INDIAN INSTITUTE OF TECHNOLOGY, MANDI

NEWS LETTER

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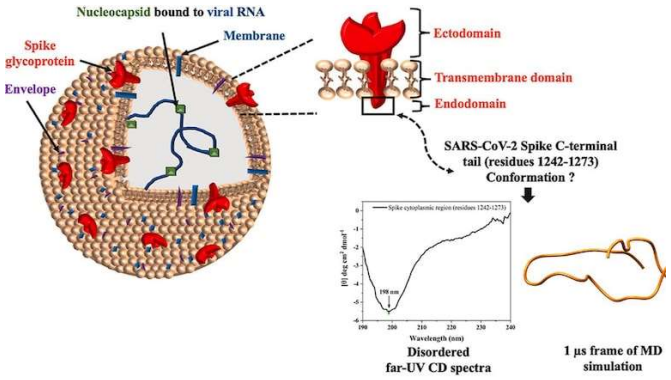


IIT Mandi researchers elucidate molecular structure of Endodomain of spike protein of Covid-19 virus

Researchers from IIT Mandi, using spectroscopy and simulation methods, unraveled the molecular structure of a functional protein region of the Covid-19 virus. The team has established the structure of one section of an important spike protein responsible for the virus's infectivity. The unique and pioneering observations have recently been published in the journal Virology. The research was led by Dr Rajanish Giri, Associate Professor, School of Basic Sciences, IIT Mandi, and co-authored by his PhD scholars, Prateek Kumar, Taniya Bhardwaj, and Dr Neha Garg, Assistant Professor at Banaras Hindu University.

IIT Mandi Researchers Develop Setup To Study Climate Change Impact On Railway Embankments

Researchers at the Indian Institute of Technology (IIT) Mandi and Durham University in the United Kingdom, have developed suction monitoring setup for soil cyclic triaxial testing to investigate the impact of climate change on railway embankments. The study was conducted by Dr Ashutosh Kumar, Assistant Professor, School of Engineering, IIT Mandi, and co-authored by Dr Arash Azizi, Assistant Professor, University of Portsmouth, UK and Professor David Geoffrey Toll, Department of Engineering, Durham University, UK,

IIT Mandi researchers develop soil stabilisation methods using soil bacteria

Dr. Venkata Uday Kala, Assistant Professor, School of Engineering, for developing a bacteria-mediated sustainable technique for soil stabilization!

The findings of this study will be helpful in designing microbial methods to improve soil shear strength at the field scale in order to protect soils from erosion in hilly areas and during geo-disasters.

The work appears in the Journal of Geotechnical and Geo-environmental Engineering of ASCE Publishing.

IIT Mandi researcher Dr. Neha Arora, Fulbright-Nehru Postdoctoral Research fellowship

Dr Naina Arora, who completed her Ph.D. from BioX, Indian Institute of Technology, Mandi, with the guidance of Dr. Amit Prasad, for receiving the prestigious Fulbright-Nehru Postdoctoral Research Fellowship!

Dr. Arora will work at the University of California, Riverside, USA, to better understand soil-transmitted helminth (STH) infections, which are a major cause of malnutrition and chronic intestinal infection and results in anemia and associated organ pathology.

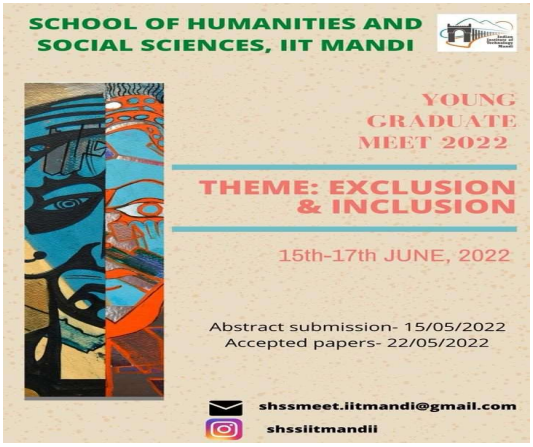
The BioX Annual Conference at Indian Institute of Technology, Mandi

The BioX Annual Conference at Indian Institute of Technology, Mandi on 13-14 May 2022. The conference will host Keynote Speakers from Indian Institute of Science (IISc), AIIMS (All India Institute of Medical Sciences, New Delhi), THSTI and IIT Kanpur. In addition, Faculty Talks, Student Flash Talks, Industry Speakers and IIT Mandi Alumni Talks are lined up.

Dr. Shyam Sundar Nandi, Scientist E/ Deputy Director delivered lectures at IIT Mandi

Dr. Shyam Sundar Nandi, Scientist E/ Deputy Director, Biotechnology Division of the National Institute of Virology (NIV), Mumbai, delivered two lectures on: "Development of a RT-LAMP assay for detection of SARS-CoV-2" and "A rapid point of care CC16 kit for screening of occupational silica dust exposed workers for early detection of si

licosis/silico-tuberculosis."



Young Graduate Meet

The School of Humanities and Social Sciences, Indian Institute of Technology, Mandi organized the 2nd Young Graduate Meet on 15-17 June 2022. The theme of this year's Meet is "Exclusion and Inclusion: Who is in and who is out?" Keynote addresses will be delivered by Prof. Gopal Guru, eminent political scientist and the Editor of Economic and Political Weekly, and Prof. Suryakant Waghmare, followed by a Distinguished Lecture by Prof. Tanweer Fazal.

IIT Mandi researchers develop wireless powering and communication technology for IoT applications

The team of Mr. Shivam Gujral, Ph.D. scholar, and Dr. Siddhartha Sarma, Assistant Professor, School of Computing and Electrical Engineering, IIT Mandi, for developing wireless powering and communication technology for IoT applications. The technology can potentially be useful for IoT devices, applications such as battery-free wireless cameras, wireless monitors, sensors, skin-attachable sensing platforms, contact lenses, machine-to-machine communication, and human-to-machine interactions.

IIT Mandi join hands with NSDC to offer courses in emerging technologies

IIT Mandi has signed an MoU with National Skill Development Corporation to introduce digital courses in emerging technologies such as data science, big data analytics, etc. This collaboration will lead to better learning outcomes and skill development, ultimately resulting in enhanced employability for India's youth.

Indian Institute of Technology, Mandi recently organized a Workshop on Healthcare Robotics and Drone Applications (WHRDA'22)

Indian Institute of Technology, Mandi recently organized a Workshop on Healthcare Robotics and Drone Applications (WHRDA'22) during 27-29 May. The Workshop brought together experts from academia and industry and featured invited talks, panel discussions, poster sessions, and brainstorming sessions. Some key areas of focus were the use of BCI, Haptics, Computer Vision, Voice, and Gesture for Robotics, Human-Robot Interaction, Tele-operated Robotic Systems, Application of Drones in Industrial Inspection and Manipulation, Drone application in Healthcare and Logistics, etc.

Director of the Centre for Engineering Innovation and Research at the University of Wolverhampton, visited Indian Institute of Technology, Mandi

Dr. Arun Arjunan, Director of the Centre for Engineering Innovation and Research at the University of Wolverhampton, visited Indian Institute of Technology, Mandi recently. Together with the Additive Manufacturing research group at IIT Mandi led by Dr. Prateek Saxena, collaborative opportunities in the area of 3D printing of metamaterials were explored. During his visit, Dr. Arujnan took a tour of the manufacturing facilities available at C4DFED, Central Workshop, Additive Manufacturing research lab, and CDMRG lab at IIT Mandi.

Anubhav Fellowship

IIT Mandi iHub and HCI Foundation is here with another big opportunity exclusively for UG students! If you have an idea which can blow minds and you believe in it but need some support, we are here for you. We invite you to share your ideas which can lead to products, startups, published papers or patents in areas such as Defence & Security, Healthcare, Environment/Agriculture, Information Technology, AR/VR/MR/, Multimedia Forensics, and BCI.

ALUMNI CORNER

Young Achiever Award

Dr. Palvi Aggarwal, first female student of IIT Mandi working as faculty outside India in a reputed University. She is serving as an Assistant Professor in Computer Science at The University of Texas at El Paso. Class of 2018, Ph.D. in Computer Science Engineering, IIT Mandi.

Young Achiever Award

Er. Dhruv Parmar, co-founder, - Glood.ai, which is a leading Personalization & Marketing Platform to help Shopify businesses grow their store revenue. Class of 2013, B.Tech in Computer Science Engineering, IIT Mandi.

Young Achiever Award

Er. Pradeep Seervi, secured AIR-1 in GATE 2015 and currently working in the R&D wing of one of India's biggest and most strategically important PSU, POWERGRID.

Young Achiever Award

Er. Harshul Jain, founder & CEO, http://Glood.ai, which is a leading Personalization & Marketing Platform to help Shopify businesses grow their store revenue. Class of 2013, B.Tech in Computer Science Engineering, IIT Mandi.