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| **Speaker** | **Title** | **Date and Venue** | **Brief Report** |
| **Dr Debi Prasad Das**, Senior Principal Scientist, CSIR- Institute of Mineral and Material Technology, Bhubaneswar | **Principle to Prototype for AATMANIRBHAR BHARAT** | 02.07.2022, at Seminar Hall of Shahpur Parishar. | Speaker began with examples of how our ideas are being used by foreign people to boost their business and economy. He said that C. V. Raman discovered Raman effect but all the instruments which are made using Raman effect are designed by engineers of USA, Germany and Japan. They are supplying these instruments to us and earning millions of dollars. Many of our theoretical findings are used by Chinese scientists to design toys and scientific instruments. This is only because many of our researchers don't know how to make prototypes. He has explained different principles and various stages of prototypes. He said that if our Universities which has a lot of potential to make prototypes are being encouraged and guided we can achieve an Aatmanirvar Bharat. |
| **Dr Mamta Aggarwal**, Scientist, Department of Physics, University of Mumbai, Founder, WeMR and Skill Foundation | An Awareness workshop on “**Path to Scientific Research: Synopsis of Job Opportunities, facilities and Network in India**” | 23.05.2022, at Seminar Hall of Shahpur Parishar | After giving a wonderful exposition on Exotic Nuclei in Nuclear Physics, the speaker went on to provide various types of skills that the students need to develop in the 21st century to become job ready. She emphasised the need for research skills and the various facilities available across our country. Her experience in creating a startup called WeMR, we mentor research, to empower the students to build reearch career has been inspiring to all. |
| **Prof. Dr. Avinash Pandey**, Director, Inter University Accelerator Center, New Delhi | **Startups Based on Science, Technology, Engineering and Mathematics (STEM)** | 09.06.2022, at Seminar Hall of Shahpur Parishar | The speaker gave an overview of extension activities of IUAC, which involve indegenous development of power supplies, data acquisition systems, alpha and gamma detection units with software, magnets, table-top accelerators, etc. Then, he elucidated how one can create startups based on these scientific principles to engineer designing different equipments for laboratory use in various colleges and universities. |
| **Prof. Dr. Atul Negi**, Professor of Computer Science, University of Hyderabad | **Artificial Intelligence for Social Good – A Faustian Bargain** | 07.04.2022, online webinar with all students from three campuses | Prof Atul Negi highlighted the importance of Technology AI and Society, Machine Learning, Case studies of social good, Faustian Bargain and related issues. He mentioned about how different sectors such as medicine, healthcare, Banking, Finance & Insurance, Transportation, Agriculture, Security and Privacy and various such other sectors are influenced by AI in today’s time. An appropriate AI System Architecture was explained to clarify the Machine Learning and Deep Learning aspects in a simple manner.He discussed about how deep learning applications are used in the daily life such as self-driving cars, deep learning in Healthcare, Voice assistants, Automatic machine translation, image recognition and in various other activities. He focused on how artificial intelligence is turning useful for various social works, its usage in smart agriculture, law and various other fields. He also recommended various things to be kept in mind while implementation of AI such as fair data certification and certification of developers of AI Tools and Products. Overall the discussion helped at the end of session helped in broadening the aspects of AI in general and gave fruitful insights to the participants. Prof. Deepak Pant proposed vote of thanks. |
| **Prof. Dr. Chandrasekhar Malvi**, Professor, Department of Mechanical Engineering, Madhva Institute of Technology and Science (MITS), Gwalior | **Innovations in Solar Energy** | 06.04.2022, online weinar attended by students from all three campuses | Prof Chandrashekhar gave detailed description on solar cell panels, solar electric panels, photo-voltaic cells, mounted in a framework for installation. Solar panels use sunlight as a source of energy to generate current/electricity and have great potential for incubation opportunities. Since this segment is non pollutant and typically its source of energy is abundantly available. It’s increasing popularity is creating a huge opportunities for entrepreneurs to start business based on solar energy. About 5,000 trillion kWh per year of solar energy is incident over India’s land area with most parts receiving 4-7 kWh per Sq. m per day. Hence, both technology routes for the conversion of solar radiation into heat and electricity, namely, solar thermal and solar photovoltaics, can effectively be harnessed while providing huge scalability for solar power in India. Therefore, starting a solar business is a lucrative opportunity for entrepreneurs. CUHP and IIC , Incubation cell can harness this potential as scientific innovation as well as business innovation. |
| **Prof. Dr. M. Sainath**, Executive Director, Incubation Center, IFHE, Hyderabad | **Role of Incubation Centers in Universities** | 30-01-2022, Online webinar attended by students of all three campuses | Prof. M. Sainath emphasised on how Incubation centres play a very crucial role in Universities which can help in building the resilience and full commitment for new idea generators. He focused on how it is important to understand that there has to be solid collateral behind the ideas and a clear knowledge about personal savings, venture capital, venture debt and revenue generation. He showcased the path of Twenty-First Century Innovation Ecosystems as a multi-level, multi-modal, multi-nodal, and multi-agent system of systems. The constituent systems consist of innovation meta-networks and knowledge meta-clusters as building blocks and organized in a self-referential or chaotic fractal knowledge and innovation architecture, which in turn constitute agglomerations of human, social, intellectual and financial capital stocks and flows as well as cultural and technological artifacts and modalities, continually coevolving, cospecializing, and cooperating. These innovation networks and knowledge clusters also form, reform, and dissolve within diverse institutional, political, technological, and socioeconomic domains, including government, university, industry, and non-governmental organizations and involving information and communication technologies, biotechnologies, advanced materials, nanotechnologies and next-generation energy technologies. |
| **Prof. Sat Prakash Bansal**, Hon. Vice Chancellor, Central University of Himachal Pradesh Dharamsala | **Vision and Mission of Udbhav Kendra, Incubation Center of CUHP** | 30-01-2022, Online webinar attended by students of all three campuses | Hon. Vice Chancellor focused on the need and importance of providing a robust environment for the research scholars of the University in order to enhance the possibilities of their research leading to new bussiness ideas and industry portable innovations in their particular fields. He emphasised on working in a collaborative manner and stressed the need for coming up with new inventions. He emphasised that the primary role of any incubator is to help nascent companies - by providing resources, access to industry mentors, interactions with other entrepreneurs and perhaps most importantly, patient capital, to get through the survival stage. His profound views that diverge from the current “conventional wisdom” that are properly grounded in theory and practice, and that consider the concepts of robust competitiveness, sustainable entrepreneurship and democratic capitalism provided roadmap to Udbhav Kendra of our University as to how to play a leading Role in nurturing future entrepreneurs within its wings. In his vision, he emphasised the need for Innovation Networks, encompassing both real and virtual network infrastructures and infra-technologies that serve to nurture creativity, trigger invention, and catalyze innovation in a public and/or private domain context (for instance, government–university–industry, public–private research and technology development co-operative partnerships). |
| **Prof. Dr. O. S. K. S. Sastri**, Director, Udbhav Kendra, Incubation Center of CUHP | **Statement of Purpose of Udbhav Kendra, Incubation center of CUHP** | 30-01-2022, Online webinar attended by students of all three campuses | He opined that there are many operational wings in every university in the form of Centre for Enterpreneurship, University Innovation Council, IPR cell, University-Industry Interface, Deendayal Kaushal Kendra, University Placement Cell, etc which cater to various aspects ranging across idea generation, prototyping, industrial design, patetning, scaleup, digital/virtual presence to startup creation, management and marketing. Inspite of all these interventions, the startup or bussiness enterprise which has been put together with the help of all these arms of the university needs an incubation period over which it needs support to make it grow into a self-sustainable venture that can make its presence and space in the regular market. |
| **Dr Sarvesh Kumar,** Secretary, Udbhav Kendra, Incubation center of CUHP | **Grassroots Innovation in Himachal Pradesh** | 22.01.2022, Online webinar attended by students of all three campuses | In India, as much as in the world, there are community-based innovators identifying new ideas and possible solutions to local problems. Based on these practices, there are entrepreneurs working at a regional, national or international level. This diversity of innovations is at the heart of sustainability. However, lack of voice, and visibility and velocity keeps most of these innovations localized in various pockets unable to make a larger impact, in accordance to the Honey Bee Network. The range of solutions being created need to be shared at a global level. This is the gap that the Grassroots Innovation Database (GRID) wants to bridge. A top-down model does not do justice to a domain which can significantly uplift emerging economies with problems around the scarcity and management of resources. Consequently, there needs to be more attention diverted to grassroots innovators and they should be integrated into any mainstream imagination of the economy. Observing the age old traditions to formulate Grassroots innovation is need of the hour. The concept from University to society and using beehive technique to accelerate the path of innovation would be the scenario envisioned in the near future. |