किरण IITH
the crowning glory

भारतीय सांकेतिक विज्ञान संस्थ हैदराबाद
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

A Quarterly e-newsletter of IIT Hyderabad
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DEFENCE AT IITH

Defence Advancements Powered by Science

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Articles' Directory

Editorial Epistle

Dear Readers,

Hope you are doing well!

As we unwrap this issue of किरIITH, we want to take a moment to extend our heartfelt thanks to you—our dedicated readers. Your support and engagement are the base of what we do, and we're incredibly grateful for each and every one of you.

Your enthusiasm, feedback, and continued interest in our content inspire us to strive for excellence and keep bringing you stories and insights of IIT Hyderabad. Knowing that our work resonates with you makes all the effort worthwhile. Like every time, this issue is also being dedicated to one of the key thrust research areas of IITH.

Following this precedence, we are back with yet another critical area of research at IITH, *"Defence@IITHyderabad"* - Vol - 6, Issue-1, Jan- Mar 2024 (Issue - 18). Defence Research has become an indispensable thrust area in many departments at IITH. Defence Research provides a vibrant platform at IITH to foster inter-and trans-disciplinary collaborations among the different departments.

In today's rapidly evolving global landscape, defence research plays a critical role in shaping the future of national security and technological advancements.

Our aim in this issue is to delve into the multifaceted world of defence research, exploring its impact on both current and future military capabilities.

We believe that understanding the nuances of defence research is crucial for grasping the broader implications for global security and technological progress. We hope this issue provides valuable insights and sparks thoughtful discussions.

The cover page pertinently describes the evolution of defence research from a test tube in a laboratory to a Space Shuttle in the sky scape. This issue is tinted with Army green that symbolizes strength and resilience.

"We will return next quarter with another groundbreaking research area where IITH continues to make its mark, Inventing and Innovating in Technology for Humanity. Your support inspires us to come back with an even more enhanced and enriching experience in the upcoming calendar year, featuring exciting new editions of 'किरIITH.'"

"Wishing everyone a safe and healthy experience.

Happy reading and stay connected!"

Dr Mudrika Khandelwal
(Dean – Alumni & Corporate Relations)
{Editor-in-Chief}

Prof C Krishna Mohan
(Department of Computer Science & Engg.)

Prof Deepak John Mathew
(Professor, Department of Design)

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(Faculty-in-Charge - Public Relations)

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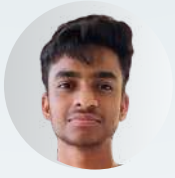
(Chief Library Officer)

Mrs Meena Kumari
(Public Relations Officer)



Mr Anand Sharma
(Media & PR Secretary, Student Gymkhana)

Front and Back Page Design by

Atul Antony
MDes, 2nd year student

> *Dream, dream, dream. Dreams transform into thoughts and thoughts result in action -*
> **Dr APJ Abdul Kalam**

Dear friends,

I hope you are all in good health and high spirits.

As we navigate through another exciting quarter, I want to take a moment to connect with each of you and share some reflections on our journey of IIT Hyderabad.

As we delve into this edition of our newsletter, "किरIITH" (KirIITH) – The Crowning Glory, I am excited to share with you the latest advancements and milestones in our defence research efforts. Our commitment to innovation and excellence in this critical field continues to drive us forward, and I am immensely proud of the progress we are making.

IITH hosted the second edition of India's largest R&D Innovation Fair by Higher Education Institutes IInvenTiv-2024, inaugurated by Hon'ble Union Education Minister Shri Dharmendra Pradhan. Featured 52 institutes, including IITs, NITs, IIITs, IISERs, showcasing 120 projects, which attracted over 2000 industry stakeholders. Five panel discussions were held, and one technology transfer agreement was signed during the event. IIT Hyderabad Cluster received a prestigious Rs. 60 crore grant from DST for establishing the ground-breaking Centre for In-Situ and Correlative Microscopy (CISCoM)

IITH and Simpliforge Creations installed India's first Pedestrian Bridge using Indigenous 3D Printing Technology. The concept and design were developed and evaluated by Prof. K.V.L. Subramaniam of Civil Eng., and his research group.

The collaboration between the Indian Institute of Technology Hyderabad (IITH) and the Japan International Cooperation Agency (JICA) reached new heights as the JICA Chair Lecture Series concluded successfully. The event brought together 200 young design enthusiasts, setting the stage for future collaborations and educational initiatives. The event was also energized with the 2nd edition of "Ayaam" - Annual Fest of the Department of Design, IITH.

Several MOUs were signed to establish collaborations to work together in various areas of academic and R&D prospects. To name few such,

- Technology Transfer agreement between IIT Hyderabad and E-Spin Nanotech to pilot commercial application of Cellulose-based Nanofiber Feminine Hygiene Products.
- Viterbi School of Engineering, University of Southern California, USA, For Cooperation in the field of Research and Education
- Intel India, Aiming at Technological Advancements

In a historic moment, the Indian Institute of Technology Hyderabad (IITH) witnessed the dedication of its transformative Campus Development Project to the nation by the Honorable Prime Minister, Shri Narendra Modi via Video Conference. The event's joy was manifold with the august presence of Dr (Smt) Tamilisai Soundararajan, Hon'ble Governor of Telangana and Lieutenant Governor of Puducherry.

IITH has vibrantly celebrated the Elan & ηVision-2024 and its 16th Foundation Day, with Prof Abhay Karandikar, Secretary, Department of Science and Technology, Government of India, as the Chief Guest of the Event.

This remarkable progress reflects the trust we have earned through the collective efforts of our outstanding faculty, staff, and students. I extend my heartfelt gratitude for your dedication and hard work.
Our relentless pursuit of excellence and commitment to academic growth drive our continued success. Together, we can achieve even greater milestones in the future.

I extend my best wishes for a time filled with happiness, fulfilment, and endless possibilities.

~ B S Murty

Concrete 3D Printing with a Portable Robotic Arm for the construction of Bunkers and AnciLlaries (PRABAL) in Forward Areas

KID: 20240101

Abstract: In a significant technological milestone, Project PRABAL has successfully demonstrated the construction of military bunkers using on-site 3D printing technology. This innovative project has opened new frontiers in military engineering, offering practical solutions for constructing defense structures in some of the world's most challenging environments. Using local materials, on-site printing of an Observation Post (OP) bunker in Leh under High Altitude Low Oxygen (HALO) conditions was demonstrated. The technological advancement required for the on-site fabrication of the structure includes overcoming adverse environmental conditions of extremely high UV, wind, and drying exposure. Printing in a remote access location within Leh further proves the robustness of the technology. The success of PRABAL is particularly noteworthy for operationalization under High Altitude, Low Oxygen (HALO) conditions, which limit the efficiency of mechanical systems. Producing concrete under adverse conditions of extremely high UV, wind, and drying exposure showcases the advancement in material processing and delivery systems used in 3D printing operations. Tactical planning and mobilization of resources to execute in a remote access location is the keystone to future deployment.

The environment and location are typical of many military operational areas, and the project's success in these conditions marks a new era in military construction.

Introduction: Forward areas are remote access with inclement weather conditions. Creating protective structures with high protection for personnel has remained a challenge. Typically, protective structures are exposed to small-arms fire and low-level blasts. The threat perception ranges from high-velocity medium machine gun (MMG) rounds and blasts from rocket-propelled grenades (RPGs).

3D concrete printing provides a solution for rapidly deploying protective structures such as bunkers and ancillaries. 3D concrete printing also allows the development of form-optimized structures for protection. The geometric freedom provided by 3D printing allows printing shapes that provide enhanced protection for the different threat perceptions.

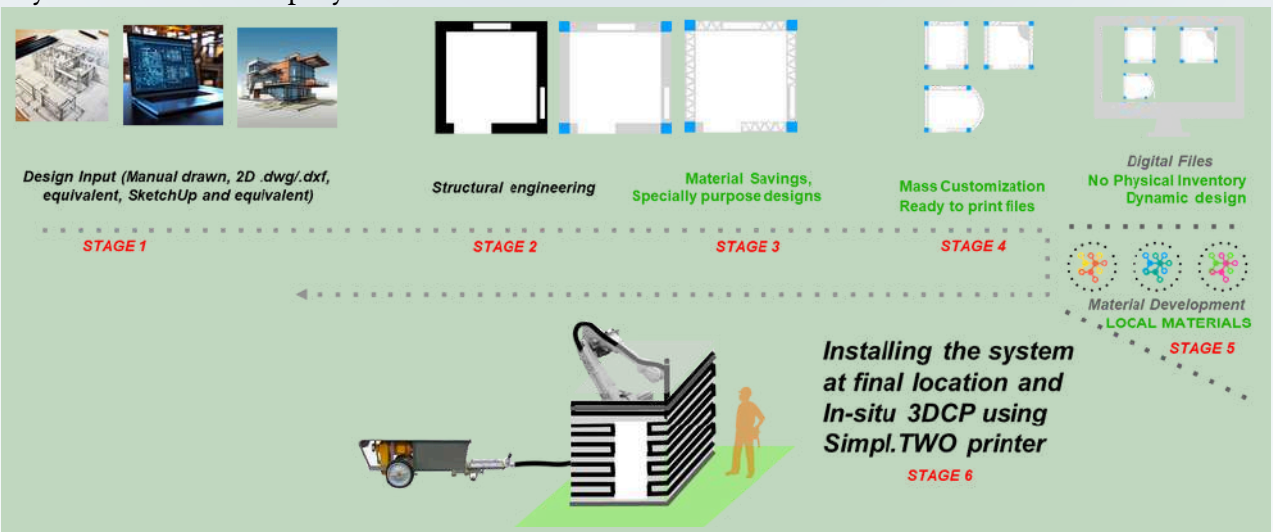


Fig 1: Development stages, including structural and dynamic design, material development, and in-situ printing.

Advantages of adopting 3D Printing by the Indian Army for deployment in forward areas include (a) Rapid Construction of defense bunkers and fortifications in remote places at a much faster pace and with limited manpower, which in turn will help in the defense preparedness of our forces; (b) Tailor-Made Structure and the freedom of design with 3D printing, when coupled with the structure's composite construction, will help design and build the structure according to the terrain and threat perception; (c) In-built camouflage and concealment based on the terrain requirement, which will blend with nature; (d) In disaster relief Operations, the rapid pace of construction will help deliver temporary shelter more quickly and efficiently; (e) The freedom in design coupled with the on-site printing will help to build the obstacles, thereby inflicting delays on the enemy advance.

3D concrete printing consists of material deposition in layers. The actual process consists of developing a layer-by-layer representation of the structure. This process, known as tessellation, creates a 3D representation of the structure for developing the 3D printed form. The material deposition contours are developed to place the material at the desired location. The entire structure is then printed by depositing the layers with material along the predetermined contours. The process of developing the digital representation of the structural design, material development, and printing the actual structure is shown schematically in Figure 1. 3D Concrete printing offers the advantage of printing complex geometric shapes form-free. The advantages of 3D printing include: (a) Structures are lightweight and efficient in performance; (b) Material is used efficiently, resulting in a reduction of wastage; (c) Structures can be fabricated in a significantly shorter time compared to conventional methods; (d) Automation and reduction in labour requirement.

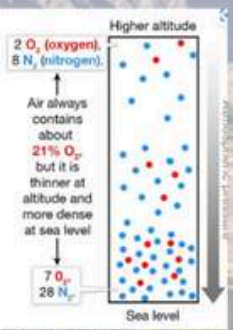
Project PRABAL:

Project PRABAL, which stands for Portable Robotic Arm for constructing Bunkers and AnciLlaries, was conceived to transform how military bunkers are built. This was a collaborative project to demonstrate on-site 3D Printing of an OP Bunker with local Materials under extremely harsh environmental conditions in a remote access area. A typical view of the project site and the environmental conditions are shown in Figure 2. The project chose a typical OP bunker to demonstrate in-situ printing and the feasibility of deployment of the technology in forward areas. The site for the fabrication of the 3D-printed structure was Leh (within the Army control area). Leh allows 3D printing to be demonstrated under extreme environmental and remote operating conditions.

The project rested on four pillars: (a) Development of an all-terrain Robotic Arm for 3D Concrete Printing; (b) 3D design mixture development as per the terrain condition; (c) Optimized Structure as per the threat perception; and (d) Development of Printing strategy as per the terrain conditions site specifications.

3D Concrete Printing System

A robotic arm printing system was developed and transported to Leh. The robotic arm system, including material delivery and placement systems, was developed indigenously. A schematic and photograph of the Robotic Arm printing system is shown in Figure 3. A custom-engineered, pressure-controlled continuous pumping system has been developed to deliver 3D-printed concrete (3DCP). This system was optimized for locally sourced sand, cement, and aggregates. The system includes advanced controls for real-time monitoring and adjustments, allowing for the precise delivery of concrete mixtures tailored to the specific demands of 3D printing designs/geometry. The same pump can be used for finishing works. The system has a rubber hose of varying length and size connected to a circular nozzle.



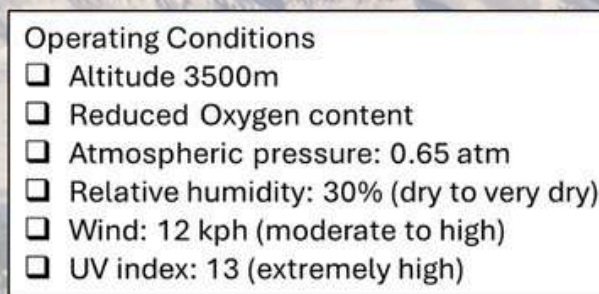


Fig 2: The site for in-situ printing and the local conditions.

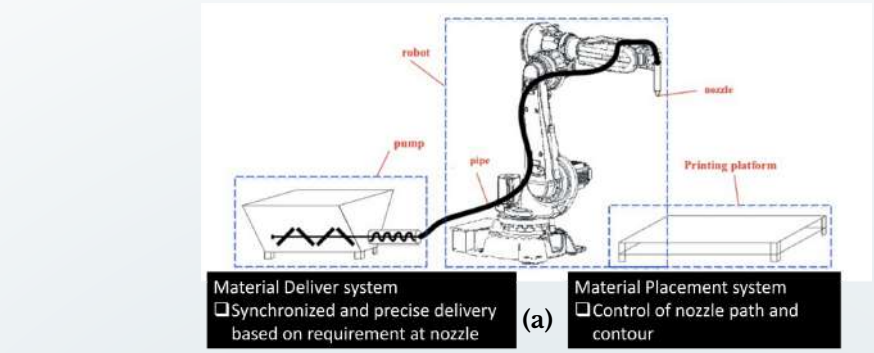


Fig 3: (a) Schematic of the robotic arm printing system; (b) The robotic-arm printing system being off-loaded on site; (c) Installation and operation of the robotic arm system in Leh.

Material ink Development

A concrete mixture is used for printing in the robotic arm printing system. An engineered concrete mixture was developed using local materials that would provide printability. This mixture ensured the structural integrity of the printed bunker, even under harsh conditions. The concrete mixture was modified to resist challenging environmental factors such as drying, quick setting, and low permeability, ensuring the material's performance in diverse conditions.

The developed concrete mixture had shape retention (held its shape after extrusion under pressure and deposition). It allowed buildability, where multiple layers could be stacked along a contour (as shown in Figure 4(a)). The printing along the predetermined contours of the OP bunker system in Leh is shown in Figures 4(b) and (c).

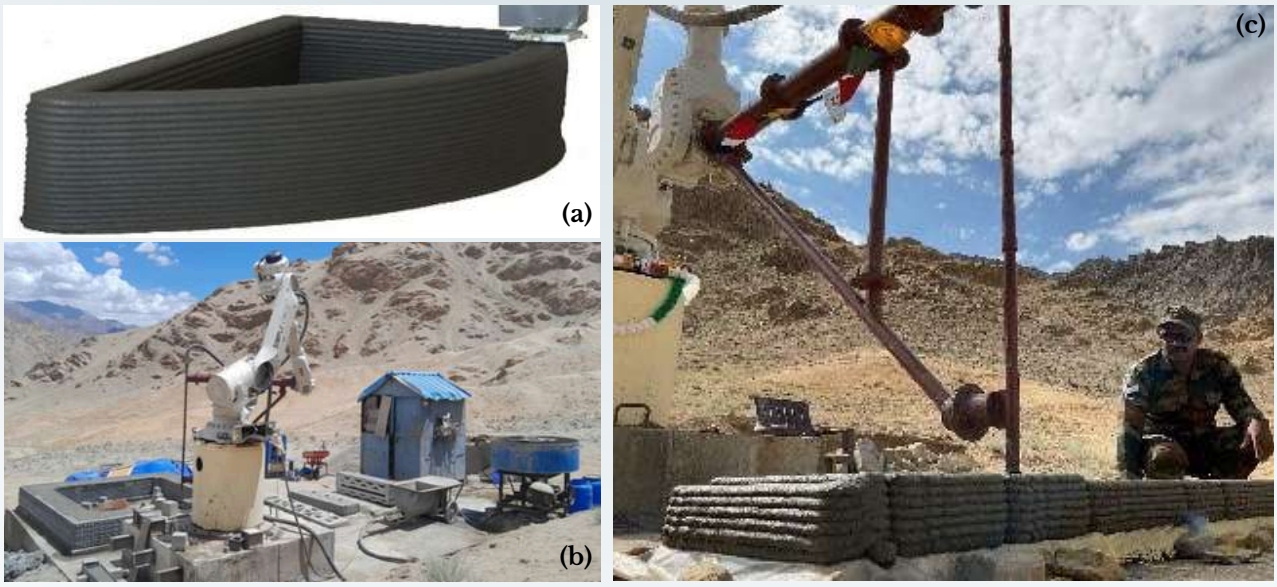


Fig 4: (a) printability testing of the concrete mixture; (b) and (c) contours of the OP bunker being printed in Leh.

A form-optimized, engineered protective structure with integrated reinforcement was developed. The form-optimized printed structure consisted of multiple layers of printed filaments with a functionalized façade. The arrangement of the filaments was developed to enhance structural resistance to blast loading.

The functionalized façade was developed for ricochet minimization. The highly functional design provided high structural efficiency at low material usage while ensuring high protection. A schematic and photograph of the form optimized functional printed form of OP Bunker are shown in Figure 5.

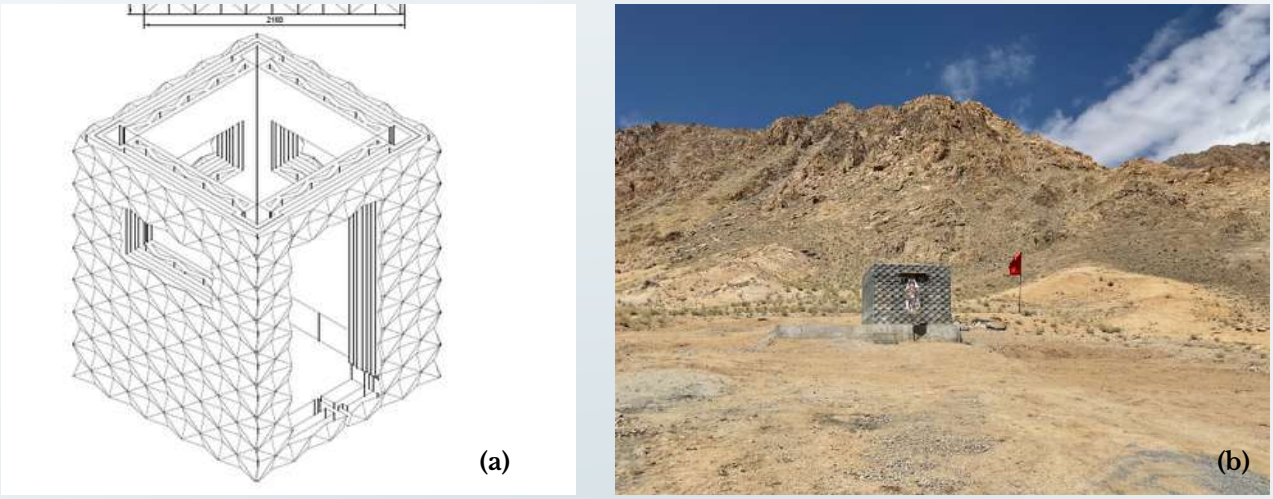


Figure 5: (a) schematic of the form-optimized structure; (b) the printed OP bunker in Le.

Summary

The form-optimized structure with enhanced ballistic protection was printed in ten days with fourteen hours of printing time. This project demonstrates the application of Indigenous technology for rapidly deployable structures adopting additive manufacturing principles on-site construction in forward areas, thereby increasing defense preparedness.

The project is an outcome of the collaboration of a startup company and IIT Hyderabad that has delivered on previous projects, such as the deployment of a 3D printed bridge (https://www.youtube.com/watch?v=Zjo0enwcCUU) and on-site printed medical facility with local materials for the Indian Army (https://www.linkedin.com/feed/update/urn:li:activity:7229098948399935488)

The printed bunker represents a ground-breaking milestone in military construction with advancements in material processing, design methodologies, and production procedures for fabricating structures. The pioneering work and technological advancement helped enhance the defense preparedness of the Indian Army.

[1] Mr Prashant R Singh
PhD Scholar, Department of Civil Engineering

[2] Prof Kolluru V L Subramaniam
Department of Civil Engineering

[3] Mr Dhruv Gandhi
Director, Simpliforge Creations Pvt Ltd

[4] Lt Col Arun Krishnan
(MTech IIT Hyderabad, Indian Army

Veera - Tactical Dynamics

KID: 20240102

Veera Tactical Dynamics is a leading Defence-technology company and futuristic combat partner of the Indian Navy. We're focused on the Research and Development of Advanced materials to revolutionize the Defence, security & civilian sectors. Our mission is to provide innovative, high-performance, and sustainable material solutions to address the most critical challenges faced by the military, law enforcement and homeland security agencies.

Veera Tactical Dynamics was founded by Mr Sai Teja Peddineni a Volcano climber, Serial entrepreneur and Former security Consultant for various institutions in the intelligence community.

Our core strength lies in integrating ground-breaking lightweight, high-strength, temperature-resistant, and stealth materials. Our interdisciplinary team creates transformative technologies to boost the operational effectiveness and safety of Defence systems and personnel.

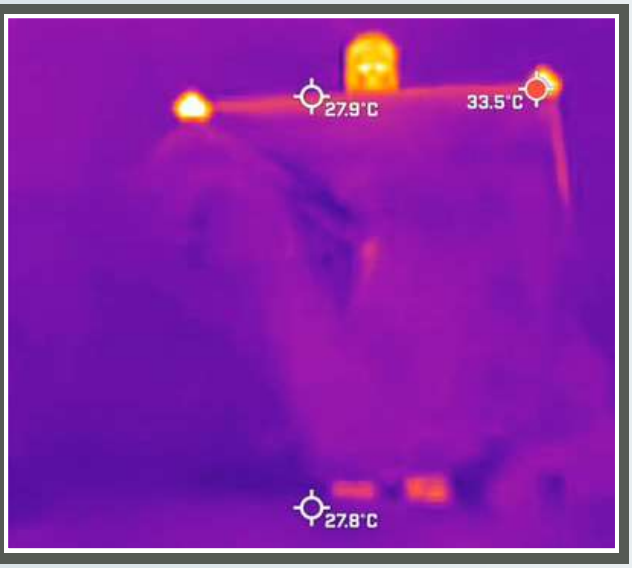
U-Safe Fire-Resistant Suit: Protects the Wearer from short exposure to fire (+350° C) and Hazardous Materials.

Our product line includes:

Tardigrade Suit: Survives extreme temperatures (-200°C to +1000°C).

ECWS: The warmest cold weather clothing system capable of withstanding upto -200° C while maintaining troop comfort and operational ability, Weighing Just 900 grams.

Moisture Wicking Hydrophobic Weapon Cover: World's first Technical Fabric which is Flame Proof, Hydrophobic, moisture wicking and has high tensile strength. Weapon Cover has been successfully field tested and currently in the Phase of Procurement.



IR Stealth Protection Clothing: Shields its wearers from adversary sensor systems during operations in the dark, providing a tremendous advantage over the adversaries.

Super Cavitation Coating: Enhances torpedoes with low-pressure bubbles, reducing drag, boosting speed, range, fuel efficiency, and durability.

Veera Tactical Dynamics has been recognized with the "Innovations for Defence Excellence PM Awardee (Idex)" for Challenges OC 6.0 and Disc 7.0 Sprint, showcasing our dedication to pushing the boundaries of Defence technology.

Our Memorandum of Understanding with the Indian Navy further solidifies our position as a research and innovation combat technology partner, underscoring our commitment to advancing cutting-edge solutions and bolstering India's defence capabilities.

Recently, we signed a historic Memorandum of understanding with S Carfil S.A., one of the most active subsidiaries of CN Romarm SA, state-owned enterprise of Romania specialized in the production of armaments, ammunition, dual-use products and equipment, with over 100 years of experience.

The document signed on May 29 2024 In the Embassy of India in Romania.

This strategic collaboration was made possible with the invaluable support and facilitation by the Embassy of India in Romania and the Society of Indian Defence Manufacturers (SIDM).

We extend our heartfelt gratitude to these organizations for their assistance in achieving this milestone.

We believe that this partnership will not only enhance our product offerings but also significantly contribute to our growth and technological advancement.

We are excited about the opportunities this MoU brings and look forward to continuing our journey of innovation and excellence with the support of iTIC Incubation at IIT Hyderabad.

Mr Sai Teja Peddineni
Chief Executive Officer
Veera Tactical Dynamics
E block, TIP
IIT Hyderabad

the pioneer

Fri, 12 Jan-24; Pioneer - Hyderabad; Size : 124 sq.cm.; Circulation:55000; Page : 4

Hyderabad is a Life Sciences capital: IIT-H chief Uday Desai

PNS ■ HYDERABAD

Uday Desai, Founder and Director of IIT-H said that Hyderabad is a Life Sciences capital. The Federation of Telangana Chambers of Commerce and Industry (FTCCI) in support of the Knowledge Partner IIT-H has launched Futurithm, an international conference that featured a global gathering of thought leaders sharing insights and visions for the future of technology and innovation at Hotel Radisson Blu, Banjara Hills. Speakers from 10 countries attended the event.

Uday Desai was the chief guest at the launch of Futurithm. He said, "Innovation in various technologies is very critical. Space technology is the most happening and promising in the private sector. Various components of digital are emerging. We need to look at them seriously. Most of the jobs today are in the digital sector -AI and ML. There is a big worry that hardly any student is getting into conventional engineering streams. AI and ML are here to stay and in the next ten years, these are going to play a very vital role. Salaries in these sectors are tremendous. Any subject you pick up there is an AI and ML component in it. IIT Hyderabad is very strong in terms of subject experts and faculty in AI and ML. Collaboration with FTCCI is quite valuable. India has launched a very big mission in quantum computing. This new and emerging technology can be explored."

"A Memorandum of Understanding (MoU) was exchanged between FTCCI and iTIC (IIT Hyderabad). The whole idea behind this collaboration is to bring academic innovations to the industry. We are going to solve the problems of the future.

The classroom-to-industry journey is 1500-days-long. We will collect problem statements from the industry today and we will work on them. We will not only discuss the future, but we will also experience the future now. The experience zone that we will create will have technologies that do not exist today. Through all these efforts we are going to help imagine how the future is going to be", said Vishal Chouhan.

THE HANS INDIA

Wed, 21 Feb-24; The Hans India - Hyd; Size : 203 sq.cm.; Circulation:78098; Page : 3

IIT Hyderabad campus dedicated to the nation by PM

HANS NEWS SERVICE
HYDERABAD

THE Indian Institute of Technology Hyderabad (IITH) witnessed the dedication of its transformative campus development project under the second phase to the nation by Prime Minister, Narendra Modi virtually on Tuesday.

According to the officials, the dedication ceremony included key buildings such as the international guest house, convention centre, technology incubation park, knowledge centre, sports and cultural complex, students' hostels, and various academic and administrative buildings, collectively valued at Rs 1,089 crore.

Urging students to contribute back to the nation, Telangana Governor Tamilisai Soundararajan said, "IIT Hyderabad is known for its excellence in technology and innovation, with a top 8 rank in engineering and a top 3 rank in innovation by NIRF 2023. I have been witnessing the campus's progress since my inception as Governor of the State. The development of low-cost ventilators by IITH's innovators was once a personal memory. "Because education is now student-centric, I am sure many such novel initiatives will be making a mark in the journey of Viksit Bharat.".

Dr BVR Mohan Reddy, chairman, board of governors, IITH, said, "The dedication of the IIT Hyderabad campus to the nation is a testament to our unwavering commitment to academic excellence and innovation. This world-class facility sets new standards for educational institutions in India and aims to be the top-100 global institute in the future."

Professor B S Murty, director, IITH, said, "The dedication of the campus to the nation is a proud moment for the entire IITH community.

Sachiko Imoto, senior vice president, JICA, said, "The dedication ceremony is a symbol of the successful collaboration between India and Japan in the field of education and technology."

THE TIMES OF INDIA

Mon, 19 Feb-24; Times Of India - Hyderabad; Size : 14 sq.cm.; Circulation:123000; Page : 3

IITH summer internship for 200 students

Hyderabad: The Indian Institute of Technology, Hyderabad (IITH) will be offering summer internships to as many as 200 students as part of the Summer Undergraduate Research Exposure (SURE) programme. Internships are scheduled to start in May 2024.

Of the 200 slots, 50 will be reserved exclusively for girl students. Second and third-year BTech or BDes students, first-year MSc or MA students, and third and fourth-year integrated BTech-M Tech students are eligible for these internships.

According to institute, a student can apply in any of the 19 departments of IITH as per their interests. "However, only a single application will be allowed," a release read. TNN

Chronicle DECCAN

Tue, 23 Feb-21; Deccan Chronicle - Hyderabad; Size : 15 sq.cm.; Circulation:43099; Page : 2

Humidity prolongs life of virus, reveals IIT-H study

DC CORRESPONDENT
HYDERABAD, FEB. 22

Droplets of SARS-Cov 2 take three times longer to dry on mobile phones than on glass surfaces, according to latest research on fluid dynamics carried out at IIT Hyderabad.

The droplets of size 10 um of saliva or discharge from the nose of the infected person were tested on different surfaces as part of the research.

Researchers dried the droplets and found that it had minimal effect in spreading. Comparing water droplets with that of saliva droplets, they found that the latter take longer time to dry.

Saliva droplets consist of salt, protein and surfactant in addition to water, which delay evaporation. It was found that an increase in humidity slowed the drying process.

This means that the virus can survive for a longer period at contact points where saliva droplets fall. It is likewise in completely air-conditioned rooms.

The theoretical and numerical study was conducted by Dr Saravanan Balusamy, Dr Sayak Banerjee from department of mechanical and aerospace engineering and Professor Kirti Chandra Sahu from department of chemical engineering of IITH.

The study has been published in International Communications in Heat and Mass Transfer.

Thu, 04 Jan-24; Telangana Today - Hyderabad; Size : 49 sq.cm.; Circulation:88000; Page : 5

IITH set to make fertilizers from waste

STATE BUREAU
Sangareddy

Indian Institute of Technology-Hyderabad (IITH) Director Prof BS Murty has sought support from Sangareddy district administration to convert waste produced in Kandi mandal into organic fertilizer and manufacture bricks with the remaining waste.

Talking to Sangareddy MLA Chintha Prabhakar, who visited IITH on Wednesday, Prof Murty said they would build a shed in the dumpyard where they could make organic fertilizer and bricks out of waste.

THE TIMES OF INDIA

Sat, 03 Feb-24; Times Of India - Hyderabad; Size : 70 sq.cm.; Circulation:123000; Page : 4

IIT-H begins RHYTHM talk series

TIMES NEWS NETWORK

Hyderabad: To encourage PhD and post doctoral students to take up a career in academia, the Indian Institute of Technology, Hyderabad (IITH) has started a new talk series wherein young faculty will be sharing their views and experiences.

The initiative – Rendezvous with Young IITH Minds (RHYTHM), has been started by the sponsored research & consultancy office at the institute.

"Glad to share a new initiative, RYTHM, on behalf of the #ResearchAdvisoryCommittee," read a tweet from IIT Hyderabad with the handle @IITHydera-bad.

As part of the talk series, Indranil Malik, an assistant professor from the Biotechnology department addressed students on Wednesday at the IIT campus.

"The first talk would be given by Dr Indranil Malik on January 31. These engaging sessions aim to provide valuable guidance and inspiration to our senior PhDs & Postdocs in their transition to a career in academia," tweeted Chandra Shekhar Sharma, dean, sponsored research and

Senior leaders from 15 US universities and IIE members visited IIT Hyderabad

By: Rajesh M March 2, 2024 Education

DECCAN Chronicle

Tue, 23 Feb-21; Deccan Chronicle - Hyderabad; Size : 15 sq.cm.; Circulation:43099; Page : 2

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DECCAN Chronicle

IInvenTiv-2024: IIT Hyderabad and E-Spin Nanotech Ink Technology Transfer Deal

Tue, 20 Feb-24; Eenadu - Hyderabad; Size : 162 sq.cm.; Circulation:305600; Page : 12

ఐఐటీహెచ్ ప్రాజెక్టును నేడు జాతికి అంకితమివ్వనున్న మోదీ

- పాలమూరు వర్సిటీలో అభివృద్ధి పనులకు శంకుస్థాపన
- రెండింటిలోనూ పర్యటనగానే ప్రధాని పోజరు

ఐఐటీ హైదరాబాద్ పరిసర ప్రాంతం

మహబూబ్‌నగర్ అర్బన్, నంగారెడ్డి టౌన్, హన్మకొండ: ఐఐటీ హైదరాబాద్ క్యాంపస్‌లో డెవలప్‌మెంట్ ప్రాజెక్టులను ప్రధాని మోదీ మంగళవారం జాతికి అంకితం ఇవ్వడం తోపాటు పాలమూరు విశ్వవిద్యాలయంలో వివిధ అభివృద్ధి పనులకు శంకుస్థాపన చేయనున్నారు. సంగారెడ్డి జిల్లా కంది లో 2008లో స్థాపించిన ఐఐటీ హైదరాబాద్ 18 డిపార్ట్‌మెంట్లు ఉండగా మొదటి బ్యాచ్ పూర్తిచేసి ప్రస్థానాలు ప్రారంభించారు. 2018 నుంచి పాలిటెక్ అన్ని డిపార్ట్‌మెంట్లను ప్రారంభించారు. తరువాత రెండో బ్యాచ్ ప్రతి డిపార్ట్‌మెంట్‌లోనూ ఒక భవనం నిర్మించారు. ఈ ఏడు మంది విద్యార్థులకు సరిపడా తరగతి గదులు, అదనపు తరగతి గృహం, గ్రంథాలయం, క్రీడా సముదాయం, ల్యాబ్‌లు, నిర్వహణ సముదాయాలు పూర్తిస్థాయిలో నిర్మాణాలతో క్యాంపస్‌ను జాతికి అంకితమిస్తారు. ప్రధానికి విజ్ఞప్తి చేయగా సమన్వయకర్తలు ఐఐటీహెచ్ డైరెక్టర్ ప్రొఫెసర్ బి.ఎస్ మూర్తి తెలిపారు. ఈ కార్యక్రమంలో గవర్నర్ తమిళిసై ప్రత్యక్షంగా పాల్గొంటారన్నారు.

రూ.100 కోట్ల సీఎం ఉపనిధులతో..

సోమవారం పాలమూరు వర్సిటీ సమావేశ మందిరంలో ఏర్పాటు చేసిన విలేకరుల సమావేశంలో మహబూబ్‌నగర్ ఎమ్మెల్యే యెన్నం శ్రీనివాస్‌రెడ్డి, ఎమ్మార్వో కిష్టప్పర్ వా మమీమా దస్‌రెడ్డితో కలిసి ఉపకులపతి ఆచార్య లక్ష్మీకాంత్ రాథోడ్ మాట్లాడారు. కేంద్ర ప్రభుత్వం ప్రధానమంత్రి ఉచ్చతర్ శిక్షా అభియాన్(పీఎం ఉష) కింద మంజూరు చేసిన రూ.100 కోట్ల నిధులతో వర్సిటీ పనులను ప్రధాని మోదీ ప్రారంభిస్తారు. 2023లో సీఎం ఇవ్వ కింద కొత్త భవన నిర్మాణాలకు రూ.80 కోట్లు పాత వాటి మరమ్మతులకు రూ.5 కోట్లు, పరికరాలకు రూ.14 కోట్లు, సిద్ధ ఆంపెండిక్ రూ.3 కోట్లు కేటాయిస్తూ ప్రతిపాదనలు పంపగా కేంద్రం మంజూరు చేసింది. ఈ మేరకు ప్రధానితోపాటు కేంద్ర మంత్రి కిషన్‌రెడ్డి, రాష్ట్ర ప్రభుత్వం, యూజీసీ ఛైర్మన్ మామిడాల జగదేశ్‌కు పృథ్వీ తదు ఈ నిధులతో వర్సిటీ అన్ని మౌలిక 2025-26లోపు పూర్తి చేస్తాం అని తెలిపారు. సీఎం కేసీఆర్‌రెడ్డితో మాట్లాడి వర్సిటీకి మరో రూ.100 కోట్లు మంజూరు చేసేలా కృషి చేస్తా మని ఎమ్మెల్యే యెన్నం వివరించారు.

THE TIMES OF INDIA

Sun, 03 Mar-24; Times Of India - Hyderabad; Size : 39 sq.cm.; Circulation:123000; Page : 4

17 US varsities delegation visits IIT Hyd over edu partnerships

TIMES NEWS NETWORK

Hyderabad: A delegation comprising senior leaders from seventeen US universities, along with members of the Institute of International Education (IIE), visited the Indian Institute of Technology Hyderabad (IITH) as part of a seven-day visit to India for the Centre for International Partnership's 2023-24 IIE Country Spotlight Series: India.

The primary objectives included enhancing the US-India collaboration, promoting student and scholar mobility in higher education, and fostering joint initiatives.

The intended outcomes of this engagement included, research collaboration in the area of mutual interest, exchange of faculty and students, joint supervision & joint degree programs, identifying the mutual area of interest in research, setting up centre of excellence in consortium mode for mutual growth and joint workshops, virtual brainstorming sessions and joint research proposals.

Professor BS Murty, director of IITH highlighted ongoing activities aimed at strengthening collaboration in research and higher education between the two nations.

He provided updates on the Indo-US Initiative on Critical and Emerging Technologies (ICET) and its five research thrust areas, including bilateral student exchanges (UG 3+1 programs), co-supervision of research students, co-innovations between students from both US and India, collaborative joint degree programs and initiatives for enhanced academia/industry connections and the establishment of Academia-Industry Consortia (Indo-US) with joint innovations.

Jal Shakti pact with IIT-H, NITW

STATE BUREAU
Hyderabad

The Ministry of Jal Shakti on Wednesday signed an agreement with 12 technical institutions for academic and research collaboration for basin management of six major rivers in the country.

The six rivers include the Krishna and Godavari basins. While the Godavari basin was entrusted jointly to IIT Hyderabad and NEERI, Nagpur, the NIT Warangal, and NIT Surathkal were entrusted with the task of managing the Krishna river basin.

Other river basins included in the project are Narmada (IIT Indore and IIT Gandhinagar), Mahanadi - IIT Raipur and IIT Rourkela, Cauvery - IISc Bangalore and NIT Trichy, Periyar - IIT Palakkad and NIT Calicut.

The agreements were signed at a function by G Ashok Kumar, Director General of National Mission for Clean Ganga and project director on behalf of the National Centre for Educational Resource Development and the directors of the consortium institutes.

Wireless 5G tech developed at IIT-Hyd launched in Barcelona

Nirupa.Vatyam
@timesgroup.com

Hyderabad: An indigenous technology developed in India has now reached Barcelona. On Thursday, the Spanish city witnessed the launch of ORAN — a wireless technology-based on open radio access network, developed by WiSig Networks Private Limited, a start-up founded at the Indian Institute of Technology, Hyderabad (IIT-H). It has been done in collaboration with Programmable Solutions Group. The technology's USP: To enable global wireless operators to increase capacity, improve signal quality and better spectral efficiency.

"Since this 5G technology is very efficient it can help improve the capacity by three times when compared to 4G. Say, if a telecom operator is catering to 100 users, they will be able to cater to 300 with this," said Kiran Kumar Kuchi, founder of WiSig Networks adding how it is touted to be the world's first ORAN Massive MIMO ULPI Radio Solution. Terming this technology as an advanced version of ORAN technology, he said that along with efficiency, the technology can also assure better reach, speed and prove to be cost effective.

THE NEW 5G REVOLUTION

Kuchi, who is currently in Barcelona for the launch, said that he along with PSG, a business unit spun off from Intel Corporation, has demonstrated the technology to telecom operators there and will soon deploy it in Barcelona. "We are making this cutting-edge technology readily available to global telecom operators and original equipment manufacturers," said the professor at the department of electrical engineering at IIT-H.

In India, the technology will be deployed through BSNL and other private networks, he added. "We are working with C-DOT (Centre for Development of Telematics), which is the R&D arm of the department of telecommunications (DoT), for developing 5G Open-RAN. So, the technology deployment will be through BSNL and other private networks," he said and added that they are hopeful that it will happen either by the end of 2024 or early next year.

According to Kuchi, this solution marks a milestone in the evolution of 5G deployments, offering open, interoperable, and programmable alternatives to traditional custom radios and baseband units.

IIT-H celebrates milestone with message of nurturing innovation

PNS ■ HYDERABAD

IIT Hyderabad celebrated its 16th Foundation Day on Thursday at its premises with Prof Abhay Karandikar, Secretary, Department of Science and Technology, Government of India, as the chief guest of the event. Dr BVR Mohan Reddy, Chairman BoG, IITH, delivered the presidential address and Prof BS Murty, Director, IITH, welcomed the gathering along with the Deans, Heads of the Departments, faculty, staff and students.

During the occasion, awards were given to faculty and students for their contribution under various categories such as Faculty Teaching Excellence, Faculty Research Excellence, Staff Excellence & Student Academic & Research Excellence Awards, along with felicitation of Endowment Awards winners. More than 182 achievers have been honoured by the dignitaries for their untiring and persistent contributions to the institution's growth.

Prof B S Murty said, "This milestone journey of 15 years of excellence is credited to every esteemed member of the IITH Community.

Dr BVR Mohan Reddy, Chairman, BoG, said, "As we commemorate 16 years of triumph, we are diligently shaping our future strategies to fortify and ensure the sustainability of our institution. Various initiatives are in the pipeline to enhance student learning, elevate research outcomes, and foster entrepreneurship".

Prof Abhay Karandikar gave a talk on innovation and entrepreneurship in academic institutions and praised IITH for its Innovative Instinct in Science & Technology during his 16th Foundation Day Lecture of IITH. He said, "India is the third country globally in scientific paper publication, and with the recent success in space and medicine, the public moral for innovation has enhanced.

I am confident that IIT Hyderabad will play a vital role in driving innovation for the greater good of the society with its incredible research infrastructure and innovative minds.

We are seeding research and innovations in quantum computing, communications, quantum sensing and metrology and quantum materials & devices."

The Foundation Day lecture was followed by the announcement of the excellence award by Prof Bharat Bhooshan Panigrahi - Dean (Academics); Prof Kanchana V - Dean (Faculty); Prof Ranjith Ramadurai - Dean (Admin), and Dr Madrika Khandelwal - Dean (ACR).

Japanese entrepreneurs awed at tech advancement in IIT-H

PNS ■ HYDERABAD

A delegation of 26 Japanese entrepreneurs comprising CEOs and Presidents of various SMEs visited the IIT Hyderabad campus as a part of Japanese entrepreneurs quest towards gaging India's technological and entrepreneurial atmosphere and developing know-how of India's student talent for future hiring in Japanese enterprises on Friday.


The Japanese delegation at the IIT-H campus

The delegation was introduced to different technological and research achievements of IIT Hyderabad, including its international collaborations and the India-Japan collaborative efforts at the institute. They were also briefed about student recruitment and the internship process, besides persuading them to hire more Indian talents. They also visited the Suzuki Innovation Centre (SIC) situated at the Institute besides learning about the JICA FRIENDSHIP 2.0 Project at the institute.

Suzuki Innovation Centre (SIC), situated at the Institute, is a collaborative endeavour between Suzuki Motor Corporation, Japan (SMC), and IIT Hyderabad, set up in January 2022 at IITH. Members of the visiting delegation were also taken for a tour of the IITH campus and all its facilities, including TIHAN. Delegates were happy to see the unprecedented technological and infrastructural advancements and research facilities available at the Institute. The Japanese delegation, led by Kenta Tani of the Japan Management Consultants Association, also met the Director of IIT Hyderabad, Prof BS Murty, as part of a courtesy call. Japanese representatives held several rounds of talks with IITH representatives comprising the Dean of International Relations, Prof Tarun Kanti Panda, Team Leader of JICA FRIENDSHIP 2.0 Project, Kunitoshi SAITO, Prof. Kotaro Kataoka, and Faculty-in-charge of the Office of Career Services, Dr Abhinav Kumar and other senior academic and administrative officials.

Both sides discussed several issues of mutual interests and future collaboration opportunities. The visiting delegation showed keen interest in various aspects of IITH, viz. its education model, research specialities, and IITH-Japan collaborative efforts, viz. SIC, JICA FRIENDSHIP 2.0 Project.

In a statement issued to the Japan Desk at IITH, the delegation said, "We saw IIT Hyderabad and were impressed by the depth of relations with Japan and would like to expand business development by linking more Japanese technology and innovation with India."

16th Foundation Day held at IIT-H

Hans News Service
Hyderabad

IIT Hyderabad has celebrated its 16th Foundation Day on Thursday. Prof Abhay Karandikar, Secretary, Department of Science and Technology, Government of India, was the Chief Guest of the Event.

During the event, more than 182 achievers were honoured by the dignitaries for their untiring and persistent contributions to the institution's growth. Dr BVR Mohan Reddy, Chairman, BoG, IITH said, "As we commemorate 16 years of triumph, we are diligently shaping our future strategies to fortify and ensure the sustainability of our institution. Various initiatives are in the pipeline to enhance student learning, elevate research outcomes, and foster entrepreneurship".

Prof Abhay Karandikar, Secretary, Department of Science and Technology stated India is the 3rd country globally in scientific paper publication, and with the recent success in space and medicine, the public moral for innovation has enhanced. From DST, we are enthusiastic about accelerating fundamental research and encouraging startups. I am confident that IIT Hyderabad will play a vital role in driving innovation for the greater good of the society with its incredible research infrastructure and innovative minds."

IIT-Hyderabad cluster gets ₹60 cr central grant for cutting-edge tech

Times News Network

Hyderabad: The Indian Institute of Technology, Hyderabad (IITH), cluster has been awarded a Rs 60 crore grant by the department of science and technology (DST) under the Sophisticated Analytical & Technical Help Institutes (SATHI) scheme.

IITH is among the three clusters selected under this scheme. The proposed Centre for In-Situ and Correlative Microscopy (SATHI-CISCoM) will serve as the cornerstone for cutting-edge characterisation. It aims to bring together scientists from a broad range of disciplines, including physical sciences, chemistry, biology and pharmaceutical studies to address common scientific goals that can only be addressed by using such sophisticated microscopy techniques.

- IIT-H clusters selected under Sophisticated Analytical & Technical Help Institutes (SATHI) scheme
- Under scheme, new centre to come up & serve as cornerstone for cutting-edge characterisation
- Centre to get support from 15 academic & research institutes
- UoH, TSCHE, NIT-Warangal, CCMB, IICT-H, among those organisations

Led by IITH director BS Murty and a team of researchers from the institute, the SATHI-CISCoM facility is supported by 15 academic, research, and industrial organisations with over Rs 16 crore. University of Hyderabad (UoH), Telangana State Council for Higher Education, National Institute of Technology, Warangal, Centre for Cellular and Molecular Biology (CCMB), Indian Institute of Chemical Technology (IICT), Hyderabad, LV Prasad Eye Institute, Hyderabad, among others are part of these 15 institutes.

The ORAN base station radio unit development led by Prof Kiran Kuchi, IITH, introduced a revolutionary ORAN technology harnessing a multitude of antennas on cell towers.

The breakthrough promises to not only enhance cell coverage but also boost capacity by an impressive 3-fold compared to existing 4G networks, thereby optimizing spectrum utilization.

Read more: https://pib.gov.in/PressReleasePage.aspx?PRID=2004801

VandeMataram-A Calligraphic Symphony by Pragya (MDes 2022-24). Video: https://www.youtube.com/watch?v=9umOxnjbF38

Prof Chandra Shekhar Sharma and his team from Carbon Lab, IITH are taking us one step closer to a green Earth and even paving the way for terraforming Mars! YouTube: https://youtu.be/CA3imsnLlcc

IITH at unveiling of a compendium of SATHI Clusters. Read More: https://pr.iith.ac.in/pressrelease/SATHI.pdf

"Nemo. care Wellness' Nemocare Raksha Featured on Shark Tank India 3: A Milestone for CfHE Startups"

Honourable Prime Minister, Shri Narendra Modi Dedicated IIT Hyderabad Campus to the Nation
Read more: https://pr.iith.ac.in/pressrelease/PMDN.pdf

Hon'ble Governor of Telangana & Lt. Governor of Puducherry, Dr Tamilisai Soundararajan participated as the Guest of Honour in the virtual launch of 'PM-SURAJ' portal program

Second edition of R&D Innovation Fair IInvenTiv at IITH.
Read more: https://pr.iith.ac.in/pressrelease/IInvenTiv24.pdf

Inauguration of IInvenTiv by Hon'ble Union Education Minister Shri Dharmendra Pradhan. Read more: https://pr.iith.ac.in/pressrelease/ITV24.pdf

National Science Day 2024 Celebrations with Prof Mustansir Barma, Former Director, TIFR Mumbai

BVRSCIENT & Innovation Council at IITH celebrated "Institution's Innovation Day" in honour of Dr APJ Abdul Kalam's Birth Anniversary.

16th Foundation Day Celebrations at IIT Hyderabad, with the message of "Nurturing Innovation for Developed Nation" Read more: https://pr.iith.ac.in/pressrelease/FD24.pdf

Research Scholars Day RSD2024 witnessed a conglomeration of esteemed Researchers of IITH campus

Women's Day Celebrations and releasing of IWISE (IITH Women In STEAM Empowerment) compendium.

2nd edition of "Ayaam 2024", the Annual Fest of the Department of Design

Prof Abhay Karandikar, along with NMICPS officials visited the TiHAN at IITH and witnessed Demonstrations of Autonomous multimodal transportation solutions including ground, aerial, Surface, and underwater vehicles

Senior leaders from 15 US universities and IIE members visited IITH to expand academic and research collaborations

IITH and JICA united to nourish Design Innovation JICA Chair Lecture Series

A 26-member business delegation comprising Chiefs and Members of some Japanese SMEs visited IIT Hyderabad

WiSig Networks, a startup incubated at IITH, demonstrated its homegrown 5G technologies to Prof Abhay Karandikar, Secretary of the DST

Republic Day Celebrations at IITH.
Youtube: https://youtu.be/gTkKthEonMEsi=2RfQcDatQmrbGWZJ

Immerse yourself in the vibrant world of Mural Art by the Design Dept IITH. YouTube: https://youtu.be/asZU_pJuTHk

Plantation Drive for January 2024 - planted approximately 200 Golden Duronta and other varieties

IITH has successfully conducted the Plantation Drive for February 2024 by planting approximately 400 Hamelia patens

Campus Corner
Collaborations

Technology Transfer agreement between IIT Hyderabad and E-Spin Nanotech.
Read more:
https://pr.iith.ac.in/pressrelease/INV241.pdf

Viterbi School of Engineering, University of Southern California, USA, and IIT Hyderabad Signed an Agreement For Cooperation in the field of Research and Education

Collaboration between IIT Hyderabad and Intel India Aiming at Technological Advancements

Campus Corner
Celebrations

Elan & ηVision A roller coaster of emotions, marking our triumphant return to the offline realm!
Read More: https://youtu.be/YHfUqpOGNMc

"Balancing Skepticism and Innovation: The Intersection of Entrepreneurship and AI" a talk by Mr Omkar Patil

Workshop on 'Decoding Corporate Taxation: Insights for Start-ups' by Mr Srinivasan Krishnaswami

Workshop on National Science Day by Mr Samir Kumar

RYTHM, "Rendezvous with Young IITH Minds" and is a new talk series by IITH faculty about careers in academia, by the SRC Office, IITH on behalf of the Research Advisory Committee IITH.

CTBUH India Chapter in collaboration with IITH Organized a half-day seminar on Tall Buildings

IIT Hyderabad exemplified the E-Summit fair

Finance and Consulting Club (FCC) at IITH, a unique platform for students to delve into finance, consulting, and product management avenues, has successfully concluded the first edition for Horizon

OAT by IIT Hyderabad

https://www.youtube.com/hashtag/oatbyiith

OAT Course by Dr Amrita Deb,
Department of Liberal Arts
Course Title: Psychopathology and Mental Health
Read more: https://shorturl.at/AINPY
YouTube: https://youtu.be/6zKKmIgHxLc

OAT Course by Dr KBVN Phanindra,
Department of Civil Engineering
Course Title: Fundamentals of GIS and Remote Sensing
Read more: https://shorturl.at/jkprP
YouTube: https://youtu.be/fYyN_sB2JII

OAT Course by Dr Chandrasekhar Murapaka
Department of MSME
Course Title: Thin Film Technology
Read more: https://shorturl.at/lwzN2
YouTube: https://youtu.be/uunyOln05B4

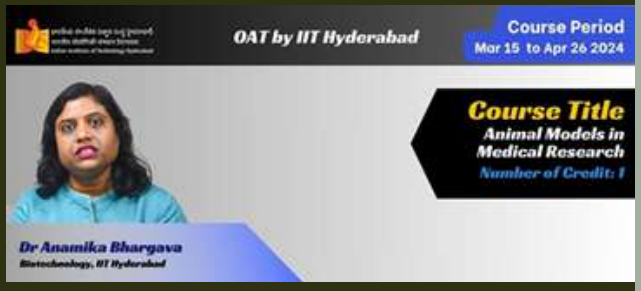
OAT Course by Dr Subhradeep Chatterjee
Department of MSME
Course Title: Computational Thermodynamics and Kinetics of Materials
Read more: https://shorturl.at/fhsY5
YouTube: https://youtu.be/QSOB5IVGSkI

OAT Course by Dr Shourya Dutta
Department of MSME
Course Title: Micro- and Nano-fabrication
Read more: https://shorturl.at/HRY45
YouTube: https://youtu.be/MePUgN-Wico

OAT Course by Dr Ashok Kamaraj
Department of MSME
Course Title: Clean Steel Making Theory, Practice and Modeling
Read more: https://shorturl.at/aboR0
YouTube: https://youtu.be/4TC6lTZyJ7E

OAT Course by Dr Ashish Misra
Department of Biotechnology
Course Title: Stem Cell Biology and Regenerative Medicine
Read more: https://shorturl.at/acdHR
YouTube: https://youtu.be/4LNYJ2NsIMk

OAT Course by Prof B S Murty
Department of MSME
Course Title: High Entropy Materials
Read more: https://shorturl.at/iKTUZ
YouTube: https://youtu.be/6-30xD8VOlc



OAT Course by Dr Anamika Bhargava
Department of Biotechnology
Course Title: Stem Cell Biology and Regenerative Medicine
Read more: https://shorturl.at/xyRSY
YouTube: https://youtu.be/6s5fE6hG4EM

Campus Corner
Alumni Highlights

Meet & Greet in Mumbai 17th March 2024

Meet & Greet in Tokyo (Japan) 28th March 2024

Meet & Greet in WashingTon DC

Campus Corner
Moment of Pride

Prof Sai Santosh Kumar Raavi
Department of Physics
Elected as A Fellow of the Royal Society of Chemistry (FRSC)

Mr Kethavath Naveen Naik
Phd Scholar,
Department of Mechanical & Aerospace Engineering
Received The Best Paper Award at 10th International & 50th National Conference on Fluid Mechanics & Fluid Power, IIT Jodhpur

Mr Vineet Gairola
PhD Scholar
Department of Liberal Arts
Received The Division 36 Social Justice Task Force, Research Grant Award from The American Psychological Association

Mr Kingshuk Mondal
PhD Scholar
Department of Mechanical & Aerospace Engineering
Received The Best Paper Award at 10th International & 50th National Conference on Fluid Mechanics & Fluid Power, IIT Jodhpur

Dr Shiva Ji
Assistant Professor
Department of Design

Received an Invitation from The Japan Science and Technology Agency (JST) to join Japan-Asia Youth Exchange Program in Science hosted by Kyushu University, Japan

Mr Piyush Saklani
MSc
Department of Physics

Awarded Chanakya Post-graduate Fellowship from I-HUB Quantum Technology Foundation (I-HUB QTF) atIISER Pune

Dr Narayanswamy Sake
PhD Scholar (2021)
Department of Materials Science And Metallurgical Engineering

Appointed as an Assistant Professor at IIT BHU

Mr Apan Dinda, Ms Mrinmoyee Saha & Mr Pitambar Bagui
Department of Physics

Awarded Chanakya Post-graduate Fellowship from I-HUB Quantum Technology Foundation (I-HUB QTF) at IISER Pune

Prof C Malla Reddy
Department of Chemistry

Being appointed Co-Editors-in-Chief of CrystEngComm Journal

Dr Prakash Chandra Mondal
Associate Professor
Department of Liberal Arts

Being admitted as A Fellow of the Royal Society of Arts (RSA) London

Dr Rahul Kumar
Assistant Professor
Department of Biotechnology

Joined the Editorial Board of Nature Scientific Reports Journal

Dr Vandana Sharma
Associate Professor
Department of Physics

Received the "Young Scientist Award" in The National Physicist Conclave - 2024

Ms Purva Kherkar
Lady PTI

Won the Gold and Silver Medal in 44th National Master's Athletics Championship 2024

Mr Sandip Das
PhD Scholar, Department of Biotechnology

Received the Best Poster Presentation Award (1st prize) at the International Conference Advances in Proteomics Technologies (APT)-2024 at IIT Bombay

Ms Srishti Banerjee
PhD Scholar, Department of Biotechnology

Received the Best Oral Presentation Award (2nd prize) at the International Conference, Advances in Proteomics Technologies (APT)-2024 at IIT Bombay

Dr Digvijay S Pawar
Department of Civil Engineering

Received A Networking Grant Award from "The Academy of Medical Sciences" UK

Dr Althuri Avanthi
Assistant Professor, Department of BioTechnology

Received the Outstanding Women Researcher in Biofuels Award at International Foundation, Chennai

Mr Kumar Shaurav
PhD Scholar, Department of Liberal Arts

Selected as an offer of Assistant Professor Grade II at Indian Institute of Management Ranchi

Ms Aswathi Velayathikode Anand
Alumnus-PhD Scholar, Department of Liberal Arts

Selected as an Assistant Professor at NIT Raipur

Dr Ranajit Mondal

Assistant Professor
Department of Chemical Engineering

Dr Ranajit Mondal hails from the Murshidabad district in West Bengal. He earned his BTech in Chemical Engineering from West Bengal University of Technology in 2013, his MTech in Chemical Engineering from National Institute of Technology Rourkela in 2015, and his PhD in Chemical Engineering from Indian Institute of Technology Madras in 2020. Prior to joining the IITH, he worked as an Institute Post-Doctoral Fellow at the Department of Chemical Engineering, IIT Bombay. His research interests are broadly in the area of Colloidal and Interfacial science, Droplet drying, Desiccation cracks, Emulsions and foams, Rheology of complex fluids, and Porous materials.

My Life at IITH:
It feels great to be part of the IITH family, one of the fastest-growing institutes among all the second-generation IITs. I am overwhelmed by the welcoming atmosphere both at the department level and at the institute level. While interacting with the department colleagues, I found them approachable and helpful in all possible ways. I am enthusiastically looking forward to contributing to the department and the overall growth of the institute.

Dr Karthik P. N.

Assistant Professor
Department of Artificial Intelligence

Dr Karthik is an Assistant Professor in the Department of Artificial Intelligence at IIT Hyderabad. Prior to this, he was a Research Fellow in the Institute of Data Science at the National University of Singapore (NUS), where he worked alongside Prof Vincent Y F Tan. Prior to joining NUS, he obtained the PhD and Master of Science (Engineering) dual degree from the Department of Electrical Communication Engineering at the Indian Institute of Science (IISc), Bengaluru, where he was advised by Prof Rajesh Sundaresan. Much earlier to joining the dual degree programme, he worked as a Project Assistant in Prof Chandra R. Murthy's lab at IISc. He holds a Bachelor of Engineering degree in Electronics and Communications from R V College of Engineering, Bengaluru.

My Life at IITH:
When I first visited the IIT Hyderabad campus for my interviews in September 2023, I had a sense of deep belongingness to the place, so much so that I did not have any hesitation in accepting the position and declining other competing offers.
Ever since joining as a faculty member in February 2024, I have been welcomed with open arms. My inclusion in matters related to student admissions, curriculum design, designing of new office spaces for the core faculty members of the department, and many more have had me experience the warmth of the colleagues within the department. I have had the opportunity to offer consultancy services to Mindgraph, and help them offer a certification programme under the auspices of IIT Hyderabad and the AI department, with support from CCE. I have come to realise the immense potential students of this institution hold, and every day since my joining has been a lesson on learning how to tap into their talents. It is my dream to serve the institution selflessly, impart quality training and mentorship to our brigade of students, and see them blossom in every facet of their lives. I wish to extend my sincere gratitude to the Director and the faculty members of the department for considering me one amongst them.

Ms Suchita Sahoo

Junior Library Information Assistant Library

Ms Suchita Sahoo has done her Master's degree in Library and Information Science from Sambalpur University Odisha and also done MPhil in Library and Information Science from Sambalpur University Odisha. After completion of her education, she immediately joined as a Library Intern cum Library Assistant at Central University of Odisha and was later selected as Junior Library Information Assistant at IITH. She has more than 1 year of experience in the field of acquisition of books, circulation, technical processing, reference service, and library automation. Her areas of interest are library automation, digital library, user studies, and information-seeking behavior.

My Life at IITH:
I joined as a Junior Library Information Assistant on 1st January 2024. Firstly, I am delighted to be a part of the IITH Community. This is one of the best institution from where I can learn so many things in my working field. I will work proactively and support the growth of the IITH.

Dr Paramita Maiti

Technical Superintendent Department of Materials Science and Metallurgical Engineering

Dr Paramita Maiti has completed her PhD in experimental condensed matter physics from the Institute of Physics, Bhubaneswar. She has four years of postdoctoral experience. She specialized in the fields of condensed matter, material science, surface science, thin films, and nanostructures. She did her Masters and Bachelors from the University of Calcutta. Before joining IIT Hyderabad, she was a Senior Scientific Officer under the INUP I2I project at IIT Kharagpur.

My Life at IITH:
IIT Hyderabad provides a stimulating work environment with a collaborative and supportive community. The campus is equipped with excellent facilities that make it an enjoyable place to work. It's an honor to be part of such a prestigious institution where employees can grow both personally and professionally.

Mr Shri Venkatakrishnaprasad SM

Technician Department of Biotechnology

Mr Shri Venkatakrishnaprasad SM is an Under Graduate (BSc) from Govt Degree College Kamareddy, Osmania University and also holds a Post-Graduation (Biochemistry) from Chaitanya PG College Hanamkonda, Kakatiya University. Before joining IIT Hyderabad, he served in National Institute of Nutrition, Hyderabad as a JRF and SRF for 5 years. He joined IIT Hyderabad in 2021 as Junior Technician, Biotechnology and then took a movement as Technician, Biotechnology in 2024.

My Life at IITH:
Working at IIT Hyderabad is a rewarding experience, the campus is beautiful and modern making it pleasant place to work. The work environment is friendly and collaborative, with opportunities to learn and grow professionally. I am very glad to be a part of the prestigious institute in India.

Mr Sajan C S

Junior Library Information Assistant Library

Mr Sajan C S has done his master's degree in library and information science from Mahatma Gandhi University, Kerala and done MPhil in Library and Information Science from Bharathidasan University Trichy. After completion of his education, he joined IIT Bombay as a library trainee in the library and later worked as Reference Assistant in Library at Kerala Veterinary and Animal Sciences University. He has more than 4 years of experience in the field of Library Science, Acquisition, Circulation, Reference Section, Electronic resource management (ERM), Collection Development, and Managing of Library. His areas of interest are Bibliometrics, ICT, and User studies.

My Life at IITH:
I feel so gratified to be part of such a wonderful organization. I am very happy to work in one of the greatest Knowledge Resource Centre (KRC) in India. I am delighted to contribute to the esteemed institution IITH.

Mr Rajashekhar Soudhari

Section Officer
Academic Section

Mr Rajashekhar Soudhari is a Postgraduate in Master of Computer Applications from Kakatiya University, Warangal. He is a topper of the batch in 2011 from Kakatiya University. He has developed a mini project on student personal details during post graduation. He has 10+ years of academic administration experience at IITH.

My Life at IITH:

My experience working in the Academic Office at IIT Hyderabad, where I was responsible for handling AIMS/ERP and PG programs....etc., was incredibly fulfilling. From the moment I joined, I was welcomed into a friendly and collaborative environment that made my time there both enjoyable and productive. IIT Hyderabad is not just an institute of academic excellence but also a place where growth is encouraged in every facet. The opportunities for professional and personal development are abundant, and the supportive nature of the faculty, staff, and students creates a nurturing environment that fosters learning. Working in such a dynamic setting allowed me to significantly enhance my skills, particularly in managing complex AIMS/ERP systems. The experience also provided me with invaluable insights and knowledge, which I believe will be instrumental in my future endeavours. Overall, till date my journey with IIT Hyderabad has been remarkable in sense of learning, growth, and skill enhancement, and I am grateful for being associated with such a wonderful & prestigious institution.

Mr Shri Laxman Srigiri

Senior Assistant Registrar
Human Resource Section

Mr Shri Laxman Srigiri possesses a distinguished educational background, holding a Master's degree in Personnel Management and a Master's in Business Administration from Osmania University, complemented by an Advanced PGD in Labour Laws from Nalsar University. Prior to joining IIT Hyderabad in 2012, he had a illustrious 15-year tenure in the Indian Navy as a Marine Commando, participating in numerous national and international counter-insurgency and rescue operations, including the notable 26/11 Taj operation (Mumbai). With over 11 years of dedicated service to IIT Hyderabad, he was recently promoted to the post of Senior Assistant Registrar in January 2024.

My Life at IITH:

My journey at IIT Hyderabad has been an incredible experience. After spending a decade in this esteemed institution, I can confidently say that it's one of the best places to work. The people here are amazing - friendly, professional, and welcoming, making it feel like a second family. The work culture and ethics are truly commendable, fostering a collaborative environment that encourages growth. The campus is a serene oasis, with its lush greenery and natural beauty. I'm grateful to be part of this wonderful community and thank the entire IITH fraternity for making this place so special. I feel fortunate to be associated with this institution, which I consider a true gem.

Mr Praveen Kumar G

Junior Technician
Department of Computer Science and Engineering

Mr Praveen Kumar G from Sangareddy. He graduated with a degree in Computer Science and Engineering from RRS College of Engineering and Technology, affiliated with JNTU. He has 11 months of experience as a System/Network Administrator at TiHAN, IITH. Additionally , he served as a System Administrator and tutor at Acharya Degree College, Zaheerabad, for 10 years, where he worked as an NSS Program Officer for 7 years. He hold a CCNA certification. Presently he was working in the CSE Department, IITH as a Junior Technician.

My Life at IITH:

My experience at IIT Hyderabad has been incredibly fortunate. It has always been my dream to work at such a prestigious educational institution, and I am grateful to have the opportunity to be here. The positive work environment, along with the strong support from the department, colleagues, and faculty members, has been invaluable. In this young and dynamic institute, there is ample scope to learn new skills and contribute to the growth of both the department and the institute as a whole. I am committed to working smart and hard to achieve the goals set by the department and the institute, while also growing personally and professionally.

Mr Venkatesh Betha

Junior Assistant
Human Resource Section

Mr Venkatesh Betha has done MCA from Andhra University. After completion of his education, he joined the Department of Posts and was later selected as a Junior Assistant in the Human Resource Section at IITH. He has extensive experience working within various roles in the Department of Posts under the Government of India. With over 8.5 years of experience, he likely has gained valuable insights and skills in various aspects of postal operations, including mail handling, counter operations involving cash transactions, treasurer responsibilities, and serving as a sub-postmaster.

My Life at IITH:
I'm truly honored to be part of IIT Hyderabad, one of the premier educational institutions in India. The innovative environment, cutting-edge research, and brilliant minds here inspire me daily. Being part of this vibrant community fills me with pride and motivation. It's a privilege to contribute to the future of technology and education.

Mr Nagaraju

Executive Assistant
Human Resource Section

Mr Nagaraju joined IITH as an Executive Assistant. He has done B.Tech in Information Technology from CVR College of Engineering. After graduation, he has worked at United India Insurance Company Limited (A Govt of India Undertaking) for 10 years in the field of Accounts, HR, Establishment and Administration.

My Life at IITH:
I am delighted to be a part of the IITH family. IITH provides an incredible opportunity for any individual to work and explore their potential. I really enjoy working at IITH

Mr Naresh Kandrathi

Section Officer
Human Resource Section

Mr Naresh Kandrathi holds a dual Masters degree in Computer Applications and Business Administration in Finance from Osmania University. He achieved distinction in MBA Finance. Prior to join IITH, he worked as a GDA at IIM Indore for 6 years. Before joining in regular position at IIM Indore, he served as Data Processing Officer at WALAMTARI under Irrigation and CAD department, Government of Andhra Pradesh in 2012-2013.

My Life at IITH:
It is a great opportunity to work with IITH community. The new role gives me more responsibility and enthusiasm. I believe Good workplace motivates towards good career growth. These 5 years of experience @ IIT Hyderabad truly enjoyed and learnt so many new things. I would like to continue my part to contribute to Institute growth.

Mr Marepally
Shivakumar Reddy

Junior Technician
Computer Science and
Engineering

Before joining IITH, Mr Marepally Shivakumar Reddy has done Diploma in Computer Engineering from Jaya Prakash Narayan College of Engineering and also B.Tech in Computer Science Engineering from Mahatma Gandhi Institute of Technology. After completion of his education, he immediately joined Spoors Technology Solutions India Private Limited as an Application Developer later joined with Cognizant Technologies as an Associate Projects later Joined with TabSquare Pte Ltd as a Senior Full Stack Engineer. He has overall more than 6 years of experience in IT Industry in that 3 years of experience in the field of Java Full Stack Development and remaining 3 years in the field of MERN Stack Development and has good knowledge on Next JS and Typescript too.

My Life at IITH:
My experience at IIT Hyderabad has been incredibly fortunate. I am grateful to have the opportunity to be here. The positive work environment, along with the strong support from the department, colleagues, and faculty members, has been invaluable. In this young and dynamic institute, there is ample scope to learn new skills and contribute to the growth of both the department and the institute as a whole. I am committed to working smart and hard to achieve the goals set by the department and the institute, while also growing personally and professionally.

Mr Archith Chandra

Junior Assistant
Department of Entrepreneurship and Management & Heritage Science and Technology

Mr Archith Chandra has done BTech in Civil Engineering from VNR Vignan Jyothi Institute of Engineering and Technology Hyderabad in 2018. After completion of his education, he joined Nephroplus Health services as Executive- Supply chain management and later worked as a Planning Analyst in Flipkart. He has more than 2 years of experience in the field of Supply chain and Data processing.

My Life at IITH:
At the Indian Institute of Technology Hyderabad (IITH), I can experience a state-of-the-art infrastructure designed to support a dynamic and innovative academic environment. The campus boasts modern facilities and physical resources. As a Junior Assistant, I play a pivotal role in managing two newly created departments. My responsibilities include serving as a liaison between these departments and other administrative sections, ensuring smooth communication and coordination. My role requires precise and timely execution of tasks, which honed my leadership abilities and multitasking skills. I am looking forward enhancing my skills and contribute my part in development of our institute.

Mr Jeebanbandhu Mahanta

Junior Technical Superintendent
Central workshop

Mr Jeebanbandhu Mahanta has done BTech in Mechanical Engineering from Centurion University of Technology and Management, Odisha and done diploma in Manufacturing Technology from NTTF Gopalpur, Odisha and also done certificate course in Master of CAD/CAM from Central Tool Room & Training Centre Bhubaneswar. After completion of his education, he has worked as "Graduate Engineer cum Trainer" in Central Tool Room & Training Centre Bhubaneswar for 4 years. he also worked in IIT Kanpur as Junior Technician in Department of Mechanical Engineering for 4 years 9 months. He has more than 9 years of experience in the field of CAD and CAM, Conventional machining, CNC programming and machining, additive manufacturing and machine maintenance. His areas of interest are Design, process planning and manufacturing.

My Life at IITH:
Since joining at IITH, my experience has been both enriching and insightful. This is a great place for me to enhance my skills and upgrade my knowledge. Overall, I am excited about the opportunities ahead and look forward to contributing further to the institute's success.

Mr Ramavath Ashok

Junior Technician
Computer Centre

Mr Ramavath Ashok graduated in Computer Science and Engineering from Gokaraju Rangaraju College of Engineering, Hyderabad, affiliated with JNTUH. He is an experienced Network & SIEM Administrator as well as a Hadoop Administrator. He began his professional journey at BHARAT ELECTRONICS LIMITED and subsequently joined the NATIONAL TECHNICAL RESEARCH ORGANISATION.

My Life at IITH:
IITH has provided me with a very good experience. The people are friendly and supportive, and the campus environment promotes a strong sense of community. I feel delighted to be associated with IITH

Mr Parimisetty Harinadha

Junior Technical Superintendent
Department of Artificial Intelligence

Mr Parimisetty Harinadha has done BTech in Computer Science and Engineering from Annamacharya Institute of Technology and sciences and also done MTech in Information Technology from University of Hyderabad. After completion of his education, he immediately joined Rajiv Gandhi University of Knowledge Technologies RK Valley in the department of Computer Science and Engg as Assistant Professor. He has 9.5 years of teaching experience and also currently pursuing PhD under the guidance of Prof C Krishna Mohan in the department of Computer Science and Engg at IIT Hyderabad. His area of research interest is Deep Learning for computer vision(Diffusion Models for Plant Disease Detection).

My Life at IITH:
I am very happy to have an opportunity to work with people having nice research cum friendly nature, and also I am feeling that this institute is the most optimistic institute to grow myself in the direction of research and technical skills. Finally, I will continue my efforts for the growth of the institute.

Mr Ajay Kumar Kar

Junior Technician
Central Workshop

Mr Ajay Kumar Kar has a Diploma in Mechanical Engineering from SCTE & VT, Odisha. After completing his education, he immediately joined at Central Tool Room and Training Centre, Bhubaneswar as a "Consultant" in CNC Section of the Training Department on a Contractual basis. He has more than 9 years of experience in the field of CNC Programming, and manufacturing of various high precision Aerospace components via using CAD/CAM software. His areas of interest are CNC Machining and programming, Conventional Machining, Designing, Process planning, Geometric Modeling and Drafting. He has participated in 43rd World Skills competition in CNC MILLING, which is held at Sao Paulo, Brazil.

My Life at IITH:
I feel that at IITH a very good work environment. The work culture and support from colleagues are quite impressive. This is a great place for me to improve my knowledge and learn new innovation ideas. Being part of an IITH always engage with my work and challenge myself to improve our organization.

Mr Kuntla Reddy Sekhar

Junior Technician
Department of Physics

Mr Kuntla Reddy Sekhar has done his Integrated MSc Physics from Pondicherry University, Puducherry. After the completion of his master's, he joined Indira Gandhi Centre for Atomic Research (IGCAR) Kalpakkam as a Research Fellow. He worked in Dr Ramaseshan's Lab of Material Science Group from 2017 to 2021. During this tenure he worked on a project involving thin film deposition and characterization for optical and mechanical applications. His computer skills include Linux Server Operating system, networking, python scientific programming modules such as NumPy, SciPy, matplotlib. He enjoys playing badminton, trekking and cycling.

My Life at IITH:
I am delighted to be a part and to contribute to the development of the IITH community. The colleagues from diverse technical backgrounds present us with the opportunities to learn and grow professionally. I am grateful for this opportunity and looking forward to a fruitful career.

Mr Moganraj M

Technical Superintendent
Department of Civil Engineering

Mr Moganraj M joined IIT Hyderabad as a Technical Superintendent in the Department of Civil Engineering on 07.03.2024. He has done B.Tech., in Civil Engineering from Pondicherry Engineering College and also done M.E., in Soil Mechanics and Foundation Engineering from College of Engineering Guindy, Anna University Chennai. After completion of his education, he joined SRM group of Institution Chennai for teaching and consultancy works. Following this he got selected in IIT Delhi as Junior Engineer (civil) and served for two years after which he has been selected as Technical Superintendent in Department of Civil Engineering at IITH. He has more than 11 years of experience in the field of construction material testing, estimation and tendering, soil stabilization, and Geo-synthetics. His areas of interest are Soil Exploration, Foundation Design, Ground Improvement, Rock Mechanics and Geo-synthetic Material.

My Life at IITH:
IITH prioritizes the well-being of employees, offers support at all levels within the organization, and has policies in place that encourage respect, trust, empathy, and support. I feel privileged to work in such renowned Institute.

Mr Manne Prahaseeth

Junior Technical Superintendent
Department of Electrical Engineering

Mr Manne Prahaseeth holds an MTech degree from Osmania University, Hyderabad. He began his career as a Research Fellow at the Defence Electronics Research Laboratory and later served as a Technical Assistant at NIT Warangal. With over five years of experience in integration and testing, purchasing and procurement, and conducting laboratory operations, he has developed a strong technical foundation.

My Life at IITH:
I feel privileged to be part of IIT Hyderabad, one of India's premier institutes. My journey in the Electrical Engineering department has been incredibly fulfilling, marked by a professional and ethical work environment. Engaging in stimulating technical discussions with students, faculty, and colleagues has significantly enriched my knowledge and fostered innovative thinking. I am genuinely excited about the opportunity to contribute to the growth of IITH while advancing my technical career. I extend my heartfelt appreciation to the HoD, faculty, and my colleagues in the Electrical Engineering department for their unwavering support and encouragement.

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