



पृथ्वी विज्ञान मंत्रालय
Ministry of Earth Sciences



National Conference on Advance Biotechnology and Biosystem (NC ABB-2024)

Conference Proceedings

Department of Biotechnology
Deen Dayal Upadhyaya Gorakhpur
University, Gorakhpur, U.P.

Acknowledgement

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1. **D.D.U Gorakhpur University, Gorakhpur , Uttar Pradesh**
2. **Anusandhan National Research Foundation (ANRF) [Science and Engineering Research Board (Statutory Body Established Through an Act of Parliament: SERB Act 2008) Government of India]**
3. **Department of Biotechnology, Government of India, New Delhi**
4. **Ministry of Earth Sciences, New Delhi**
5. **American Chemical Society, USA**

**NATIONAL CONFERENCE ON
"ADVANCED BIOTECHNOLOGY AND BIOSYSTEM" (NC-ABB 2024)
TECHNICAL PROGRAMME SCHEDULE**

November 11, 2024 (Day-1)

Venue: Department of Biotechnology, D.D.U. Gorakhpur University

8:30AM-10:00 AM	Registration (Conference Hall)
10:00AM-11:00 AM	Inaugural Session Signing of MoU between DDUGU, Gorakhpur and The Genomic Foundation (TGF), New Delhi
11:00 AM-11:30 AM	High-Tea
TECHNICAL SESSION-I	
Chairman: Padma Shri Prof. (Dr.) R.C. Chaudhary, Chairman PRDF- Gorakhpur Rapporteur: Dr. Ashok Kumar, Department of Botany, D.D.U. Gorakhpur University	
11:30AM-12:20 PM	Keynote Lecture <i>Decoding of Plant Genomes Economically Important for India</i> Prof. Nagendra K. Singh, NIPB-IARI, New Delhi
12:20 PM-12:40 PM	<i>Management of Redox Homeostasis by Natural Products: A Key to Healthy Living</i> Prof. Abhay Kumar Pandey, University of Allahabad, Prayagraj
12:40 PM-1:00 PM	<i>Integrative Network Biology Approach for Identification of Potential Drug Targets: Thyroid Pathways a Case Study</i> Dr. Manish Kumar Gupta, VBS Purvanchal University, Jaunpur
1:00 PM-1:20 PM	<i>Patient's Serum-derived Exosomal-Contents May Serve As a Non-invasive Marker Development for Gallbladder Cancer</i> Dr. Girijesh Kumar Patel, MNNIT, Prayagraj
1:20 PM-1:40 PM	<i>Microbial Regulation of Plant Defence Genes: Unlocking Molecular Switches to Boost Crop Resilience for Sustainable Agriculture and Food Security</i> Dr. Shekhar Jain, Mandsaur University, M.P.
1:40 PM-2:00 PM	Discussion
2:00 PM-3:00 PM	LUNCH/POSTERSESSION
TECHNICAL SESSION-II	
Chairman: Prof. Ravi Kant Upadhyay, Head, Department of Zoology, D.D.U. Gorakhpur University Rapporteur: Dr. Mahendra Pratap Singh, Department of Zoology, D.D.U. Gorakhpur University	
3:00 PM - 3:40 PM	Keynote Lecture <i>Structural Attributes of HIV-1 Reverse Transcriptase (RT) That Contribute to Anti-HIV Drug Resistance</i> Prof. Bechan Sharma, University of Allahabad, Prayagraj
3:40 PM - 4:00 PM	<i>Natural Ligands as Inhibitors of β Secretase-1: Identifying Alzheimer's Disease Therapeutics Through In- Silico Approach</i> Dr. Ashutosh Mani, MNNIT, Prayagraj

4:00 PM - 4:20 PM	<i>Impairment in NMD Upon UPF3B-Knockout Accumulates and Stabilizes Alternatively Spliced Transcripts with Premature Termination Codons</i> Dr. Kusum Singh, IIT, Guwahati	
4:20 PM - 4:40 PM	<i>Targeting the Cytoskeleton: Advanced Therapeutic Strategies for Cancer Treatment</i> Dr. Ankit Rai, Gujarat Biotechnology University, Gandhinagar	
4:40 PM - 5:00 PM	<i>Hsp27 over expression protect against cadmium induced nephrotoxicity in Drosophila melanogaster</i> Dr. Naveen Kumar Gautam, SGPGIM, Lucknow	
5:00 PM - 5:10 PM	Tea break	
5:10 PM – 6:30 PM	TECHNICAL SESSION-III Oral Presentation (8+2=10 mins. for each) <i>Chairman: Prof. Abhay Kumar Pandey, Professor, Department of Biochemistry, University of Allahabad, Prayagraj</i> <i>Rapporteur: Dr. Manish Pratap Singh, Department of Zoology, D.D.U. Gorakhpur University</i>	
5:10 PM – 5:20 PM	Oral 1	<i>Assessment of morpho-agronomic and yield-related traits in M4 and M5 mutants of Kalanamak rice cultivar (Oryza sativa L.).</i> Tanmay Mishra
5:20 PM – 5:30 PM	Oral 2	<i>Genetic Mutational Patterns in High and Low Isoniazid Levels in Tuberculosis from Eastern Uttar Pradesh</i> Nandini Singh
5:30 PM – 5:40 PM	Oral 3	<i>pH regulation of effector molecules in fungal pathogenesis</i> Dr. Amit Kumar Dubey
5:40 PM – 5:50 PM	Oral 4	<i>Enzyme mediated preparation of handmade paper using agriculture waste</i> Dr. Aiman Tanveer
5:50 PM – 6:00 PM	Oral 5	<i>Deleterious effect of gut microbiota-derived p-Cresyl Sulfate on colon cancer Cells</i> Manish Kushwaha
6:00 PM – 6:10 PM	Oral 6	<i>ctDNA as a diagnostic oncologic marker for early detection of multiple cancer</i> Dr. Anupama Ojha
6:10 PM – 6:20 PM	Oral 7	<i>A new Tetraploid cytotype of Microlepia speluncae (l.) t. moore (Dennstaedtiaceae - Pteridophyta) from India</i> Dr. S. Dominic Rajkumar
6:20 PM – 6:30 PM	Oral 8	<i>Plant Adaptive Mechanisms to Salinity and Drought Stress: A Comprehensive Review of Physiological and Molecular Responses</i> Dr. Rakesh Kumar Verma
7:00 PM onwards	Dinner	

**NATIONAL CONFERENCE ON
“ADVANCED BIOTECHNOLOGY AND BIOSYSTEM” (NC-ABB 2024)
TECHNICAL PROGRAMME SCHEDULE**

November 12, 2024 (Day-2)

Venue: Department of Biotechnology, D.D.U. Gorakhpur University

8:30AM-9:30AM	Breakfast
TECHNICAL SESSION-IV	
<i>Chairman: Prof. V.S. Verma, Head, Department of Mathematics and Statistics, D.D.U. Gorakhpur University</i>	
<i>Rapporteur: Dr. Sushil Kumar, Department of Zoology, D.D.U. Gorakhpur University</i>	
9:40AM-10:00AM	<i>Reviving the Ancestral Treasure of Indian Himalayas-The Story of Millets and Pseudocereals</i> Dr. D.C. Joshi, VIPKAS, Almora
10:00AM-10:20AM	<i>Revitalizing Soils and Improving Crop Yields with Microbial Solutions</i> Dr. Swati Tripathi, Amity University, Noida
10:20AM-10:40AM	<i>The structural and functional cohesiveness of plants' photosynthetic apparatus in response to abiotic stresses</i> Dr. Ramwant Gupta, D.D.U. Gorakhpur University, Gorakhpur
10:40AM-11:00AM	<i>KRBP72 facilitates ATPase-dependent editing progression through a structural roadblock in mitochondrial A6 Mrna</i> Dr. Ashutosh P. Dubey, University of Buffalo, New York
11:00AM-11:20AM	<i>The Advancing Role of Biotechnology in Infectious Disease Diagnostics</i> Dr. Vivek Hada, AIIMS, Gorakhpur
11:20AM-11:40AM	<i>Bioactive Compounds from Natural Sources and Their Role Against Human Pathogenic Bacteria</i> Dr. Pradeep Kumar, University of Lucknow, Lucknow
11:40AM-12:00PM	<i>Assessment of microbiological quality of river Saryu and characterization of AR bacteria</i> Prof. Shailendra Kumar, Dr. R. M. L Awadh University, Ayodhya
12:00PM-12:20PM	Poster Display/Tea break
TECHNICAL SESSION-V	
<i>Chairman: Prof. Umesh Yadava, Department of Physics, D.D.U. Gorakhpur University</i>	
<i>Rapporteur: Dr. Ambrish Kumar Srivastava, Department of Physics, D.D.U. Gorakhpur University</i>	
12:20PM-12:40PM	<i>Transplantation of Bone Marrow Stem Cell: A Promising Cell Therapy for Genetic Liver Diseases</i> Dr. Neelam Yadav, Dr. R. M. L Awadh University, Ayodhya
12:40PM-1:00PM	<i>Design, Synthesis and Efflux Pump Inhibitory Potential of Gallic Acid based compounds</i> Dr. Gaurav Raj Dwivedi, ICMR-RMRC, Gorakhpur
1:00PM-1:20PM	<i>Jackfruit waste: a natural resource for valued bioproducts and their beneficial uses for sustainable ecosystem</i> Prof. Neelam Pathak, Dr. R. M. L Awadh University, Ayodhya
1:20PM-1:40PM	<i>Plant-Based Biopharmaceuticals: The Next Generation of Herbal Drugs</i> Prof. Sunil Kumar Singh, Mahayogi Gorakhnath University, Gorakhpur

1:40PM-2:00PM	<i>RT-RPA: CRISPR/Cas12a based one-pot detection of the Chikungunya virus</i> Dr. Rajeev Singh, ICMR-RMRC, Gorakhpur
2:00PM-3:00PM	Lunch
	<p style="text-align: center;">VALEDICTORY SESSION: 3:00 PM onwards</p> <p style="text-align: center;">Dr. Ayyanadar Arunachalam Director ICAR-Central Agroforestry Research Institute (CAFRI), Jhansi will be the Chief Guest and shall deliver keynote address.</p> <p style="text-align: center;">and</p> <p style="text-align: center;">Prof. Shantanu Rastogi Pro-Vice Chancellor & Dean, Faculty of Science, Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur shall preside over the session</p> <p style="text-align: center;"><i>❖ Awards for Best Poster and Oral Presentation(s)</i> <i>Signing of MoU between DDUGU, Gorakhpur and ICAR-Central Agroforestry Research Institute (CAFRI), Jhansi</i></p>

Report on the Conference

Biotechnology is the area which encompasses almost all areas of human life. It is playing important role in solving the challenge of hunger worldwide. It is contributing significantly in health sector like drug discovery, vaccine production, gene therapy, stem cell technology etc. Now a day's environment has become a major concern and Biotechnology is being applied for the environment protection. Biotechnological industrial products are on high demand in the world. The occasion will provide an opportunity to review the status and future trends in the specified areas and suggest viable ways to adopt the latest developments at International and National Institutions.

Techniques have been developed to produce rare and medicinally valuable molecules, to change hereditary traits of plants and animals, to diagnose diseases and cure them either through biotechnologically derived proteins and polypeptides forming a new class of potential drugs, or through designed vaccines to clean up the environment. To discuss more about the current technology and biosystems the Department of Biotechnology, Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur organized two days **National Conference on Advanced Biotechnology & Biosystem** (NC-ABB 2024) at Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur, Uttar Pradesh from **November 11-12, 2024**. Near about 100 research papers were communicated by different scientists and research scholars. The conference was well attended by near about 200 scholars from different parts of the country. The conference was marked by inaugural function, five technical sessions, followed by a valedictory function.

Inaugural Function (Day-1: 11th Nov. 2024)

The inaugural function was held on 11th Nov. 2024 and the chief guest for the occasion was Prof. Nagendra Kumar Singh, President, The Genomics Foundation, Dr. J.C Bose Fellow, National Professor, B.P Pal Chair & Ex- Director, National Institute of Plant Biotechnology, ICAR-IARI, New Delhi. The Function was presided by Hon'ble Vice-Chancellor, Prof. Poonam Tandon and Prof. Shantanu Rastogi, Pro-Vice-Chancellor, Deen Dayal Upadhyaya Gorakhpur University. Prof. Rajarshi K Gaur, Convener, Prof. Dinesh Yadav and Prof. Sarad K Mishra (as Co-convener) and Dr. Gaurav and Dr. Pawan (as organizing

secretary) conducted the function. The welcome address was delivered by Prof. Rajarshi K Gaur, Prof. Dinesh Yadav presented the theme of the conference, Prof. Nagendra K Singh, Chief Guest provided and insight into the recent innovations in agricultural biotechnology and appreciated the efforts of the organizers for the said conference. Prof. Shantanu Rastogi presented his view about the relevance of such conferences and said that such events bring an opportunity for the collaborative research and especially the students get a platform to interact with the experts working in diverse areas of the Biotechnology. In the Presidential address, Hon'ble Vice-Chancellor gave a glimpse of the research profile of the university and revealed that several initiatives have been to enhance the quality research, many of which have started showing prominent results. She appreciated the Department of Biotechnology for organizing such conferences and generating financial support from several funding agencies like SERB (now ANRF), DBT, Ministry of Earth Sciences and American Chemical Society within a very short time.



The function also witnessed a MoU signed between Deen Dayal Upadhyaya Gorakhpur University and The Genomics Foundation, New Delhi for promoting collaborative research in the areas of genomics intervention in agriculture. The function ended with a vote of thanks presented by Prof. Sarad Kumar Mishra.



First Technical Session(Day-1: 11th Nov. 2024)

The first technical session was conducted by Prof. Dinesh Yadav, Co-convenor along with PhD scholars Shivangi and Mahima. Padma Shri Prof. (Dr.) R.C. Chaudhary, Chairman PRDF-Gorakhpur, and Dr. Ashok Kumar, Department of Botany, D.D.U. Gorakhpur University played the role of the chairman and rapporteur of this session. This session had one keynote lecture and four invited lectures. The keynote lecture was delivered by Prof. Nagendra K Singh on “*Decoding of Plant Genomes Economically Important for India*”. The lecture highlighted the genomics intervention in agriculture, its potential and expertise of the Indian scientist in genome sequencing of diverse crops. He presented the ongoing research in plant biotechnology in India and showed some of the promising results, where genomics has played a significant role in the development of climate resilient crop varieties. Professor Singh discussed the fundamentals of genomics and its applications. Complete physical mapping, genome sequencing, high density DNA fingerprint, IPR protection of germplasm, trait linked and enhancing plant breeding by DNA markers were the key points of the lecture. Professor Singh in his lecture also highlighted the Indian initiative for rice genome sequencing, clone by clone sequencing, BAC shotgun sequencing, next generation sequencing (NGS) as well as breeding of isogenic lines in Kala Namak and Samba rice. Professor Singh highlighted the importance of study of genomes of tomato, wheat, pigeon pea, jute, mango, neem, tulsi, turmeric etc. along with rice and their applications in food security, social and economic upliftment.



The first invited lecture was delivered by Prof. Abhay Kumar Pandey, Department of Biochemistry, University of Allahabad on “*Management of Redox Homeostasis by Natural Products: A Key to Healthy Living*”. This lecture was an update of the role of natural products for health

care and reflected the strategies to manage the redox homeostasis. Professor Pandey discussed in detail the importance of homeostasis as well as the factors affecting homeostasis in the human body. He highlighted the role and structure of free radicals in redox imbalance and oxidative stress. He explained the effect of transition metal in converting free radicals from less reactive to more reactive and the importance of tissue destruction by free radicals, prevention of diseases and gene expression. He also presented his research in the relevant area to the audiences. This was followed by another invited lecture by Dr. Manish Kumar Gupta, Associate Professor, VBS Purvanchal University, Jaunpur on "*Integrative Network Biology Approach for Identification of Potential Drug Targets: Thyroid Pathways a Case Study*". Dr. Gupta elaborated on the features and applications of integrated network biology as well as the topological view of biology and the approach to human diseases. In the lecture, Dr. Gupta particularly emphasized on mathematical applications in drug formulation, drug design, system level knowledge, in-silico models, pathway modeling and various modeling techniques. The fourth lecture of the session was delivered by Dr. Girijesh Kumar Patel, Assistant Professor and Dr. Ramalinga Fellow, MNNIT, Prayagraj, on the topic "*Patient serum-derived exosomal contents may serve as a non-invasive marker development for gallbladder cancer*". He explained the functions of the gallbladder, the risks associated with gallbladder cancer and the relation of this cancer with gender inequality. All the participants were made aware of the challenges in prevention of gallbladder cancer and exosomes are a potential source for biomarkers used in its treatment. The fifth invited lecture of the session was delivered by Dr. Shekhar Jain, Mandsaur University, Madhya Pradesh on the topic "*Microbial Regulation for Plant Defense Genes Unlocking Molecular Switches to Boost Crop Resilience for Sustainable Agriculture and Food Security*". Dr. Shekhar Jain gave a detailed description on various aspects of sustainable development and food security.

Second Technical Session (Day-1: 11th Nov. 2024)

The second technical session was conducted by Prof. Sarad Kumar Mishra, Co-convenor along with PhD scholars Priyanka Bharti and Ambrish Pandey, Department of Biotechnology Shivangi and Mahima. Prof. Prof. Ravi Kant Upadhyay, Head, Department of Zoology and Dr. Mahendra Pratap Singh, Department of Zoology D.D.U. Gorakhpur University played the role as the chairman and rapporteur. Prof. Bechan Sharma, Head, Department of Biochemistry and Dean, faculty of Science, delivered the keynote lecture entitled "*Structural Attributes of HIV-1 Reverse Transcriptase (RT) That Contribute to Anti-HIV Drug Resistance*". He emphasized the strategies for developing drugs for HIV and represented his work on the HIV-1 reverse transcriptase using several molecular and bioinformatics tools. He gave a glimpse of structural aspects of several

reverse transcriptase which contribute to anti-HIV drug resistance. This was followed by invited lecture delivered Dr. Ashutosh Mani, Associate Professor, MNNIT, Prayagraj on “*Natural Ligands as Inhibitors of β Secretase-1: Identifying Alzheimer's Disease Therapeutics Through In- Silico Approach*”. This lecture reflected potential of bioinformatics approach in addressing issues related to Alzheimer. He showed several ligands which could target as inhibitor of β Secretase-1, one of the potential candidates for developing drugs and explained the *in-silico* methodology used for drug target identification. The next invited lecture was delivered by Prof. Shailendra Kumar, Dr. R. M. L Awadh University, Ayodhya on “*Assessment of microbiological quality of river Saryu and characterization of AR bacteria*”. This lecture showed the how one can assess the quality of river water by knowing the prevalence of different microbial communities. He showed some of his results on the ongoing research work on saryu river emphasizing the microbial population dynamics over the years of assessment. This was followed by another invited lecture by Dr Kusum Singh, Assistant Professor, IIT, Guwahati on “*Impairment in NMD Upon UPF3B-Knockout Accumulates and Stabilizes Alternatively Spliced Transcripts with Premature Termination Codons*”. This was a classical molecular biology lecture, where several molecular biology tools relevant for deciphering the expression were discussed highlighting one of her research work. The final invited lecture of this technical session was delivered by Dr. Naveen Kumar Gautam, Associate Professor, SGPGIM, Lucknow on “*Hsp27 over expression protect against cadmium induced nephrotoxicity in Drosophila melanogaster*”. This lecture provided an insight into the utility of *Drosophila melanogaster* as excellent model system for revealing the role of Hsp70 in cadmium induced nephrotoxicity. It was an excellent lecture for the participants, especially students to know the potential of such model system in deciphering the expression of several genes.

Third Technical Session (Day-1: 11th Nov. 2024)

This technical session was coordinated by Dr. Pawan Kumar Dohrey , Assistant Professor along with two PhD Scholars Nupur Sharma and Rajeev Ranjan, Department of Biotechnology D.D.U. Gorakhpur University. The chairman and rapporteur for this technical session were Prof. Abhay Kumar Pandey, Professor, Department of Biochemistry, University of Allahabad, Prayagraj and Dr. Manish Pratap Singh, Department of Zoology, D.D.U. Gorakhpur University. This technical session was exclusively conducted for the participants selected for oral presentations. This was also evaluated for two awards for the best oral presentations by experts.

Fourth Technical Session(Day-2: 12th Nov. 2024)

This technical session of the second day of the conference was coordinated by Prof. Rajarshi Kumar Gaur , Convener along with two research scholars namely Sapna and Archi Shukla, Department of Biotechnology. D.D.U. Gorakhpur University. Prof. V.S. Verma, Head, Department of Mathematics and Statistics and Dr. Sushil Kumar, Department of Zoology, D.D.U. Gorakhpur University played the role of Chairman and Rapporteur of this technical session. The first invited lecture of this session was delivered by Dr. D.C. Joshi, Senior Scientist, VIPKAS, Almora on "*Reviving the ancestral treasure of the Indian Himalayas - the story of millets and pseudo-cereals*". This lecture revealed the holistic approach for the improvement of millets. He presented the relevance of millets of Indian Himalayas, the strategies for germplasm preservation, the on-going research on identifying the germplasm for several agronomics traits for its utility for developing climate resilient millets. He also explained the success stories for several millet varieties developed at his institute as a collaborative effort by several National and International Institutes. The limitation and challenges for the millets research were well taken in his lecture and provided several potential areas of research which could be conducted. This was followed by invited lecture by Dr. Ramwant Gupta, Associate Professor, Department of Botany, D.D.U Gorakhpur University, Gorakhpur on "*Structural and functional integration of photosynthetic apparatus of plants in response to abiotic stresses*". The lecture reflected the potential of photosynthetic apparatus as a target for crop improvement by knowing its response towards abiotic stresses. He highlighted his ongoing research on using this strategy for millet improvement, especially targeting on the overall yield. The less explored photosynthetic machinery was made clear to the participants. The third invited lecture of this session was delivered by Dr. Ashutosh P. Dubey, research scientist, University at Buffalo, New York, USA on "*KRBPT2 facilitates ATPase-dependent editing progression through a structural constraint in mitochondrial*". This was another classical lecture of molecular biology, where he discussed his research on *KRBPT2* using several state-of-the art tools in biotechnology. This was followed by another invited lecture by Dr. Vivek Hada, Associate Professor, AIIMS, Gorakhpur on "*Advanced role of biotechnology in infectious disease diagnosis*". This lecture gave a complete picture of the recent developments in biotechnology focusing on diagnostic tools for infectious diseases. Several classical, molecular, immunological tools were discussed in this lecture highlighting the principle, advantages and limitations of each tools. He also shared his experiences with some of the tools being used in his ongoing research with the participants.



Fifth Technical Session(Day-2: 12th Nov. 2024)

This technical session was coordinated by Dr. Gaurav Singh, Assistant Professor Department of Biotechnology, D.D.U. Gorakhpur University along with two research scholars of the Department namely Manish Kumar Singh and Sandeep K Tiwari PhD scholar, Department of Biotechnology D.D.U. Gorakhpur University. Prof. Umesh Yadava and Dr. Ambrish K Srivastava, Assistant Professor, both from Department of Physics, D.D.U Gorakhpur University conducted the session as chairman and rapporteur respectively. The first invited lecture of this technical session was delivered by Dr. Neelam Yadav, Assistant Professor, Department of Biochemistry, Dr. Ram Manohar Lohia Avadh University, Ayodhya on "*Transplantation of bone marrow stem cells: a promising cell therapy for genetic liver diseases*". This lecture gave an insight into the promising stem cell technology with reflection from basics to recent applications. She presented the potential of bone marrow stem cells targeting genetic liver diseases and revealed the strategies adopted by her research group. This was followed by another invited lecture by Dr. Gaurav Raj Dwivedi, Scientist, ICMR-RMRC, Gorakhpur entitled "*Design, synthesis and efflux pump inhibitory potential of gallic acid-based compounds*". His lecture reflected the strategies for the novel drug discovery from natural products. He provided an insight into several natural products being tested in his lab

to assess the potential for drugs. The next invited lecture was delivered by Prof. Sunil Kumar Singh, Dean, Faculty of Allied Health Sciences, Mahayogi Gorakhnath University, Gorakhpur on "*Plant-based biopharmaceuticals: Next generation of herbal medicines*". His lecture provided a comprehensive view on herbal medicine, the strategies for its identification, assessment, modifications and applications for several diseases. The safety of the plant-based drugs along with some of the limitations were well taken in his lecture. This was followed by the last invited lecture of this technical session by Dr. Rajeev Singh, Scientist, ICMR-RMRC, Gorakhpur on "*RT-RPA: CRISPR/Cas12A based detection of Chikungunya virus*". This lecture revealed an excellent example of using state-of-the art technologies CRISPR-Cas for developing diagnostic tools. He presented his work on developing detection kit for chikungunya virus using one pot reverse transcription recombinase polymerase amplification (RT-RPA): CRISPR/Cas12a, for which patent has been filed.

Valedictory Function (Day-2: 12th Nov. 2024)

The valedictory function was presided by Hon'ble Vice-Chancellor, Prof Poonam Tandon, Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur. The chief guest for this occasion was Dr. A. Arunachalam, Director, ICAR-Central Agroforestry Research Institute, Jhansi.



The function started with the welcome address by the convener and Head, Department of Biotechnology, Prof. Rajarshi K Gaur, followed by a detailed report of the conference by the organizing secretary Dr. Pawan Kumar Dohrey. The awards for the four best posters, sponsored by American Chemical Society (ACS) along with two awards for best oral presentation was conducted after the detailed report. This was followed by a remark by Pro-Vice Chancellor, Prof, Shantanu Rastogi on the successful conduct of the 2-day conference. The chief guest Dr. A. Arunachalam then gave a short keynote address highlighting the importance of such conference and the relevance in the present day. He discussed his experience in agroforestry and explained in a very simple way that how the forest cover is gradually declining for the development of several projects and how this could be increased. He emphasized the adopting of strategies for co-existence of all living beings and provided the alarming statistics related to the forest areas of India. The several approaches adopted in his institute were also highlighted in his keynote address.



This

was followed by signing of MoU between Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur and ICAR-Central Agroforestry Research Institute, Jhansi.



In her presidential address, Hon'ble Vice-Chancellor, first congratulated the organizer for successfully conducting the national conference and emphasized that such conferences bring the possibility for collaborative research. She congratulated the participants who were awarded for poster and oral presentation but emphasized that the participation in the conference is itself an award and students should always try to attend such conferences as it provides a platform for interactions with experts from diverse fields.



Feedback

Many thanks again for allowing me to participate in this exciting meeting and thank you and your colleagues for the interesting discussions the great accommodations and the exciting excursions and the travel refund.-**Prof. N.K.Singh**

Many-many congratulations to you and your team for grand success of the Conference 2024. My heartiest thanks to you and the organizing team for inviting me and giving me the opportunity to come to your university and share my views. It would be my pleasure if could be of any help to your students and faculty.-**Prof. Bechan Sharma**

While thanking you for the courtesy and hospitality extended by you and your team during my stay at lush green beautiful campus, I also wish to congratulate you for a successful endeavour having very fruitful deliberation all through. I am sure that under your leadership the students and staff will attain new heights.-**Prof. Abhay Kumar Pandey**

It was nice to receive your letter. I appreciate for your all help with smiling face. Stay in luxurious hotel was marvelous with your scholar. We were well treated throughout the period and enjoyed your hospitality. -**Dr. Ashutosh Mani**

Your institute is in no way less than an oasis in desert. Academically all of you are very strong in your subjects. You quite intelligently invited the speakers; some of them were world widely known. Good speakers are the base of success of any meeting.-**Dr. Ankit Kumar**

For me it was the second visit to your university. I just love the campus and environment. I will always look for an opportunity to visit your university. I really like the way your students do participate in the discussion. You have organized the meeting very well and the hospitality extended to us was wonderful. -**Manish Kushwaha**
(Participants)

Just one minor suggestion for technical program, that there were some lectures in that technical session which were not in sync with the theme of the session. I think that could be reason that some speakers may not be available with the allocated time slot.-**Dr. Ambrish Srivastava**

I will look forward an opportunity to work together.-**Dr. Pooja Tripathi (Participants)**

Thank you for extending all the hospitality. Although journey was tedious, but stay was

comfortable. Nice campus and good ambience.-Dr. Shaekhar Jain

*I would like to thank very warmly the organizers for their incredible work and efforts which contributed to the success to the success of the conference-**Ms. Archana Tiwri (Participants)***

*First, kindly accept my greetings for hosting a very successful event. The hospitality offered to all the guests was excellent. Please do congratulate all your colleagues and subordinates for the tireless effort they had put to make this event a grand success._**Dr. A. Arunachalam***