





IDP-NAHEP Pantnagar Updates

G. B. Pant University of Agriculture & Technology Pantnagar 263145, Uttarakhand

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Message of IDP Leader, GBPUAT, Pantnagar

Enriching Tale of Transformation with IDP-NAHEP

he World Bank funded project Institutional Development Plan of National Agricultural Higher Education Project (IDP-NAHEP) was granted to G.B. Pant University of Agriculture and Technology, Pantnagar in 2019. The project officially started its functions in the University campus in September 2019. Now when the project has completed its official duration of two years, it gives me immense pleasure to reflect upon the enriching journey of the project. The project was initiated in a structured manner, with strict time-bound targets, and most importantly with a holistic vision which aimed for the overall development of the University. Also, another unique thing which made the IDP-NAHEP, Pantnagar as one of the leading IDPs of the country was its work culture for which the entire IDP Pantnagar team has to be credited.



Their spirit towards goal completion, ensuring task efficiency, and intensive hand holding led to a wide scale impact, touching the lives of major stakeholders of the University. I put forth my good wishes for the entire IDP Pantnagar team for their continued success for the extended project duration.

(Tej Partap)

Idea Pitching Contest Organized by IDP-NAHEP, Pantnagar

200+ Participants from 50+ Universities

eeping a focus on development of the entrepreneurial capability of students and an objective of creating an idea bank by bringing fresh ideas to the forefront, the Innovation and Incubation Centre of IDP-NAHEP, Pantnagar organized Ingenious -An Idea Pitching Contest on the theme Providing Urban Amenities to Rural Areas. Students from 50 different universities/colleges/ institutes participated from all across the country. There were a total 102 ideas which were submitted by 200 plus students either individually or in groups. The idea pitching contest was organised in two rounds. The first round was the Virtual Pitch Contest wherein the students submitted their ideas. These ideas were evaluated by an expert team comprising of research scholars, scientists and corporate professionals. The expert team then shortlisted 18 unique, practical and needful ideas for the second round which was the Final Presentation Round and was held on September 26, 2021 in online mode.



The Final Presentation Round was conducted on Microsoft Teams platform, where all the selected contestants joined and put their best to elucidate their ideas. Each team created a prototype of their brilliant idea and pitched it in front of the panel of esteemed judges which included Mr. Manish Kumar, Co-Founder, Back to Village (B2V) and Dr. Yogita Bohra, Assistant Professor, Plant Pathology, Punjab Agricultural University, Ludhiana. Out of the 18



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shortlisted teams, the top 8 teams were recognised for their excellent ideas. The event successfully ended with the valuable words of Dr. S.K. Kashyap, PI, IDP-NAHEP, Pantnagar; Dr. S.K. Guru, Nodal Officer (Academic), IDP-NAHEP, Pantnagar and Dr. A.K. Upadhyay, Coordinator, Innovation and Incubation Centre, IDP-NAHEP, Pantnagar who extended their guidance and vision for the young minds to excel in the field of innovations and entrepreneurial scenario.

They also quoted several examples of real-world to encourage the budding entrepreneurs. The judges also proposed their insights for the event and suggested possible improvements in the ideas of the participants. They however appreciated all the ideas and wished that the participants soon realize their dreams and do something for the society and nation-building. The participants also thanked the IDP-NAHEP team for providing this wonderful opportunity.

Winners of Ingenious'21 - The Idea Pitching Contest

Award	Name	University/Institute	Idea	
Winner	Ms. Sneha Kashyap	CEPT University, Ahmedabad	abad Cheap Life Saver for Flood Prone	
-			Rural Areas	
	Ms. Shruti Kashyap	GBPUAT, Pantnagar		
First Runner-Up	Ms. Aishna Shrivastava	GBPUAT, Pantnagar	Project Black-Green Diamond	
	Ms. Mallika Tripathi			
	Ms. Padmini Joshi			
	Mr. Ravi Kumar Jha			
Second Runner-Up	Mr. Ayush Prasad	GBPUAT, Pantnagar	R-Hope Illuminating Rural Household	
	Ms. Neha Singh			
	Ms. Palak Chaturvedi			
	Ms. Ria Mehra			
Special	Ms. Neha Goyal	IIT, Bombay	Aasan Kisan	
Recognition Prize	Mr. Nischay			
Special	Mr. Kailash Kumar	B. TNAU, Coimbatore	Agriculture Machinery	
Recognition Prize	Mr. Amit Chatterjee	IIT, Indore	Hiring Services Version1.0	
Special			Industry 4.0 Based Smart Agricultural	
Recognition Prize	Mr. Arka Prava Das	Institute of Engineering	Solutions for Rural Areas	
		and Industrial Technology,		
		Durgapur		
	Mr. Sanjay Biswas	Maulana Abul Kalam Azad		
		University of Technology,		
		Kalyani		
Special	Ms. Aastika Pandey		Fog Collecting Unit for Water	
Recognition Prize	Ms. Anjali Mehta		Harvesting	
Special	Ms. Ankita	GBPUAT, Pantnagar	Green Energy Generation	
Recognition Prize	Ms. Richa Kumari			
	Ms. Surbhi Kumari			



FAO Scientists Guide University Students on Digital Soil Management Practices in Smart Farming

two days webinar titled as Role of Digital Soil Management Practices in Smart Farming was held on September 20-21, 2021. The Agri-Informatics Component of IDP-NAHEP, Pantnagar organized the webinar. The experts of the webinar were Dr. Yi Peng, International Consultant (Soil Spectroscopy and Soil Information) and Ms. Isabel Luotto, Spatial Soil Data Consultant, Global Soil Partnership (GSP) Secretariat, Food and Agriculture Organization, United Nations, Rome, Italy. Dr. Dharmesh Verma, Alumnus, Pantnagar University and former Global Head-Technical, RNZ International, Dubai was the facilitator of the webinar. The motive of the webinar was to develop skills of agricultural graduates so they can come up with the right solution for the different problems persisting in agriculture.

The webinar experts addressed the participants about GSP and informed that the GSP aims to promote sustainable soil management at all levels through different means including normative tools, capacity development, international events and field projects relying on evidence-based science. They further highlighted how the Food and Agricultural Organization of the United Nations (FAO) recognizes the need to preserve soil resources from degradation





and boost healthy soils. The experts further discussed about digital soil mapping methods and its different applications. The also said that with increase in data availability, the quality of the maps produced also increases. They also highlighted about global soil organic carbon sequestration mapping. They said that GSOCseq will fill a big gap by simulating soil organic carbon stocks over a 20-year period in agricultural lands as well as quantifying the soil organic carbon sequestration potential under different sustainable soil management and business as usual (BAU) scenarios. In the long term, it will provide a global perspective and understanding of the critical role of soils in major global issues. The two day webinar provided the participants a global perspective of soil and its humongous impact on different economic activities. The participants wholeheartedly appreciated the experts.

Understanding Fundamentals of Life through Macromolecular Structures: Webinar Held on Fascinating World of Biological Nanomachines

he applications of nanotechnology are delivering in both expected and unexpected ways on nanotechnology's promise to benefit society. Realising the need of getting aware about the nanotechnology and nanomachines a two-hour webinar on Fascinating World of Biological Nanomachines: Understanding Fundamentals of Life through Macromolecular Structures was held on on September 2, 2021. The expert of the session was Dr. Sushant Kumar, Postdoctoral Researcher, Van Andel Institute, USA and an alumnus of Pantnagar University.

Dr. S.K. Guru, Nodal Officer (Academic), IDP-NAHEP, Pantnagar formally welcomed the expert of the session and briefed the participants about the emerging roles of nanotechnology. He also motivated the participants to take part in such scientific webinars. During the session, Dr. Sushant Kumar made the participants aware about the concepts like

biological nanomachines, macromolecular structures, DNA molecule, etc. Dr. Kumar stated that it is an interesting and multi-disciplinary area to study, collaborating with physics, mathematics, biology, and chemistry. Making it a varied and stimulating experience, he also remarked



that the natural world amazes us with all its mysteries. Nature has evolved various forms of biological nanomachines, small-scale devices composed of chemically reacting biological molecules. The webinar concluded with an interesting question-answer session whereby participants from different educational backgrounds connected with Dr. Kumar to satiate their queries on biological nanomachines.



IDP-NAHEP Writing Studio Nurtures Students on News and Feature Writing

he IDP-NAHEP Writing Studio was started by IDP-NAHEP, Pantnagar with a focus on boosting the writing skills of UG students of the University. Continuing the process, the sixth workshop of the Writing Studio was held in online mode from September 21-25, 2021 and was titled as News and Feature Writing. The expert for the five-day workshop was Dr. Shweta Gupta, alumnus of Pantnagar University, Fellow, IIM Indore, and Director, Arohana Management Solutions, Dehradun. Dr. S.K. Kashyap, Dean, College of Agriculture and PI, IDP-NAHEP, Pantnagar introduced the session by explaining participants about the importance of news reporting to spread the actual information among people. He also stated that the news writing is a difficult task which requires training and practice. Dr. S.K. Guru, Nodal Officer (Academic), IDP-NAHEP, Pantnagar said during the inaugural of the workshop that the news writing skills can be very beneficial for participants as it is a skill which is required at every stage of professional life. The events need to be recorded and reported in a structured format. Therefore, for students this skill is extremely crucial.

During the five days workshop, the expert covered the concept of news and feature writing like what is news, types of news, what is news writing, principles of news writing, structuring process of news, ABC of news, highlights of news, writing headlines, key notes of news



writing, the inverted pyramid concept, etc. During the workshop a special focus was given on active participation by students, therefore, activities and assignments were given on daily basis to participants for effective learning. Right from preparation of news article to creating the lead to creating the body paragraphs, participants got a hands-on learning experience by preparing both hard and soft news. The assignments were then critically evaluated, and areas of improvement were pointed out by the experts. The participants got an opportunity to skill themselves in another area of writing through one more insightful workshop of IDP-NAHEP Writing Studio.

Exploring a French House through Home Tour

he Language Lab Component of IDP-NAHEP, Pantnagar organized a webinar on French Home Tour on September 26, 2021, where students explored a French house virtually. The expert of the webinar was Miss Annéa SAILLY, French Language Trainer, Nouvelle Aquitaine, France. The webinar focused on the description of a French house with its different parts and design. It also included house vocabulary such as different furniture and tools that is common in a French house.

The expert Miss SAILLY commenced the tour from her garden where the students got to see a variety of flowers like roses, lilies, jasmine and tulips. Then, the concept of vegetable garden which is quite frequent in French culture was to be seen. Aubergine, tomatoes and courgette were some vegetables that grow in the current autumn season. Moving towards the 'terasse' area on the ground floor (completely different of Indian terrace concept), a swimming pool and a jacuzzi bathtub showcased French love for swimming. Miss SAILLY explained the students that

swimming is a mandatory subject in schools and almost every French knows to swim. Then in the garage area, a lot of tools and equipment could be found as French are also very fond of 'bricolage' (do-it-yourself (DIY)). Just next to garage was 'cave du vin', a small room where French



wines were stored. Adjacent to it was 'célier' (storeroom), where eatables are stored. In the same room was 'machine à laver' (washing machine) and 'machine à s'essuyer' (drying machine) which is for the laundry.

Climbing up to the 'étage' (first floor) through stairs, the kitchen area could be seen with modern equipment such as refrigérateur (refrigerator), congélateur (deep-freezer), machine à café (coffee machine), lave-vaisselle (dish-washer), four (oven),

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Five Days Training Held on Applications of 3D Modelling in Agriculture

Pantnagar organized a five days online training programme for undergraduates of Pantnagar University. The training programme was held from September 8-14, 2021 on the topic Applications of 3D Modelling in Automation of Agriculture. The main purpose of the training programme was to make the students aware about 3D modelling software used for 3D mechanical design, simulation and visualization to design farming equipments. Mr. Bhuvanesh Mishra mentored the training programme. Currently, Mr. Mishra is serving as the Managing Director of Club First Robotics Private Limited, Jaipur, Rajasthan.

The training programme initiated with the words of Dr. S.K. Kashyap, PI, IDP-NAHEP, Pantnagar. He encouraged the participants with his insightful words of wisdom and stated that it is essential that students learn to design automated models and master them in order to emerge in the area of specialization of technocracy and scientific knowledge. Dr. A.S. Nain, Coordinator, Agri-Informatics Component, IDP-NAHEP, Pantnagar highlighted the relevance of this type of skill development trainings for undergraduate students.



The expert of the training Mr. Mishra began with the fundamentals and told 3D Modelling is an expansion on the concept of two dimensional drafting that began to make accurate designs to ensure that a project functions properly and



lasts for decades. He further emphasized on advanced designing software Autodesk Inventor, which is specifically helpful for product design and simulation. It is a brilliant specimen for designing special equipments. The initial two days of the training programme were used to discuss about basic features to most advanced automation processes. Thereafter, the expert enlightened the participants with the concept of parametric designs, used primarily to create technical drawings for mechanical purposes. Autodesk Inventor also includes parametric, direct edit and freeform modelling tools for all designing based projects. The expert gave a wonderful demonstration on advanced 3D mechanical objects. With the help of Autodesk Inventor software, he showed that how one can improve performance of designing and analysis with the finite element method. Participants learnt about simulation of different movements on 3D creations, managing the data and designing moulds for prototypes. They even created a model in freeform.

This intensive and involving training programme was appreciated by all the participants. The training programme was coordinated by Dr. R.S. Rajput and Dr. Rajeev Ranjan, Project Scientists, Agri-Informatics Component, IDP-NAHEP, Pantnagar.

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micro-ondes (microwave), plaque de l'induction (induction plate). Students got to know about the dish washer, a machine that cleans the dishes automatically. Then, the expert showed four 'chambres' (bedrooms), 'salle de maquillage' (dressing room), 'lestoilettes' or WC (washroom), 'salle de bain' (bathroom), 'salon' (sitting area or lounge) and 'balcon' (balcony). In the 'terasse' area of first floor was barbeque and plancha which is generally used when the weather is sunny.

At the end of the session, Miss SAILLY told the students that French houses don't have terrace like in India and have sloping roofs because of rain and snow. Generally, every house has a garden and terasse, mostly in the countryside. She also added that it's mandatory to have a particular color of the house from outside to give a heritage look which is very common in most of the European countries. This kind of unique, experiential learning was highly appreciated by the participating students of webinar.





Feedback of Interns of Internship Pathshala 7

It was an invaluable experience to be a part of such a great organisation and work with such a wonderful team. It gave me a chance to improve upon my negotiation and verbal skills. The best thing about the internship was that everything was in a time bound frame which made me more disciplined. I also developed team spirit and strengthened my management skills.



- Aastika Pandey, IIIrd Year, College of Agriculture



The Pathshala was a lot more than I thought it would be in best way possible. I gained and developed an entrepreneurial bent of mind due to interaction with more than 100 agripreneurs of our country. This intership has given me real world exposure and experience. It has also given me a chance to learn more about different businesses and how I can use my skills in different ways.

- Abhyudaya, IIIrd Year, College of Agriculture

In the 60 days internship, I learned a lot of new things. Initially managing time appeared a bit difficult but eventually, with the help of my mentor things starting taking off smoothly and I could understand the intricacies of effective time management. Also, my overall personality groomed through this internship endeavour.



- Aditya Kumar, IIIrd Year, College of Technology



The journey was very insightful. I have enhanced my skills for content writing, knowledge about social media handling, editing, increased vocabulary, outlining and time management. This internship gave me some real experience in the time span of virtual studies and COVID times.

- Akriti Ballabh, $\ensuremath{\mathsf{II}}^{\ensuremath{\mathsf{nd}}}$ Year, College of Veterinary and Animal Sciences

The internship provided me a unique opportunity to gain ample amount of experience and self-confidence. I had an opportunity to talk to many people having an entrepreneurial background and listening to their journey and vision for the society. The best part of this internship was the networking opportunities I have got.



- Ankita, $\ensuremath{\mathsf{III}^{\text{rd}}}$ Year, College of Agriculture



It was my privilege to get an opportunity to work in the internship provided by IDP-NAHEP. It gave me relevant exposure in practical training and helped in instilling a sense of confidence and responsibility in me. I have gained a lot by learning the value of hard work and diligence.

- Asad Rehman, IIIrd Year, College of Agriculture

The joy and emotions of being and working in the Internship of IDP-NAHEP are inexpressible in words. Through this Internship, I could evolve myself into a much confident personality, ready to prove my mettle in the situations that I would have to deal with in the future. The skills I learnt here would be a part and parcel of my life in the times to come.



- Ayush Prasad, $\ensuremath{\mathsf{II}^{\text{nd}}}$ Year, College of Technology



This extraordinary time period of two months of internship provided me a unique opportunity to know more about Pantnagar University. I came across many USPs of our University which I was mostly unaware. It was an amazing time interning especially with the constant support and help from my mentor through which I was able to grow and develop some critical thinking skills.

- Barsha, IIIrd Year, College of Agriculture

Being a part of the NAHEP Internship Pathshala was a unique experience where I was compelled to improvise my communication skills and learned to develop better content. I acquired the spirit of professionalism and developed consistency in my work as we set targets for every week with effective planning of the task. All in all, the experience was something that will always help me in the future.



- Deepshikha Choudhary, IIIrd Year, College of Home Science



Working as an intern, I got an opportunity to develop the right work attitude, interpersonal skills and ability to work as a team in a rea organisational setting. Having worked under IDP-NAHEP team has boosted my confidence and improved my personality as a whole.

- Kavita, IIIrd Year, College of Agriculture

The internship experience helped me learn about various copyrights existing that should be kept in mind while creating e-content and other sources that are aid for all types of content creators. I also campaigned for certificate and diploma courses through which I connected with people from all around the country that helped me in polishing my communication skills. Overall, I had a worthwhile experience.



- Muskan Nargwani, IIIrd Year, College of Agriculture



I reflect back on all I have learned and I realize what an excellent experience this has been. One of the most important things I gained from this internship is newfound knowledge. This can include knowing how to fulfil tasks that are relevant to my desired career path, sharpening the skills that I already possess and the ability to speak with people.

- Niharika Rana, III'" Year, College of Technology

My internship as a content writer under IDP-NAHEP Internship Pathshala-7 has been the most rewarding and motivational experience I have had during my time as a student at the University. The internship enhanced my thinking skills, creativity, content framework, presentation skills and also allowed me to get an experience of preserving history in the form of literature.



- Palak Chaturvedi, $\mathbf{III}^{\mathrm{rd}}$ Year, College of Agriculture



I stepped into with full gusto into the Internship Pathshala-7. The deadlines taught me to arrange tasks in a priority list and complete them in a timely manner. I learned how to compose myself and talk in a professional environment, and even bagged the skill of teamwork and communication. Expanding my horizon of creativity during this stint of two months, I surprised myself at various instances.

- Sanjana Goswami, IIIrd Year, College of Technology



5 Days Online Crash Courses Conducted for JRF Aspirants

series of 5-days online crash courses were initiated by IDP-NAHEP, Pantnagar as a part of its unique alumni supported remedial classes for the undergraduate students of the University. In order to nurture the UG students and give them a final stroke of preparation, the five days crash course was organized to prepare the young aspiring minds for the national level competitive exam - ICAR All India Entrance Examination for Admission (AIEEA) PG-2021. The classes were initiated for UG students of College of Agriculture, College of Fisheries and College of Home Science. The classes were focussed on clarifying the basic concepts of subjects and giving competitive edge to the students. The illustrious alumni of Pantnagar University who were top rankers in the AIEEA examinations and are either pursuing their higher studies or serving as academicians/scientists in agricultural universities/institutes were the mentors of the five days crash course programme. The five days revision crash course of the subjects was initiated

looking into the needs and requirements of the UG students.

Dr. S.K. Kashyap, Dean, College of Agriculture and PI, IDP-NAHEP, Pantnagar supported the initiative and reflected that these classes helped the students to brush up the whole course at last moment and get tips and tricks from the knowledgeable experts of their field. The crash course aimed at assisting students clarify doubts in their subjects and to raise the level of comprehension and improve the knowledge of the students, said Dr. S.K. Guru, Nodal Officer (Academic), IDP-NAHEP, Pantnagar. He informed that the curriculum for these classes was designed keeping in mind the needs/interest of the students.

The crash course was accompanied with short tests after classes to assess the improvement in students' level of understanding. The shortcomings were discussed with the students and their queries were also resolved. A total of 100+ students benefitted from the crash course programme.

The Main Events of October 2021

S. No.	Event	Proposed Date	Venue	Nodal Unit	Convener
1.	Online Workshop on Learn to Design Your Writeup: Concerns of Layout and Design	13-10-2021 to 17-10-2021	Online	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
2.	Training cum Interaction Programme on Campus to Corporate by Coromandel International	18-10-2021 to 21-20-2021	Online	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
3.	Hands on Training at Hydroponics and Aeroponics Business Unit	29-10-2021 Onwards	College of Agriculture, Pantnagar	Innovation and Incubation Centre Team	Dr. A.K. Upadhyay, College of Veterinary and Animal Sciences
4.	Photography Contest for UG Students	29-10-2021	University Centre - NAHEP Building	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
5.	Online Webinar on Opportunities in Wildlife Research	30-10-2021	Online	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities



With Incessant Support Comes Victory

Dr. S.K. Kashyap Dean, College of Agriculture/PI, IDP-NAHEP, Pantnagar

he month of September 2021 marks the successful completion of two years of the IDP-NAHEP project at Pantnagar University. Immense toil has been undertaken by different people at different cadres to execute the project in the best possible way and deliver the promised outputs and outcomes. Apart from the foreign exchange programmes of students and faculty members, which could not be completed due to the pandemic, all other project targets were met with utmost efficiency and impact. I would like to put on record the valuable guidance of Hon'ble Vice-Chancellor Dr. Tej Partap, the support of Deans and Directors of the



University, the hard work of complete IDP Pantnagar team including the faculty members, the consultants, the post doctoral fellows, the research associates, the e-content developers, the programmers, the project assistants, the office staff, and several others whose contributions made this project an exemplary case in the University. The originally declared project duration came to an end in September 2021, however the ICAR has extended the project duration without further financial support. This is yet another challenging task which would require the University to embark on the journey of financial independence and continue with all the project activities with the same vigour and enthusiasm.

