MR./MS./DR./PROF.	
DATE OF BIRTH	
DESIGNATION	
ORGANISATION (Full address)	
E-MAIL ID	
MOBILE NO.	ADDL. NO.
REGISTRATION FEE DETAILS: DD NO./DATE /NEFT/RTGS/ OR ANY OTHER ONLINE WITH REFERENCE NUMBER	
REMARKS (Office Use Only)	

REGISTRATION

Please fill up the registration form and send it to adinathupadhyay@gmail.com

All participants try to pay the registration fee in advance and confirm through mail.

(Signature of Participant)

ACCOMODATIONS

The participants are requested to explore their stay arrangements themselves. The information about the nearest is given below

Sr.No.	Hotel Details/GuestHouse	Tariff
1.	Anjali Girls Hostel, Jamunipur, Kotwa, Dubawal, Prayagraj	
2.	Hotel Vilas 22-C SardarPatelMarg(Adjacent to PVR),CivilLines,Prayagraj-211001	AC(DoubleBed)Rs.2600/- Non-AC (Double Bed) Rs.1600/-
3.	Guest House G. B. Pant Institute Social Sciences, Jhunsi- 211002, Prayagraj	AC(DoubleBed)Rs.1000/-
4.	Hotel Krishna Leelapur Road,Jhunsi-211002, Prayagraj	Non-AC(TripleBed) Rs. 1500/-
5.	Hotel Shree Krishna 11Reewa Building, Leader Road Opposite Railway stations, Prayagraj, Mob: 6387244242	AC(DoubleBed)Rs.1800/- Non-AC (Double Bed) Rs.1600/- AC(SingleBed)Rs.1400/- Non-AC (Single Bed) Rs.1200/-
6.	Hotel Arpit, Bandhwa, Tahirpur, Jhunsi, Prayagraj	Non-AC(DoubleBed) Rs. 1200/-
7.	Yoganand Charitable Trust, Near Railway Station, Nai Jhunsi, Prayagraj	Non-AC(DoubleBed)500 AC (Double Bed) 1000

Technical Details:

Friday, 23TH August, 2024

Venue	Nehru Gram Bharati Deemed to be University Research Centre Shashi Campus, Prayagraj
9:00Am – 10:00am	Reception and Registration
Key note Address 11:30-12:00	(Chief Guest) Prof. Shanthi Sundaram, Professor Centre of Biotechnology, University of Allahabad, Prayagraj

DEMONSTRATION SESSION I

Venue	Nehru Gram Bharati Deemed to be University Research Centre Shashi Campus, Prayagraj
Wet-Lab-I	Herbal Product Processing by using machine Double cone blender; Muffle furnace, Sox let apparatus, Tablet Dissolution, Distinguation, Friability apparatus, Soil, water analysis, Flame Photometer, Colorimeter etc.
012:30pm-05:30pm	Dr. R. P. Ojha & Dr. Adi Nath-Training Address and Instruments description
05:30pm	Tea

24TH August 2024 IInd Day

Venue	Nehru Gram Bharati Deemed to be University, Department of Botany, Research Laboratory, Prayagraj
Theme	Mushroom Cultivation Technology Aspect
9:45am-10:30 am	IL-Dr. Ena Gupta, Department of Home Science, University of Allahabad
10: 30-12:40	Dr. Adi Nath & Dr. Amitabh Chandra Dwivedi Nehru Gram Bharati Deemed to be University, Department of Botany, Research Laboratory, Prayagraj
01:26pm – 04:45pm	preparation of spawn substrate, process of spawn culture, selection of correct spawn, culture maintenance, mother spawn production and storage of spawn, Harvesting of mushrooms: identifying the right stage for harvesting, methods of harvesting; grading, packaging and storing mushroom, Nutrient values of mushroom – protein, carbohydrate, fat, fibre, vitamins and amino acids contents; short and long term storage of mushroom; preparation of various dishes from mushroom. Medicinal value of mushroom – cultivation, extraction, isolation and identification of active principle from mushroom. Pharmacological and economic values of mushroom.

25TH August, 2024, III Day

Venue	Nehru Gram Bharati Deemed to be University Research Centre Shashi Campus, Prayagraj
Theme:	Biochemical aspect
09:00am – 10:30am	Dr. Vinod Kannaujiya, Department of Botany, Banaras Hindu University
11:30am – 12:30am	Dr. Adi Nath & Dr. Anita Singh Venue- Nehru Gram Bharati Deemed to be University Department of Botany, Research Laboratory, Prayagraj
01:00pm – 05:00pm	Phytochemicals Test : 1-Total Phenolic Content (TPC) Ibrahim Khalil, et.al., 2012 2-Total Flavonoid Content (TFC) Change et .al, 2002; Stakovic, 2011 3-Total Flavonol Content (TF) Pattanayak et. al; 2011 & Kalita et. al; 2013 4-DPPH Assay (2,2-diphenyl-1-picrylhydrazyl) Mensor LL, et.al, 2001 5-Hydrogen peroxide (H ₂ O ₂) Ruch RT, et.al, 1984 6-Reducing Power Assay (RPA) Yen GC, Duh PD; 1994 7-ABTS assay Thaipong et al 2006; Gan et.al. 2010 8-Phosphomolybdenum (PM) Assay Prieto P et al. 1999 9-Ferric reducing antioxidant power (FRAP) assay Benzie & Strain; 1996

26TH August, 2024 IVth Day

Venue	Nehru Gram Bharati (Deemed to be University) Prayagraj
Theme	Bio-fuel, Biohydrogen, Biomethanol, Biomethanol production
09:45am - 10:30 am	IL- Dr. Sugandha Asthana, Department of Biotechnology, Amity University, Dubai
01:00pm - 05:30pm	Dr. Adi Nath & Dr. Vikram Singh Venue- Nehru Gram Bharati Deemed to be University, Department of Botany, Research Laboratory, Prayagraj
Laboratory	Cyanobacteria, Microalgae, Bacteria and Fungus Culture Lab Visit, Growth Kinetics, Pigment Estimation (Chlorophyll-a & b, Phycocyanin, Allophycyanin, Phyerythrin Estimation, Carotenoid estimation from various model organism and comparative yield quantification, Biochemical Estimation- Protein Estimation by Lowry method, Bradford method and Spectroscopic and comparative study for high yield Carbohydrate Estimation- Total Sugar Estimation by Anthrone method Reducing sugar estimation by Nelson-Samogyi Method, DNS method and Comparative study in various model organism, Lipid Estimation by Folch Method , Shanon Method and Bligh & Dyer method comparison for higher yield, Transesterification, Evaporation, Bio-fuel conversion and quantification

27TH August , 2024 (V Day)

Venue	Nehru Gram Bharati (Deemed to be University) Prayagraj
Theme:	Bio-control agent, Nanotechnology Approach
09:45am - 12:30noon	IL- Dr. Abhishek Bhardwaj, Deptt. of Environmental Sciences, Amity University, Gwalior
01:00pm - 05:30pm	Dr. Adi Nath & Dr. Archana Shukla Venue- Nehru Gram Bharati Deemed to be University, Department of Botany, Research Laboratory, Prayagraj
Laboratory	Genomic DNA Isolation From Cyanobacterium Synechocystis PCC 6808, Protein Profiling by SDS –PAGE, PCR amplification, 16S rDNA PCR reaction mixture, Purification of PCR products, Sequencing of PCR products (Sanger method), Purification and condition of PCR products (Sanger method). DNA sequencing of community DNA/mixed DNA/soil DNA, Subcloning DNA targets using PCR.

28TH August, 2024 (VI Day)

Venue	Nehru Gram Bharati (Deemed to be University) Prayagraj
Theme:	Medicinal and Carcinogenic Aspect
09:45am - 12:30noon	Dr. Munish Kumar, Deptt. of Biochemistry, University of Allahabad
01:00pm - 05:30pm	Dr. Adi Nath & Dr. Asheesh Shivam Venue- Nehru Gram Bharati Deemed to be University, Department of Botany, Research Laboratory, Prayagraj
Laboratory	EMS, MMS Chemical Mutagenesis, UV-B Physical Mutagenesis, Comparison with mutagen with their wild type, Replica plating, ARDRA(Amplified ribosomal DNA restriction analysis) or Ribotyping/RFLP mapping, Competent cell preparation from DH5 ALPHA jm109,NCIM 2428, Lipid extraction from microalgae & cyanobacteria by Folch method/Bligh & Dyer method.

29TH August, 2024 (VII Day)

Venue	Nehru Gram Bharati (Deemed to be University) Prayagraj
Theme:	Bioinformatics
09:45am - 12:30noon	Dr. Veer Singh, Young Scientist (DHR) ICMR-Rajendra Memorial Research Institute of ,Medical Sciences Patna
01:00pm - 04:30pm	Dr. Adi Nath & Mr. Pradeep Upadhyay Venue- Nehru Gram Bharati Deemed to be University Research Centre Shashi Campus, Prayagraj
Laboratory	Competent cell preparation from cyanobacteria, Transformation in <i>E. Coli</i> DH5 ALPHA jm109,NCIM 2428, Transformation in <i>Unicellular Cyanobacteria</i> , Ligation/cloning of PCR product in pGEMT@easy vector, Plasmid isolation by Bimboin & Dolly method of alkaline denaturation, RFLP marker development /RFLP mappiung/ Genome mapping Pure g DNA(<i>S. dimorphus</i>).
04:30-05:00pm	Prof. Anjana Pandey, Dept. of Biotechnology, MNNIT Prayagraj Valedictory andCertificate Distribution