



HINDUSTAN

INSTITUTE OF TECHNOLOGY & SCIENCE
(DEEMED TO BE UNIVERSITY)



FROM VISION TO LEGACY
FOUR DECADES OF
EXCELLENCE, INNOVATION, AND
UNWAVERING COMMITMENT TO
EDUCATION

RESEARCH BROCHURE 2026

SYMPHONY AT THE JUBILEE



Founder - Chairman

Hindustan Group of Institutions



Late Dr. K. C. G. VERGHESE

(1940-2006)

Founder's Vision

To Make Every Man a **Success**
and No Man a Failure

Founder Chancellor

Hindustan Institute of Technology and Science



Dr. Mrs. ELIZABETH VERGHESE

Education is not preparation for life; education is
life itself.”

- John Dewey

Chancellor's Message



Dr. Anand Jacob Verghese
Chancellor
Hindustan Institute of Technology and Science

“

Every human being has infinite potential. The role of an educator is to bring out the best in every individual; and that of an educational institution, to provide the best facilities and the right ambience

”

In an era where technological advancement and scientific research shape the destiny of nations, Hindustan Institute of Technology and Science (HITS) stands at the forefront of innovation and discovery. Our researchers are not just pushing boundaries- they're dissolving them entirely, creating new intersections between disciplines that were once considered separate domains. This past year has been particularly extraordinary in demonstrating the power of innovation and collaborative research. C.S. Lewis's belief that "The task of the modern educator is not to cut down jungles, but to irrigate deserts," resonates deeply with our mission. Today, as we navigate through unprecedented global challenges - from climate change to digital AI transformation, from healthcare innovations to sustainable energy solutions - our commitment to pioneering research and technological excellence has never been stronger. The future demands not just knowledge creation, but transformative solutions that can address the complex challenges of our rapidly evolving world.

At HITS, our research journey has been marked by remarkable achievements and continuous growth. With over 600+ Research Scholars pursuing groundbreaking work, 6,100+ research publications in prestigious journals, and 219 patents filed, we are steadily advancing towards our goal of becoming a leading research university in Asia. Our strategic collaborations with premier institutions like Cranfield University UK, Dongguk University and GCU Korea, Trier University Germany, IIT Madras and IIT Ropar, coupled with multiple Centers of Excellence, have created a robust ecosystem for interdisciplinary research and innovation.

The strength of our research infrastructure is further enhanced by substantial support from various government agencies including SERB, DST, AERB, DAE, ICMR, and DRDO. These partnerships have enabled us to undertake significant projects in defense, renewable energy, aerospace, and other crucial sectors. Our state-of-the-art laboratories and advanced research

facilities provide the perfect environment for groundbreaking discoveries and innovations. What truly sets HITS apart is our commitment to bridging the gap between academia and industry. Through strategic partnerships with leading global corporations, we ensure that our research addresses real-world challenges while creating opportunities for technology transfer and practical applications. This industry-academia synergy has been instrumental in fostering innovation and creating solutions that benefit society at large. The research landscape at HITS is not merely about numbers and achievements; it's about creating meaningful impact. Every patent filed, every paper published, and every discovery made contributes to our nation's progress and humanity's advancement.

Our focus remains unwavering on excellence in fundamental research, innovation in applied sciences, contribution to national development, and fostering global research collaborations. In a significant stride towards research excellence, HITS has established a comprehensive research ecosystem comprising of 10 specialized Research Centers & 5 Skill Centers, cementing the university's position as a leader in academic innovation and technological advancement.

Over the past 14 years, HITS has systematically developed its research infrastructure, adapting to emerging technological needs and industry demands. The journey that began in 2011 with the establishment of the Centre for Clean Energy and Nanoconvergence (CENCON), continues to forge ahead relentlessly with the recent 2025 launch of the Centre for Cyber - Physical Systems (CPS), established as the 16th laboratory under the national network of iHub-AWaDH (IIT Ropar), it holds the distinction of being the first-ever CPS Lab in South India.

A notable achievement has been the success of the Structural Impact Crash Simulation Centre (SIMCRASH), led by Dr. K. Ramajeyathilagam. The center's excellence culminated in the establishment of two laboratories in collaboration with NSTL in February 2024, followed by a strategic MoU in October 2024. Aligned with India's ambitious space program, including the upcoming "Bharatiya Antriksh Station" by 2035, HITS has repositioned its space research through the Centre for Satellite & Space Technology (C-SAT). The center, in collaboration with the Centre for Automation and Robotics (ANRO), is poised to contribute to ISRO's Lunar Human Habitat project. This center, working in tandem with the Machine Intelligence and Data Analysis Research Centre (MIDARC), focuses on developing secure digital health platforms.

The institute's strategic location near Chennai's industrial hubs has facilitated strong industry partnerships. Notable among these is the Royal Enfield Experiential Training Hub and the Centre for e-Hardware Innovative Test-Technology Systems (eHITS), which hosts international training programs, including Vietnam Military Experts.

With its commitment to research excellence, HITS continues to align its R&D activities with global standards. The institution emphasizes interdisciplinary research, encouraging collaborations between various centers to address complex technological challenges. Faculty members are actively engaged in consultancy projects, contributing to both academic excellence and industrial development. To our current and prospective research scholars, I say this: At HITS, you're not just pursuing research; you're becoming part of a legacy. Your curiosity should find direction, your ideas should find support, and your innovations should find purpose. Together, let us continue this journey of discovery, innovation, and excellence, making HITS a beacon of research that illuminates paths to a better tomorrow.



Pro Chancellor's Message

Dr. Ashok George Verghese

Pro Chancellor

Hindustan Institute of Technology and Science

At Hindustan our drive for innovation is anchored with research. It fuels our pursuit of knowledge and solutions to address challenges. We are committed to fostering an environment where inquiry, creativity, and collaboration thrive, empowering our researchers to push boundaries. The Department highlights diverse research initiatives, cutting-edge facilities, and impactful contributions to science, technology, and society.

At Hindustan we have built a vibrant research ecosystem supported by 16 specialized Research and Skill Centres, addressing global and local challenges. From the launch of the Centre for Clean Energy and Nanoconvergence (CENCON) in 2011 to the introduction of the IIT Ropar Cyber Physical Systems Lab (CPS) in 2025, our research aligns with emerging technologies and global needs. Our interdisciplinary focus has led to impactful collaborations, shaping solutions for a better tomorrow. Join us as we continue to achieve milestones that make meaningful contributions to the world.

Vice Chancellor's Message

Dr. Vikas Misra

Vice Chancellor

Hindustan Institute of Technology and Science

Research has become an essential and integral identity of any institution for fostering innovation, driving knowledge creation, and making meaningful contributions to society as we move forward in an era of rapid technological advancements and global challenges.

HITS has created an environment to augment the collaboration, creativity and critical thinking are integrated into the research board. The world's evolution is resulting in an increasing demand for novel solutions to complex problems. These challenges can be addressed head-on by our institution's well-positioned structured research facilities and activities. Our ability to drive impactful discoveries that address real-world issues can be achieved through enhancing interdisciplinary partnerships, increasing research funding opportunities, and promoting cutting-edge projects. Our research community is one of the most valuable assets we possess, and by working together, we can make a lasting impact, both within academia and in the wider world. I recommend that every faculty, researcher, and student at HITS stay committed to pushing the boundaries of knowledge, collaborating across disciplines, and continuously discovering new avenues of inquiry.



CONTENTS

08	MOTTO, VISION, MISSION AND VALUE STATEMENT
09	ABOUT HITS
10	ACCREDITATIONS AND RANKINGS
15	CENTRE FOR RESEARCH AND CONSULTANCY
16	RESEARCH PROGRAMME
17	PUBLICATIONS
18	RESEARCH CENTRES
40	SELECTED RESEARCH FACILITIES
41	SKILL CENTRES
54	INAUGURATION OF CENTRES (GLIMPSES)
55	SEED GRANT 2024-25
56	INTELLECTUAL PROPERTY
57	TOP 2% SCIENTISTS
58	CHANCELLORS AWARDS
60	INTERNATIONAL CONFERENCE ON QUANTUM HORIZONS
61	RESEARCH ADVISORY BOARD
62	Dr. K. C. G. VERGHESE RESEARCH AND RESOURCE CENTRE
64	LIST OF HONORIS CAUSA AWARDEES
66	INTERNATIONAL COLLABORATIONS

MOTTO, VISION, MISSION AND VALUE STATEMENT



Motto

To Make Every Man a Success and No Man a Failure

Vision

To be an International Institute of Excellence, providing a conducive environment for education with a strong emphasis on innovation, quality, research and strategic partnership blended with values and commitment to society.

Mission

- ▶ To create an ecosystem for learning and world class research.
- ▶ To nurture a sense of creativity and innovation.
- ▶ To instill highest ethical standards and values with a sense of professionalism.
- ▶ To take up activities for the development of Society.
- ▶ To develop national and international collaborations and strategic partnership with industry and institutes of excellence.
- ▶ To enable graduates to become future leaders and innovators.

Value Statement

Integrity, Innovation, Internationalization.

Hindustan Institute of Technology and Science (HITS), established in 1985 by the visionary founder Late Dr. KCG Verghese, is renowned for its excellence in academics, research, and innovation. Embracing the motto “TO MAKE EVERY MAN A SUCCESS AND NO MAN A FAILURE,” HITS has evolved into a premier higher education institution of repute in Chennai, Southern India.

As a NAAC A+ accredited university, HITS holds a prestigious position in the academic landscape of India. HITS engineering programs are accredited by the National Board of Accreditation (NBA) and the B.Tech programs are accredited by the Institution of Engineering and Technology (IET), UK, ensuring the highest standards of education and industry relevance. We have also featured in the top among Universities in NIRF Rankings 2025. HITS has won the Diamond Award in the QS I Gauge Indian University Rankings 2025 and holds the top spot among private universities in the country. The university's dedication to excellence has resulted in top rankings in several prestigious private surveys, including India Today, Times Now, Times Engineering, Times B School, Outlook – Icare, The Times of India, The Impact ranking for SDGs and The Week Rankings.

The University offers a wide range of academic programs, including undergraduate, diploma, online, postgraduate, and doctoral degrees in engineering, aviation, architecture, design, management, law, liberal arts, applied sciences, health sciences, and nursing. We also collaborate with industry experts including IBM, GARC, IMAX, Logistics Sector Skill Council, ENAC, Airbus and Sankara Nethralaya to offer specialized programs in various disciplines.

HITS offers state-of-the-art facilities, including modern tech-enabled classrooms, 10 advanced research centers, 5 Skill development centers such as Royal Enfield experiential National Training, hangars, business incubators, a world-class library, and a variety of sports facilities. Our faculty members, composed of renowned scientists and industry leaders, are actively involved in research and encourage student participation. 5 faculty members of HITS have featured in the top 2% scientists of the world in the Stanford ranking. HITS is credited with over 6100+ publications in Scopus indexing; 52,087 Scopus Citations and 118 granted patents. HITS has received many Funded Research Projects from leading organizations like Department of Science and Technology (DST), Defence Research and Development Organization (DRDO), Naval Research Board (NRB), Ministry of mines and many others.

HITS has signed 150+ MoUs with institutions, industries and organisations across 42 countries to leverage collective expertise and resources to make meaningful contributions to the global community. From student exchange, twinning, dual degree, cultural immersion, research abroad, faculty exchanges, joint research, consultancy projects, conferences, study tour to much more, HITS offers students and faculty members the benefit of unique learning experiences, exposure to different academic cultures, and enhanced global perspectives.

With the noble vision of the Founder-Chairman, **Late Dr. K.C.G. Verghese, “To Make Every Man a Success and No Man a Failure”**, Hindustan Institute of Technology and Science chisels its learners with a competitive spirit to face the future.

ACCREDITATIONS & RANKINGS

National Assessment and Accreditation Council (NAAC)
A+ grade



Accredits six Engineering Programmes viz., Aeronautical, Aerospace, Computer Science, Electrical and Electronics, Electrical and Communication and Mechatronics



National Institute Ranking Framework (NIRF-2025)

- **#151-200** band – overall
- **#101-150**- universities
- **#101-125**- MGT
- **#101-150**- Engineering



- **#3** Tamil Nadu
- **#4** South India
- **#5** Private institutes in India



Ranked under Category – 2 by MHRD-UGC

Ministry of Human Resource Development



Top 10 deemed multidisciplinary universities in India

- **# 9 in India**
- **#5 in south India**
- **#2 in Tamil Nadu**



- **#19 -India.**
- **#1 Tamil Nadu**



Titanium band



Asia 801-850
South Asia 254
India 126
India 34 among private universities
India 13 among pvt universities in inbound exchange students



World University Rankings Asia
#601



- 81 in India – collaboration criteria in Physical sciences and engineering
- 1561 in world– collaboration criteria in Physical sciences and engineering
- 738 Asia– collaboration criteria in Physical sciences and engineering



Subject Rankings 2025

Engineering

- World: 1001-1250
- India 72
- 36 among private univ in India

Physical Sciences

- World : 801-1000
- India 33
- 15 among private univ in India

Computer Science

- World: 801-1000
- India 40
- 23 among private univ in India



Overall World 601-800

- SDG12 Responsible consumption and production- 401-600 in world, 20 in India
- SDG 7 Affordable and clean energy - 301-400 in world, 32 in India
- SDG 17 Partnership for goals - 601-800 in world, 24 in India
- SDG 6 Clean water and sanitation - 101-200 in world, 10 in India



The Institution of
Engineering and Technology

- Aeronautical, Mechanical, Aerospace, Automobile, Computer Science, Mechatronics, Information Technology, Electrical and Electronics, Electronics and Communications. One of the few Universities in India to be Internationally Accredited by IET, UK



Top Private Engineering Colleges in India 2025

- #36 India
- #2 Tamil Nadu



Top private engineering and technology universities in India

- # 2 in Chennai
- #4 in Tamil Nadu
- #10 in India



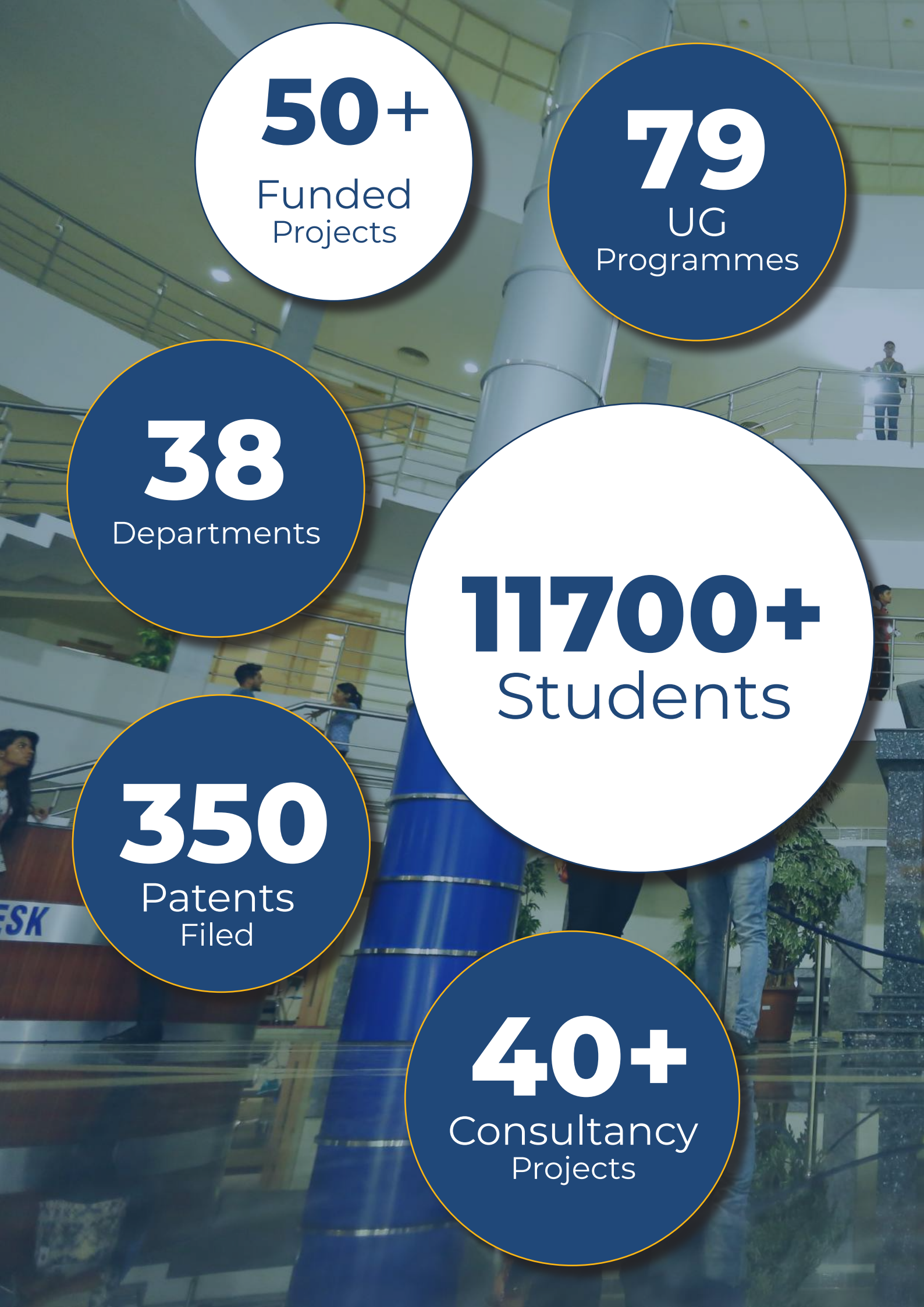
- #32 India
- #24 South
- #9 Tamil Nadu

CAREERS360

Rated **AAAA+** as one of the best
Engineering Institutes in India



- #382 in Asia
- #38 in India



50+

Funded
Projects

79

UG
Programmes

38

Departments

11700+
Students

350

Patents
Filed

40+

Consultancy
Projects



700+
Faculty

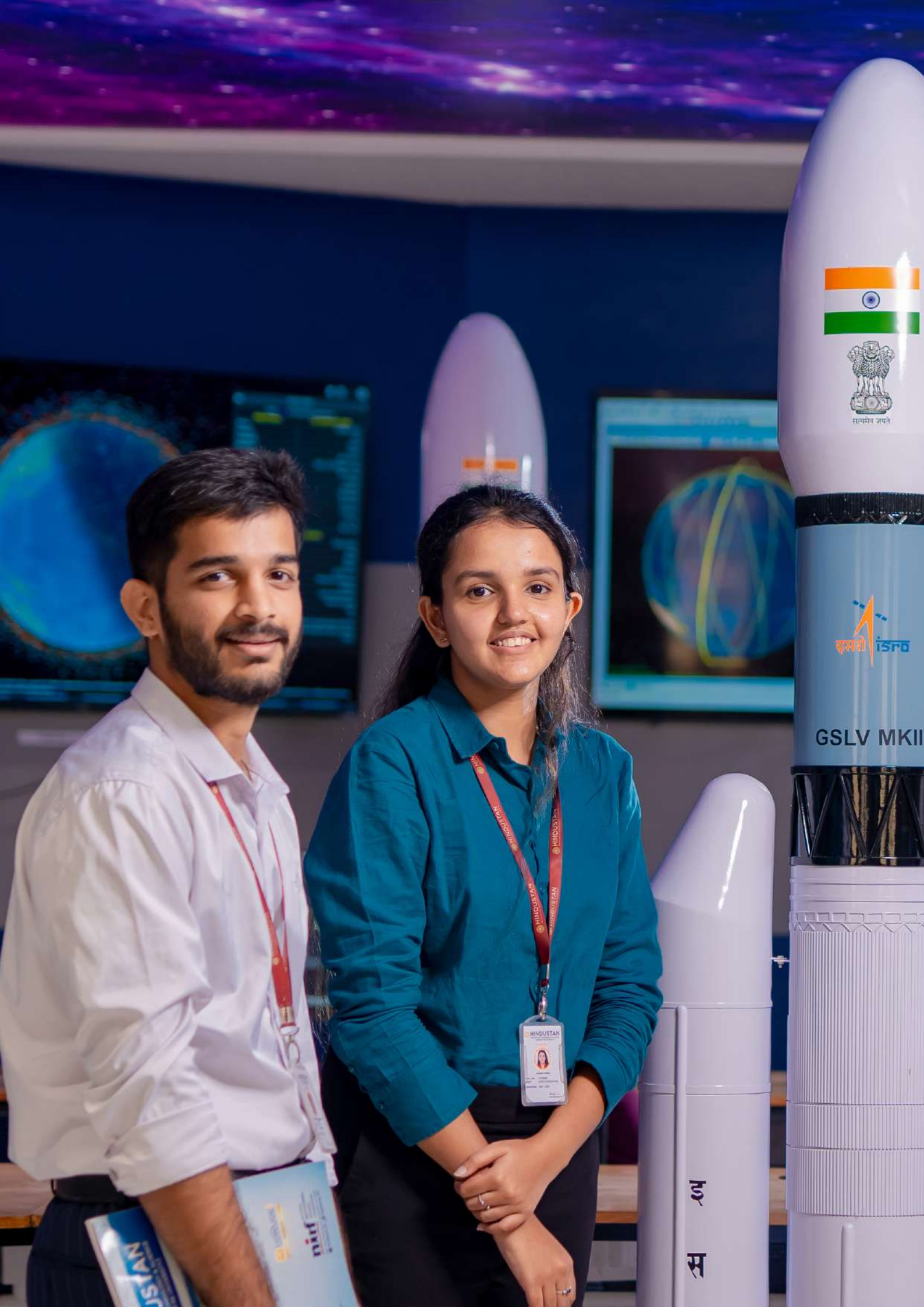
48
PG
Programmes

Over
150
MoUs

600+
Research
Scholars

07
Schools

15
Research
Centres



DIRECTORATE OF RESEARCH & CONSULTANCY

The Centre for Research and Consultancy (CRC) is a dynamic hub dedicated to fostering a vibrant research ecosystem within the University, driving innovation in advanced research areas, and building collaborative bridges across academia, industry, and government. With a commitment to inclusivity, we aim to make knowledge accessible and impactful for all, leaving “no one” behind. Through thoughtfully developed policies on Research, Consultancy, and Intellectual Property, the Centre serves as a catalyst for transformative projects that address real-world challenges. Guided by Research advisors, Industry mentors and Professors of Practice, we work across disciplines to deliver actionable insights and pioneering solutions that empower communities and fuel progress at HITS

Vision

To evolve as a premier Science and Technology Research Institute, recognized for generating knowledge and delivering excellence in technical education.

Mission

To foster a research-driven culture across the University, igniting innovation and advancing transformative technologies.

The Centre's objectives are to:

- ▶ *Encourage Research Engagement: Actively promote interdisciplinary research throughout the University.*
- ▶ *Establish Global Partnerships: Develop and sustain international collaborations to broaden research perspectives.*
- ▶ *Provide Colloquia and Training Opportunities: Offer forums and specialized training to deepen research expertise among scholars.*
- ▶ *Expand Connections with Funding Organizations: Engage with funding bodies to support research initiatives.*
- ▶ *Guide Project Development and Execution: Assist in the preparation, submission, and management of research proposals.*
- ▶ *Facilitate Knowledge Sharing: Organize short-term courses, seminars, and workshops to effectively share insights and discoveries.*
- ▶ *Strengthen Faculty-Scientist Collaboration: Build connections between University faculty, scientists, and industry R&D professionals.*
- ▶ *Protect Intellectual Property: Ensure that valuable intellectual assets are identified, recognized, and secured.*
- ▶ *Host National and International Conferences: Provide a platform for the exchange of ideas and the advancement of knowledge globally*

Dr. AL. Vallikannu

Associate Dean - Sponsored Research
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RESEARCH PROGRAMME

Doctorate of Philosophy (Ph. D)

Categories of Admission

- 1. Residential:** Scholars with or without Institute fellowship or funded project within the institute or with external Fellowships like support by UGC / CSIR JRF, ICMR / ICAR Fellowship, DST Inspire. QIP as per QIP norms
 - i. Sponsored:** Sponsored by industry, R&D organizations, government departments, or public sector undertakings with no financial support from the institute under Residential category.
 - ii. Integrated Dual Degree (PG + Ph.D.):** Scholar admitted under this category in established programmes, intended for candidates with good academic performance at the undergraduate level. The total duration of study is 4.5 years.
- 2. Non- Residential:** Professionals employed in educational institutions, R&D organizations, national laboratories, or industries with R&D facilities, with at least two year of experience, holding a No Objection Certificate (NOC) from their employer.

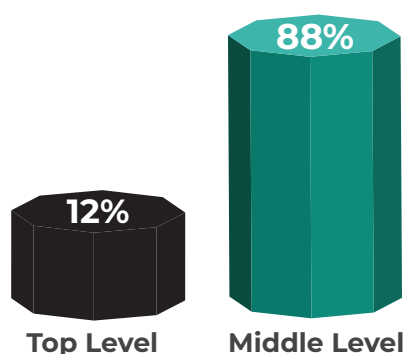
Post-Doctoral Fellowship (PDF)

Categories of Post-Doctoral Fellows

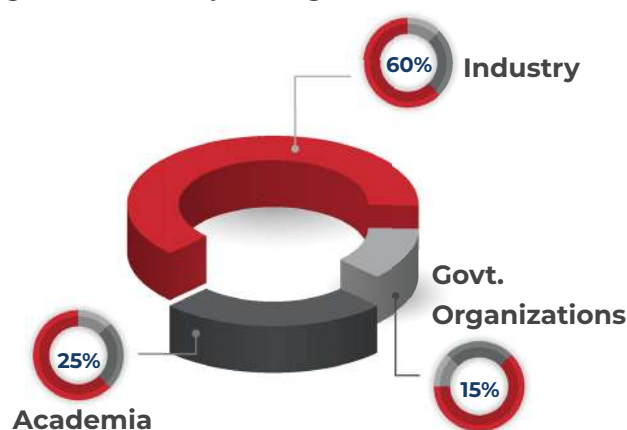
Admissions may be made under the following categories:

1. HITS-Funded Post-Doctoral Fellows;
2. Externally Funded Post-Doctoral Fellows (UGC, ANRF, CSIR, DRDO, ISRO, Industry, International Agencies); independent Scientists funded under various schemes of the Government of India (such as Ramanujan Fellowship, ICSSR, NBHM, DST Women Scientists, DST INSPIRE fellow, ANRF Power Fellow and other independently funded Post-doctoral Programs) and non-governmental (national and international) organizations.
3. Project-Linked / Sponsored Post-Doctoral Fellows; and
4. Self-Funded Post-Doctoral Researchers, where permitted under HITS Statutes.

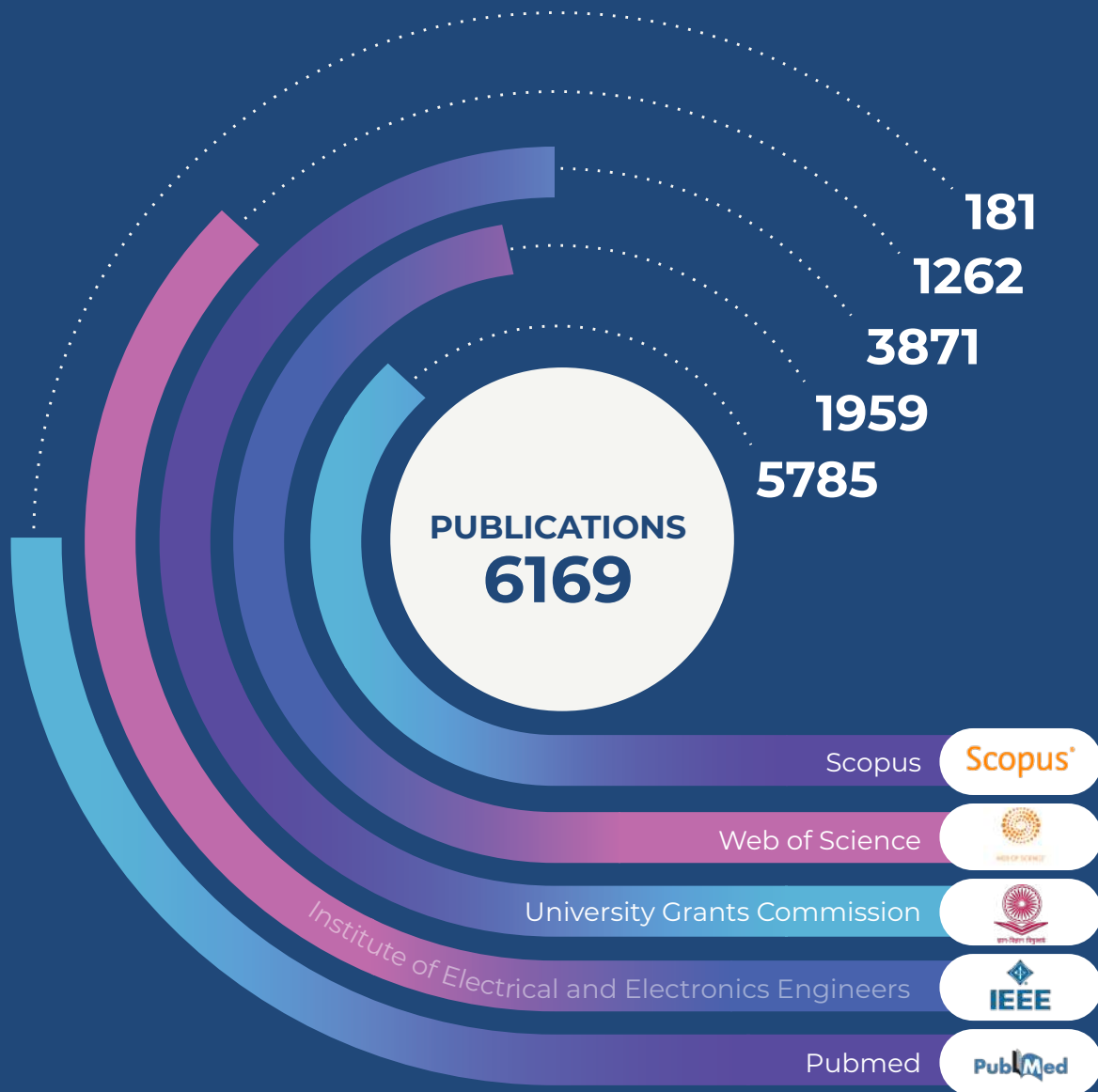
Professionals working in top and mid-level positions at various organizations are pursuing their doctoral studies part-time at our university.



Professionals from industry, academia, and government organizations are pursuing their Ph.D. at HITS.



PUBLICATIONS



SCOPUS
CITATIONS
52087

WOS
CITATIONS
29175

HIGHEST
SNIP
5.825

HIGHEST
IF
20.200

SCOPUS H-INDEX **90**

WOS H-INDEX **75**

10 RESEARCH CENTRES



STRUCTURAL
IMPACT & CRASH
SIMULATION CENTRE



RESEARCH CENTRES

1. Centre for Clean Energy and Nanoconvergence (CENCON)
2. Structural Impact Crash Simulation Centre (SIMCRASH)
3. Centre for Sensors and Process Control (CENSE)
4. Centre for Sustainable Technology & Development (CSTD)
5. Centre for Satellite & Space Technology (C-SAT)
6. Centre for Automation and Robotics (ANRO)
7. Centre for Underwater Robotics & Communication (URoC)
8. Machine Intelligence and Data Analysis Research Centre (MIDARC)
9. Centre for Simulation and Engineering Design (SIMENDES)
10. Centre for Hydrogen Technology and Carbon Utilization (CeHy)

01

CENTRE FOR CLEAN ENERGY
AND NANOCONVERGENCE
(CENCON)

ESTABLISHED

JANUARY 2011

Vision:

To make CENCON as a regional research hub to carry out basic & applied research in the area of clean energy and nanotechnology.

Mission:

To strengthen the infrastructure, research activities and develop network with worldwide institutions, national labs and industries working in the area of clean energy nanotechnology.

Research Partners





The **Centre for Clean Energy and Nanoconvergence** (CENCON) was established in collaboration with Quantum – Functional Semiconductor Research Centre (QSRC) of Dongguk University with an objective to promote basic and applied research in Nanotechnology. The centre was inaugurated by His Excellency, Dr. A. P. J. Abdul Kalam, Former President of India on 6th January 2011. The centre aims to work towards clean energy solutions incorporating the quintessence. The Centre offers M.Sc. Nano Science & Technology course.

Research Areas

Computational simulation on 2D smart materials, Solar cells, Lithium-ion Batteries, Luminescent devices, Sensors and Photo Catalytic Applications R&D Projects

Research Facilities

Scanning Electron Microscopy (SEM) with Energy Dispersive X-ray spectroscopy (EDS), High Performance Computing facility (HPC), Battery Tester, Electrochemical workstation, Hall Effect Measurements, UV – Visible Spectrophotometer, UV – VIS – NIR Spectrofluorometer, Thermal Vacuum Coating unit, Chemical Vapor Deposition, Freeze Drier, Hydraulic Press, Nabertherm Furnace and Spin coater.

Research Activities

Publications

CENCON Team has published more than 130 research articles in high impact journals such as International Journal of Hydrogen Energy, Materials Today Chemistry, ACS Applied Nano Materials, Applied Surface Science, Royal Society of Chemistry Advances.

Funded Projects

- ▶ Integrated automated biofloc and recycling system for indoor crustacean farming in association with CIBA and Industry partner strengthening Industry Academia Collaborations (DBT-BIRAC)
- ▶ Enhancement of Photovoltaic efficiency by down-conversion phosphors for underwater panels towards Naval applications –Naval Research Board (NRB), DRDO
- ▶ Development of a Photo-electrochemical Cell (PEC) using Si based (In) GaN Nanowires for
- ▶ Hydrogen production by Splitting of Water under Visible Light – National Post-Doctoral Fellowship (NPDF), Science and Engineering Research Board (SERB)
- ▶ Edge Saturated Si₂BN Nano-ribbon as High – Capacity Anode Materials for Next Generation Mg-ion Batteries. SERB –TARE (2 More Projects)

Patent

Highly Efficient Easy-on-pocket, One-use Biodegradable, Antimicrobial-Face-Mask to Battle against COVID-19 - Australian patent has been submitted

CONTACT

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Head, CENCON

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02

STRUCTURAL IMPACT & CRASH SIMULATION CENTRE (SIMCRASH)

ESTABLISHED

JANUARY 2017

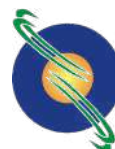
Vision

- To be a centre of excellence for design and development of structural systems for structural impact, crash and durability related technologies

Mission

- To assess, design, simulate and integrate advanced state of art technologies for durability, impact and crash proof design of systems for industry and defence forces.

Research Partners



Structural Solutions
Private Limited



STRUCTURAL IMPACT & CRASH SIMULATION CENTRE

Structural Impact and Crash Simulation Centre (SIMCRASH) was established on 12th January 2017 to promote educational and research activities in the field of structural impact and crash analysis. The centre bridges the gap between the industries,

research institutes and the University with a distinct capability to harness the intellectual energy of academia to solve the real time problems faced by the industry and the Defence forces. SIMCRASH is a multi-disciplinary research centre dedicated for solving real world structural impact and crash problems through the application of modelling and simulation techniques and to develop new approaches in material modelling for structural impact crash problems.

Research Areas

Impact and Crash, Hail ice Impact, Fatigue and Fracture, Traumatic Brain Injury (TBI), Bird Strike, Underwater Explosion, Water Entry Shock, Mine Blast.

Research Facilities

Training on LS-Dyna Software (Explicit Analysis) Collaborative Partners GTRE, NSTL, CSIR – Structural Engineering Research Centre (SERC), ADE, R and D engineers.

- ▶ LS Dyna
- ▶ High end workstation -INos
- ▶ Ballistic Test facility
- ▶ Hail ice impact facility
- ▶ Fatigue test Machine –MTS 100kN
- ▶ Drop weight Test
- ▶ Drop test facilities- 5m height
- ▶ Advanced aircraft structural analysis
- ▶ Finite element methods

Research Outcomes

R&D projects

- ▶ Fatigue Spectrum Analysis of ADC-150 Container Due to Repeated Shock and Vibratory Loads
- ▶ Evaluation of Numerical Bird Model Parameters Through the Dynamic Test of Bird Projectile” Funded by GTRE, DRDO.
- ▶ Experimental and Numerical investigations on the failures of metallic and composite structures to hail- ice impact Funded by ARDB, DRDO
- ▶ Simulation of Traumatic Brain Injury Using Finite Element Method” Sponsored by HITS.
- ▶ Coupled Fluid-Structure Interaction Studies Due to Underwater Explosion Around Submerged Composite Pressure Hull” Funded by NRB, DRDO.
- ▶ Estimation of Shock Levels and Its Impact on the Underwater Axi-Symmetric Bodies Due to Water Entry and Pyro Shock” Funded by NSTL, DRDO.
- ▶ Development of shock standards and guideline for two different marine vessels through numerical simulations.
- ▶ Experimental and numerical investigations on the failures of metallic and composite structures to hail ice impact.
- ▶ Parametric studies on articles subjected to underwater shock wave excitation.
- ▶ Fatigue testing of composite specimens.

CONTACT

Dr. K. Ramajeyathilagam

Head, SIMCRASH

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03

CENTRE FOR SENSORS
AND PROCESS CONTROL
(CENSE)

ESTABLISHED

OCTOBER 2016

Industry Online S

Home

Vision:

To create a Centre of Excellence in sensors, sensor systems, Robotics applications, Measurement, Instrumentation and Process Control Systems

Mission:

- ▶ To establish state of the art multidisciplinary research facility.
- ▶ To promote meaningful collaborations with National / International bodies and Universities.
- ▶ To be proactive in providing practical solutions to industrial problems.
- ▶ To provide practical, technical landscape to accelerate the transfer of technology from the research base to industry.

Research Partners



POLITECNICO
MILANO 1863

ARM[®]University
Worldwide Education Program



Government of India
AERB
Atomic Energy Regulatory Board





The Centre for Sensors and Process Control (CENSE) was inaugurated by Dr. Sekhar Basu, Chairman, Atomic Energy Commission and Secretary, Department of Atomic Energy, Government of India in the presence of Dr. Amitabh Mattoo, Former Vice Chancellor, University of Jammu on 8th October 2016. The Centre aims to work towards indigenous sensor development solutions incorporating the latest technology.

Research Areas

Acoustic Signal processing, Robotics and Industrial Automation, Remote handling applications, Remote inspection applications, Smart Sensor Design, Process control applications, Multidisciplinary handling application, Environment monitoring, Energy management, Medical Instrumentation, Nano Electronics.

Research Facilities

B&K make 2270 model Hand held Sound Analyzer, ARM development software keil tools, COMSOL AC DC Module, NI My-Rio with Labview, Embedded Development Systems: CYPRESS FM4-176L Arm Cortex-M4 MCU, LPC 1115 LPC Xpresso Boards, LPC L2 Link Boards.

Research Outcomes

Publications

CENSE Team has published more than 50+ research articles in high impact journals such as IEEE Sensors, International Journal of Alzheimer's Disease, Advanced Materials Research, Wireless Communications and Mobile Computing, Journal of Electronic Science and Technology, Journal of Building Engineering.

Funded Projects

- ▶ Development of purification process technology for the preparation of 5N purity aluminium for electronic and other speciality applications.
- ▶ Development of an on-line measurement system for hydrogen concentration in steam environment-AERB, DAE
- ▶ Wall Climbing Robot with reduced sound levels using Active Noise Control – ERIPR DRDO
- ▶ Development of purification process technology for the preparation of 5N purity aluminium for electronic and other speciality applications..

Consultancy Projects

- ▶ Development of See Through Wall Passive Eddy Current Sensor for Blade Detection - GTRE DRDO
- ▶ Design, Development and characterization of electrostatic sensor with digital electronic system for Debris Monitoring in Gas turbines - GTRE DRDO
- ▶ Development of Position control system - GTRE DRDO
- ▶ Development of automatic Tea leaf cutter for inclined terrain harvesting – Poabs Tea Private Ltd.

Patents

- ▶ Multifunctional Bed for Quadriplegia Patients, Indian Patent (Granted)
- ▶ A patient essentials transport system - Australian Patent (Granted)

CONTACT

Dr. G. Muthukumar

Head, CENSE

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04

CENTRE FOR SUSTAINABLE
TECHNOLOGY &
DEVELOPMENT
(CSTD)

ESTABLISHED

AUGUST 2014

Vision

To find solutions for problems related to Development of Infrastructure and Environment towards sustainability.

Mission

- ▶ To promote interdisciplinary activities and initiatives that lead to sustainability associated with Infrastructure and Environment.
- ▶ To develop and showcase cost effective solutions in the areas of green building materials, health monitoring of structural systems, water, air, solid waste management, renewable energy and other issues related to environmental resources using the state of art technologies.
- ▶ To develop technologies for cleaner production and help the industries for adoption.

Research Partners





The Centre for Sustainable Technology & Development was established during the year 2014. Its objectives are to promote interdisciplinary activities that lead to sustainability associated with Construction and Environment, to develop cost effective solutions in the areas of green building materials, health monitoring of structural systems, water, air, solid waste management, renewable energy related to environmental resources and also to develop technologies for cleaner production

Research Areas

Green building materials, Health monitoring of structural systems, CO₂ storage in Concrete structures, Water, Air, Solid waste management, Recovery of Hydrogen from wastewater containing Sulphide, Steel Timber Composite Structures, Cold Formed steel structures and retrofitting of structures

Research Facilities

Vertical loading frame 40T capacity, Column testing frame 100 T capacity, Data acquisition system, Reversed lateral loading frame 20 T capacity, Computerized UTM, Carbonation Chamber, UV-Vis Spectrophotometer, Photocatalytic reactor for Hydrogen Recovery, Tubular Furnace, Deep freezer, Atomic Absorption Spectroscopy and Flame Photometer

Research Outcomes

Publications

CSTD Team has published more than 35 research articles in high impact journals such as Environment, Development and Sustainability, International Journal of Hydrogen Energy, Chemosphere, Journal of Water Process Engineering, Nanomaterials, Construction and building materials, Asian Journal of Civil Engineering and Journal of Environmental Management

Funded Projects

- ▶ Recovery of Hydrogen from Sulphide Waste Streams by SERB, DST
- ▶ Development and Characterization of High-Volume Fly Ash Concrete for structural applications by Department of Atomic Energy (BRNS scheme)

Patents

- ▶ Cold-Formed Steel Beam with Encased Braced Web for Earthquake Resistant Constructions
- ▶ Quasi-Static Cyclic Load Performance Testing Method of Encased Concrete-Filled Steel Tubular with Steel Loops Joint
- ▶ Gas-Phase Recovery of Hydrogen from Hydrogen Sulphide Using Photocatalysis

CONTACT

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05

CENTRE FOR SATELLITE
& SPACE TECHNOLOGY
(C-SAT)

ESTABLISHED

SEPTEMBER 2022

Vision

- ▶ To establish Centre for Satellite & Space Technology (C-SAT) as a Global technological centre in the field of satellite development and space applications, fostering a nurturing environment that facilitates and expedites the advancement of space technology for the betterment of society.

Mission

- ▶ To spearhead innovation through international collaboration and take the lead in integrating and delivering multidisciplinary research and development solutions in the realm of satellite and space technology.
- ▶ We aim to produce a skilled workforce in the rapidly evolving field of satellite and space technology through international collaboration.
- ▶ To establish the center as a unique knowledge base and training facility within the private sector, providing advanced training in the fields of satellite and space technology

Research Partners





The Centre for Satellite & Space Technology is the advanced research centre created with an aim to foster and accelerate the growth of space based technological applications for the benefit of society and to impart advanced training & research in the field of satellite technology and development. The Centre of Excellence in Satellite Technology was

inaugurated by Dr. S Somanath, Chairman, Indian Space Research Organisation (ISRO) on 30th September 2022. This centre is established under the able guidance of Dr. A Sivathanu Pillai, Founder CEO & MD BrahMos Aerospace and Professor Emeritus (Research), HITS.

Research Areas

- ▶ Design and Development of Nano/Pico/Femto Sats Structural & Thermal Analysis Nano/Pico/Femto Sats
- ▶ Development and Testing of CANSATS Satellite/Constellation Mission Design Analysis
- ▶ Precision Agriculture using Satellites Astronomy & Space Habitability
- ▶ Antenna Design Satellite Tracking & Link Budget Study

Research Facilities

- ▶ Low Earth Orbit (LEO) Satellite Tracking Ground Station
- ▶ Long Range (LoRa) based IoT platform
- ▶ Facility to track satellites in LEO with Upper UHF frequency

Centre Activities

1. Weather Satellite Tracking:

C-SAT gives students the ability to actively monitor and track National Oceanic and Atmospheric Administration (NOAA) Weather Satellites of the USA. By decoding and processing the data received from NOAA, the Centre creates an unparalleled and interactive experience in Space Technology and Weather Monitoring.

2. Student Trainings:

C-SAT offers exciting projects to students in Nano/Pico/Femto Satellite development, Satellite tracking and Ground Station Operations, involving design & development of the satellite, receiving data from a satellite, decoding and processing the data for analysis.

Research Outcome

KCG VERGHESESAT Project

KCG VERGHESESAT is a 1U satellite developed by the students of the Hindustan Group of Institutions, under the 75 Student Satellite Mission to commemorate the 75th year of Independent India. The KCG VERGHESESAT is equipped with LoRa payload for Intersatellite Communication which can be used to communicate with the fishermen in deep seas using the constellation of satellites with an aim of aiding the society during the onset of any natural disasters like cyclones. KCG VERGHESESAT is also equipped with sensors to receive data from the water buoys to monitor the water levels in ponds and lakes during torrential rains.

Ongoing Projects

1. Design and Development of a 1U satellite KCG VERGHESESAT
2. Intersatellite Communication with LoRa Module for CubeSats
3. Satellite Orbit Debris Management using CubeSats
4. On-Orbit Satellite Refuelling by Magnetic Docking Mechanism

CONTACT

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06

**CENTRE FOR AUTOMATION
AND ROBOTICS
(ANRO)**

ESTABLISHED

OCTOBER 2014

Vision:

To emphasize robotics and automation related research, product development, teaching, training, and consultancy with a goal to innovate and disseminate new knowledge to meet the needs of industries and society

Mission:

- ▶ Reach National prominence through high quality research practice and services and develop as renowned research centre in India
- ▶ Become a sustainable and productive centre of Excellence through indigenous research, advanced training, and academic practices
- ▶ Promote interdisciplinary graduate and post graduate programs through a distinctive industrial and research collaborations
- ▶ Develop relationships with potential, national and international collaborators to promote joint projects and programmes

Research Partners





Centre for Automation and Robotics (ANRO) was established on 20th October 2014 to promote educational and research activities in the area of robotics, automation, and computer vision. This Centre bridges the gap between industries and Department of Mechatronics Engineering at HITS with a distinctive capability to harness the intellectual energy of academia to impact Indian industries.

Research Areas

- ▶ To innovate and disseminate new knowledge to meet the needs of industries and society
- ▶ Robotics, Intelligent Automation, Condition Monitoring, Artificial Intelligence, Virtual Reality & Augmented Reality

Research Facilities

- ▶ ANRO laboratories are designed for collaborative research, providing future-proof spaces for research and education.
- ▶ Facilities include: Yaskawa Industrial Robots, Gantry Robot, Collaborative Robot, Quadruped Pet Robot, IoT Autonomous Car, EEG headset for Mind control, Mobile Robot Platforms, Virtual/ Augmented Reality, Flexible Manufacturing System, Advanced Pneumatic Trainers, CNC Machining Centre, Laser Cutting Machines, Motion Sensors, 3D Printers, IoT development platforms

Research Outcomes

Funded Projects

- ▶ Autonomous Heterogeneous Robotic Swarm Simulator, in collaboration with Leicester University, Funded by Royal Academy of Engineering, UK.
- ▶ Trainer for Tactical Warfare, funded by Combat Vehicles Research & Development Establishment, DRDO, Govt. of India
- ▶ Adaptive Control of Robotic Fettling, Funded by SERB, DST.
- ▶ Wall climbing robot for the internal non-destructive testing (NDT), in collaboration with London South Bank University, Funded by Royal Academy of Engineering, UK.
- ▶ Suzhali – The Powered Air Purifying Respirator, Funded by Indian Medical Association.
- ▶ Low-cost patient Assistive Robot, in collaboration with University of Leeds, UK, Funded by Royal Academy of Engineering, UK
- ▶ Intelligent System for Adaptive Enhancement of Underwater, Funded by Naval Research Board (NRB), DRDO
- ▶ Modelling and Simulation of an Electromagnetic Retarder, Funded by Rambal Limited
- ▶ Sevili – The Assistive Robot, Funded by Renault Nissan Technology Business Center

Patent

- ▶ Sevili – Assistive Robot
- ▶ PAPR – Suzhali
- ▶ Quadruped Robot

CONTACT

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07

CENTRE FOR
UNDERWATER ROBOTICS &
COMMUNICATION
(URoC)

ESTABLISHED

SEPTEMBER 2022

Vision:

To create a globally recognized research network dedicated to advancing underwater technologies, with a focus on the development of autonomous vehicles, communication networks, IoT signal processing, and the innovation of smart nanomaterials for underwater devices.

Mission:

To enhance the capabilities of underwater vehicles and devices by integrating emerging next-generation smart materials. To bridge fundamental research with high-end technological applications by employing advanced approaches in material science and device physics. To position the Centre as a leading hub of excellence and a trusted service provider, advancing innovation in the field of underwater technologies.

**Research
Partners**



Technology
Innovation Hub
IITG TIDF





Various underwater technologies have been developed for the tracking and surveillance of marine ecosystems, leveraging fundamental physical principles such as optical, acoustical, and RF methods. It has become clear that integrating multiple research areas is essential to developing a highly product-oriented approach to underwater device innovation. Established on September 30, 2022, the Centre of Excellence in Underwater Robotics and Communication focuses on major research thrust areas that explore diverse aspects of ocean engineering and technology.

Research Areas

- ▶ Design and Development of Bio/Nature-Inspired Underwater Vehicles for Ocean Surveillance
- ▶ Functional Nanomaterials and Devices (Photovoltaics, Photodetectors, Smart Sensors) for Underwater Applications
- ▶ Development of Optical, Acoustical, and RF Communication Networks for Underwater Applications
- ▶ IoT Signal Processing using Artificial Intelligence and Machine Learning

Research Facilities

- ▶ High-end Workstations
- ▶ Electron Beam Evaporation Unit
- ▶ Thermal Evaporation Unit
- ▶ Quantum Efficiency Measurement

Research Outcomes

Funded Project

- ▶ Burning number algorithm for high-yield agriculture (IIT Ropar)
- ▶ 2D Quantum materials enabled solar driven electrolysis assisted nano bubble technology for sustainable agriculture and water treatment (IIT Ropar)
- ▶ Hexagonal Boron Nitride (h-BN) Barrier Coating for Preventing Biofouling, Bioinvasion and Corrosion on Underwater Vehicles.
- ▶ Development of Antimony Chalcogenide Thin Film Photodetectors for Underwater Optical Wireless Communication.
- ▶ Irradiation Enabled Defects Mediated Charge Transport in 2D-Layered Van der Waals Heterostructure for Photovoltaic Applications - UGC-DAE Collaborative Research Scheme (2022)

Patents

- ▶ Weavable-Wearable Fiber Solar Cells for Smart Nanotextiles – German Patent
- ▶ Compact Planar Stripline Bowtype Antenna for Sub-7GHz / Vo5G Applications

CONTACT

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08

**MACHINE INTELLIGENCE
AND DATA ANALYSIS
RESEARCH CENTRE
(MIDARC)**

ESTABLISHED

AUGUST 2019

Vision

The Vision of the Machine Intelligence and Data Analytics Research Centre MIDARC is to become a world class, self- sustaining research centre that provides an integral platform for synergizing research potential in realizing the best-of-breed, state-of-art business solutions through the deployment of cutting-edge technologies and applications.

Mission

The Mission of the centre is to maximize the use of resources and facilities in order to emerge as a full-fledged research centre with a diverse portfolio of research projects funded by top nodal funding organizations.

Research Partners





Machine Intelligence and Data Analysis Research Centre (MIDARC) was founded in collaboration with two international partners Stevens Institute of Technology, USA as Academic partner and Machine Intelligence Research (MIR) Labs, USA a global non-profit academic consortium and IBM as an industry partner. The aim of establishing this centre is to provide a vital and perfect platform for the research scholars to coordinate and focus their diverse domain specific research acumen in producing a cutting-edge technical solution and applications to a persisting business challenge. .

Research Areas

Artificial Intelligence, Machine Learning, Deep Learning, Big data Analytics, Natural Language Processing and Cognitive Computing

Research Facilities

- ▶ AI GPU Deep Learning Lab with IBM Minsky Server with 2 NVidia P100 GPU with NVlink Technology
- ▶ Mark Zuckerberg New Data Science Lab with 60 X- i7/16 GB RAM/ 1TB HDD systems.
- ▶ MATLAB with Deep Learning Toolbox, Statistics and Machine Learning Toolbox, Text Analytics Toolbox, Image Processing Toolbox, Medical Imaging Toolbox, Computer Vision Toolbox, Reinforcement Learning Toolbox, Predictive Maintenance Toolbox
- ▶ IBM Hub with i5/512GBSSD/12th Generation/Lenovo - 5 Computers and i7/16GB/1TB/GPU/ Acer - 5 Computers.

Societal Benefit

1. The centre intends to produce programmes that will solve enduring difficulties in the agricultural industry in a delicate manner, thereby weeding out undesired problems and enhancing productivity and returns.
2. There are also plans to deliberate and develop indigenous projects to mitigate the effect of global warming.
3. Other topics in which the Centre intends to intervene and provide remedial methods include Pollution Monitoring, Health Care and Waste Management and also from leather industry.

Major Events

- ▶ International Conference on Advances in Data Engineering and Intelligent Computing Systems in association with IEEE Xplore was successfully conducted on 17th -18th April 2024

Funded Project

- ▶ Development of Drug Response Prediction Model using Ensemble Learning for clinical Application
- ▶ Development of a web app for Agriculture from Sustainable Global Peace Trust
- ▶ A webapp for Smart Agriculture using ML application funded by Sustainable World Peace Trust worth Rs 2 Lakhs, PI - Dr Thangakumar J, Head,CSE

CONTACT

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09

CENTRE FOR SIMULATION
AND ENGINEERING DESIGN
(SIMENDES)

ESTABLISHED

AUGUST 2015

Vision:

To develop and deliver Innovative Product Designs harnessing the intellectual capabilities of Academia for the demanding needs of Industry.

Mission:

- ▶ Creating a collaborative platform for Rational & Innovative product designs
- ▶ Adopting PLM - Product Life Cycle Management Approach
- ▶ Establishing as a leading center for Value Added Training in Advanced CAD, FEA & Product Design.

Research Partners





The Center for Simulation and Engineering Design (SIMENDES) has been established to promote research and training on Product Design adopting the latest practices of PLM (Product Life Cycle Management). This will include reverse engineering practices also. The center will deliver high quality product designs in a timely and cost-effective manner. The software enables the full spectrum of next generation collaborative design including system engineering, shape design and equipment engineering.

Research Areas

Product Modeling, Design, Simulation & Analysis: Finite Element Analysis of Composite Products and Structures in ANSYS ACP. Composite Pressure Vessels & Piping, Rapid Prototyping: 3D printing, Reverse Engineering.

Research Facilities - TANCAN Hub and Spock Centre

- ▶ Training on Dassault Systèmes 3D EXPERIENCE Platform.
- ▶ Software coverage: CATIA | SIMULIA | DELMIA | ENOVIA.
- ▶ Hands-on & industry-oriented training by certified TANCAM trainers.
- ▶ Access to advanced labs, AR/VR, simulation & prototyping facilities.
- ▶ Structured courses & industry-recognized certification

Research Outcomes

Publication

Over 30 research articles in Scopus Indexed Journals.

Funded Projects

- ▶ Development of composite poles and towers - IIT Chennai Consultancy -Rs.5.9 lakhs
- ▶ Development of Composite Track guard Fuel Tanks with Polyurea Coating on the Striking Face for Futuristic AFV - CVRDE (DRDO). This project is a full-scale product development work using new composite material system involving all phases of product design activities like CAD modeling, Finite Element Analysis for Structural integrity and Impact strength, Static & cyclic pressure testing and finally the bullet resistance testing.

Consultancy Projects

Design of Large Diameter Glass Fiber Reinforced Plastic (GRP) Storage Tanks for combined loads including seismic loads

CONTACT

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10

CENTRE FOR HYDROGEN
TECHNOLOGY AND CARBON
UTILIZATION
(CeHy)

Mission:

- ▶ The Centre for Hydrogen Technologies and Carbon Utilization (CeHy) aims to advance research and innovate on in hydrogen energy and carbon utilization, developing sustainable solutions that support clean energy and global carbon reduction goals.

Vision:

- ▶ To be a leading global center for hydrogen and carbon technologies, pioneering research that drives the transition to a low-carbon, sustainable future.

Research Partners





The Centre for Hydrogen Technologies and Carbon Utilization (CeHy) focuses on green hydrogen, fuel cells, CO₂ conversion, and clean energy technologies. It develops advanced materials and sustainable solutions for carbon-neutral energy systems. CeHy combines modern research facilities with interdisciplinary expertise to support future clean energy innovations. The centre aims to bridge academic research with industrial applications to support a sustainable future.

Research areas

- ▶ Green hydrogen production through electrolysis and solar-driven systems.
- ▶ Hydrogen storage, fuel cells, IC engines, and membrane technologies.
- ▶ Digital-twin, modeling, and simulation for electrolyser optimization.
- ▶ CO₂ capture and utilization for fuels, chemicals, and materials. loads including seismic loads

Research Funds

- ▶ DST-CEST (2025-2028): 87.6 Lacks
- ▶ DST-GITA (2023-2026): 44.5 Lacks
- ▶ ANRF-SERB-CRG (2022-2025): 49.5 Lacks

Publications and Patents

- ▶ Indian Patent IN202541077956 (2025)
- ▶ ACS Omega, 11(13), 19963-20001, 2026
- ▶ RSC Adv., 15 (37), 30135-30145, 2025
- ▶ Journal of Alloys and Compounds, 984, 173886, 2024
- ▶ Small, 19 (45), 2303598, 2023
- ▶ Nature Communications, 13(1), 1-8, 2022

Courses Offered

Technology for Hydrogen Generation

Funded Project

- ▶ Recovery of silica from the end-of-life silicon PV panels and laboratory e-wastes for high end applications, Department of Science & Technology - 83.4 Lakhs

CONTACT

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SELECTED RESEARCH FACILITIES



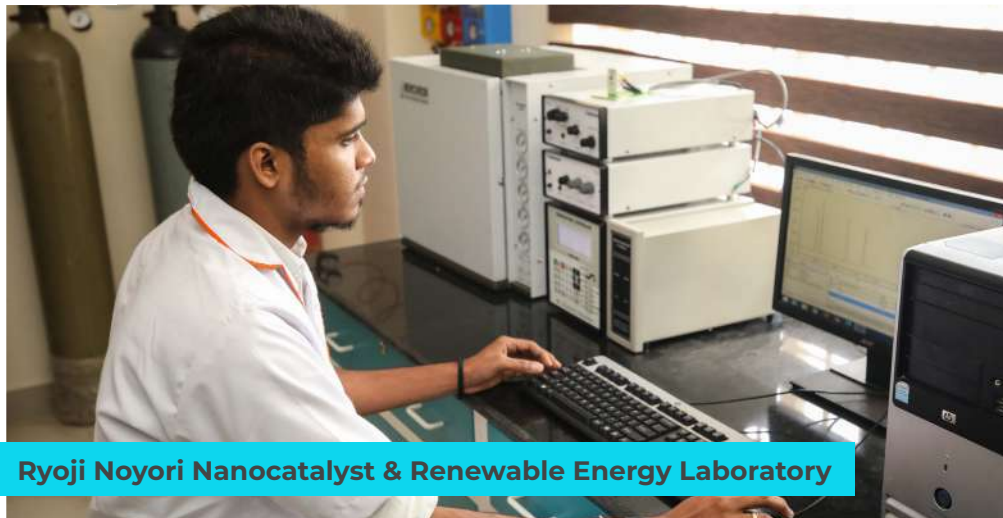
Structural Engineering Lab



High performance computing cluster



Energy dispersive X-ray



Ryoji Noyori Nanocatalyst & Renewable Energy Laboratory



Fatigue and damage tolerance lab / SIMCRASH



Lyophilizer

5 SKILL CENTRES



CAEv



CBS

**ROYAL
ENFIELD**

SKILL CENTRES

1. Dr. KCG Verghese Higher Education Leadership & Management Centre (HELM)
2. Centre for Autotronics & Electric Vehicles (CAEv)
3. Centre for E-Hardware Innovative Test-Technology Systems (eHITS)
4. Centre for Business Simulations (CBS)
5. Royal Enfield Experiential Training Hub

01

DR. KCG VERGHESE HIGHER
EDUCATION LEADERSHIP &
MANAGEMENT CENTRE
(HELM)

ESTABLISHED

12 JANUARY 2017



Vision

Shaping the future of higher education institutions across the globe through continual innovation in educational leadership, management, research and contribution to society.

Mission

Excellence in value based Education and quality Research through an innovative learning environment for the development of human resources.



HIGHER EDUCATION, LEADERSHIP & MANAGEMENT CENTRE

The HELM Centre is dedicated to driving transparency, strengthening leadership, and promoting the successful implementation of higher education reforms across the nation. The Centre actively supports stakeholders in developing policies, materials, outreach, and training programs that enable system-wide adoption and the effective application of leadership and management principles in higher education. With a focus on continuous improvement, the Centre emphasizes the importance of aligning quality standards with institutional missions, fostering interdependent educational systems, and enhancing the professional development of highly specialized faculty.

Objectives

- ▶ To provide professional guidance and education that nurtures leadership in education, enabling India to reclaim its global standing in higher education.
- ▶ To assist Indian institutions in improving their global rankings and achieving international recognition.
- ▶ To offer consultancy services aimed at meeting quality standards, enhancing the effectiveness of education, and developing the skills of students.

Centre Activities

Looking ahead, the Dr. KCG Verghese HELM Centre is committed to equipping the next generation of higher education leaders with cutting-edge skills in artificial intelligence and data-driven decision-making. The Centre's future roadmap emphasizes the integration of AI in educational leadership, empowering stakeholders to leverage data for informed policy-making and governance. Through specialized training programs, the Centre will enable leaders to harness the power of AI to enhance institutional efficiency, drive innovation, and promote evidence-based reforms in higher education. By embracing these technologies, the Centre aims to shape forward-thinking leaders who can navigate complex educational landscapes and influence systemic change across the nation and beyond.

CONTACT

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02

**CENTRE FOR
AUTOTRONICS &
ELECTRIC VEHICLES
(CAEv)**

ESTABLISHED

03 OCTOBER 2015

Vision

To be the Centre of knowledge for research, development and Professional service in Automotive Electronics and Partnered with industry to deliver leading edge technologies in a vibrant research education environment.

Mission

Committed to create and disseminate knowledge through a range of high-quality academic program in a Student-Centered learning environment emphasizing intellectual achievement and employability in the field of Automotive Electronics.

Research Partners



HOCHSCHULE TRIER
Trier University of Applied Sciences

DAAD

Deutscher Akademischer Austauschdienst
German Academic Exchange Service



AUTOTRONICS
BY VOLKSWAGEN GROUP ACADEMY



BOSCH

ŠKODA | VOLKSWAGEN
ŠKODA AUTO Volkswagen India Private Limited



The Centre for Autotronics and Electric Vehicles is a research and skill development center dedicated to automotive electronics and electric vehicle technology. Addressing industry demands, it focuses on Driver Assistance Systems, EV Powertrain Modeling, Battery Management, and Autonomous Technologies. Equipped with advanced facilities and strong industry ties, the center offers hands-on training in Autotronics, Model-Based Design, and EV systems. With a focus on intellectual property, the center has developed patents and innovations enhancing vehicle safety, efficiency, and sustainability, driving the future of smart, eco-friendly mobility.

Objectives

- ▶ **Research:** To conduct cutting-edge research in Driver Assistance Systems, Electric Vehicle Powertrain Modeling, and Battery Management Systems.
- ▶ **Skill Development:** To equip students with practical, industry-ready skills through hands-on training in Autotronics, EV systems, and Model-Based Design.
- ▶ **Intellectual Properties:** To generate patents and intellectual assets that advance automotive safety, efficiency, and smart mobility.

Research Areas

Electric and Smart Mobility, Advanced Driver Assistance Systems (ADAS), Vehicle Safety and vehicle Diagnosis, Digital Mobility and Sustainable Transportation

Research Facilities

Autotronics Laboratory, HITS – Bosch Joint Training Centre, Electric One Skill Next, Automotive Electric and Electronics Laboratory

Research Outcomes

Funded Project

Indo- German DAAD funded Projects on Advanced Driver Assistance Systems Algorithms Development in Association with Trier University of Applied Science.

Consultancy Project

- ▶ Consultancy Project on Development of Embedded Tech Accessories for car with Krux Studio, Mumbai

Patents

- ▶ System and Method for Automatic Helmet Detection to Enhance the Rider Safety Using Deep Learning
- ▶ A Child Occupant Protection and Safety Assisting System for Vehicle.
- ▶ An IOT based Intelligent Driver Assistance System

Skill Development Partners

- ▶ Global Automotive Research Centre (GARC)
- ▶ Skoda Auto Volkswagen India Pvt. Ltd.
- ▶ Bosch Automotive India Private Limited
- ▶ Electric One India Pvt. Ltd.

CONTACT

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03

CENTRE FOR
E-HARDWARE INNOVATIVE
TEST-TECHNOLOGY
SYSTEMS
(eHITS)

ESTABLISHED

16 SEPTEMBER 2023

Vision

To train and serve Government, Private R&D Organizations and Education Institutes at the National and International level.

Mission

To Improve technical merits of Electronics Test Engineering and test solutions by employing fundamental principles, standard methodologies and laboratory practices using ATEs.

Research Partners



Hindustan Institute of Technology & Science (HITS) partnered with QMAX, established a world class automated electronic hardware test engineering facility to train and serve Government, Private R&D organizations and Educational Institutions at the National / International levels to meet the future demands in test engineering and focus on capacity building. Currently, there is a need for innovative test solutions for high density PCB electronic systems. Henceforth eHITS is oriented towards test and diagnose faults in electronic systems starting from the component level to the system level tests.

Objectives of E-HITS

- To offer Training programs to enable the **technical experts, faculty, researchers and students** to evaluate the system under test, program development using ATEs, Advanced Boundary Scan Test Techniques, Reverse Engineering and Functional Testing.
- To provide the first-hand exposure to participants on debug and **troubleshoot, identify the faulty components as well as Re-work precision Soldering techniques**.
- To assist the learners to acquire knowledge in the **TPS (Test Program Sets) development** in Qmax ATE platform and other advanced testing such as **Boundary Scan tests and test using Advanced Robotic Flying Probe Testers**.
- To provide hands on exposure in **wider test domains** to expand the **Electronics test coverage skill sets**.
- To **Certify and test Quality Assurance of PCB Boards** for Strategic Electronics, ESDM and Automation Industries.
- To offer Consultancy and student projects

Research Facilities

- | | |
|--|-------------------------------------|
| ▶ QTouch - Automated Flying Probe Tester | ▶ QE49 Boundary Scan Trainer System |
| ▶ QT200NXG Desktop ATE | ▶ QT-Hi1 Nodal Impedance Analyzer |
| ▶ QT65 - ICFT Trainer System | ▶ QT-25 PCB Shorts Locator |

About the Courses

- ▶ Basic Training Course in Test Engineering for Electronics Hardware
- ▶ Advanced Development Training Course in Test Engineering for Electronics Hardware

Centre Activities

- ▶ Industry expert training in Test Engineering – Associated industries: Steel Authority of India (SAIL), Indian railways, Indian Navy, Vietnam Military and many more
- ▶ Value added Course on Test Engineering for Electronics engineering students
- ▶ Internships for core ECE students
- ▶ Centre supported students' project work
- ▶ Consultancy for Electronic Board testing

04

CYBER PHYSICAL SYSTEMS (CPS)

Mission & Vision

We aim to bridge the gap between academic research and real-world industrial applications. By leveraging national-level deep-tech initiatives, our lab serves as a collaborative hub for students, researchers, and startups to co-create solutions that align with India's vision for global competitiveness and Industry 4.0.

Research Partners



शिक्षा मंत्रालय
MINISTRY OF
EDUCATION



विज्ञान एवं प्रौद्योगिकी विभाग
DEPARTMENT OF
SCIENCE & TECHNOLOGY



AWaDH
IIT Ropar-TIF



The IIT Ropar Cyber Physical Systems Lab at HITS is a premier center for excellence in Cyber-Physical Systems (CPS), established on September 20, 2025. As the 16th laboratory under the national network of iHub–AWaDH (IIT Ropar), it holds the distinction of being the first-ever CPS Lab in South India.

Operating under the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) by the Department of Science and Technology (DST), Government of India, the lab is strategically located at the Hindustan Institute of Technology and Science (HITS) in Chennai. It serves as a vital spoke in India's mission to decentralize deep-tech innovation and foster technological self-reliance in crucial fields like agriculture and water management.

Facilities:

- ▶ IV Measurement System
- ▶ Quantum Efficiency Measurement System
- ▶ 3D Printer
- ▶ High-performance Computers
- ▶ Integrated Soldering and Rework Station
- ▶ Solar Panels
- ▶ Diverse Range of Sensors

Projects:

- Satura : Smart Vapor Pressure Deficit (VPD) Monitoring and Actuation System.
- IntelliSun : Adaptive Tracking System intelligently aligns Solar Panels with the sun for maximum energy.
- AgriSense : Smart System to detect Spoilage Risk in post-harvest Grain Storage.
- SeriNova : Smart Sericulture System that optimizes silkworm growth through real-time monitoring and control.
- AlliumGuard : IOT based Fern and Fungal prediction and alert device for Onion.

CONTACT

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05

ROYAL ENFIELD
EXPERIENTIAL TRAINING
HUB

ESTABLISHED

30 NOVEMBER 2022





HITS-Royal Enfield Experiential Learning Hub established at Hindustan Institute of Technology and Science (HITS) is India's first state-of-the-art facility dedicated to advancing expertise in two-wheeler technology, specifically focused on the iconic Royal Enfield brand. Established through a pioneering partnership between HITS and Royal Enfield (a unit of Eicher Motors Ltd.), this training centre's primary objective is to provide students with world-class hands-on experience in the repair, maintenance, and diagnostic techniques of Royal Enfield motorcycles. It equips aspiring technicians with the skills needed to excel in the rapidly evolving two-wheeler industry. Through rigorous training programs, students gain practical insights into the latest technologies and techniques used in Royal Enfield bikes, ensuring they are ready to meet the demands of the modern automotive landscape.

The training programs are designed to integrate seamlessly with the students' academic curriculum. Groups of students are engaged in specialized training phases, mentored by experts from Royal Enfield. The centre also offers ongoing professional development opportunities for faculty, allowing them to stay abreast of cutting-edge advancements in two-wheeler technology.

Spanning over 11,000 sq. ft., the Royal Enfield – HITS National Training Centre is equipped with world-class infrastructure and cutting-edge equipment to provide an immersive learning experience. The centre features distinct sections dedicated to the essential components of Royal Enfield motorcycles, including:

- ▶ Engine Section
- ▶ Transmission Section
- ▶ Chassis Section
- ▶ Electrical Components Section

Each section is equipped with working models, allowing students to explore and engage with the mechanical and electrical systems of the motorcycles in a hands-on environment. This practical, experience-based learning ensures that students not only master the theoretical aspects of two-wheeler technology but also gain the expertise needed to diagnose, repair, and maintain Royal Enfield bikes with precision and confidence.

Through this collaboration, the Royal Enfield Experiential Training Hub is setting new standards for training excellence in India's automotive sector, bridging the gap between academic learning and industry-ready skills.

CONTACT

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Head, Royal Enfield Experiential Training Hub

Email: enfield@hindustanuniv.ac.in

50+

Funded Projects



Naval Science & Technological Laboratory (NSTL)

- ▶ Parametric studies on article subjected to underwater shock wave excitation
- ▶ Development of shock standards and guidelines for two different marine vessels through numerical analysis

Department of Atomic Energy(DAE)

- ▶ Development of Inspection Robot
- ▶ Active Noise Reduction



Defence Research and Development Organisation (DRDO)

- ▶ Ultra response Gas Purging System
- ▶ Composite Fuel Tank for MBT
- ▶ Development of Eddy Current Sensors & Electrostatic Sensors
- ▶ Wall Climbing Robot
- ▶ Tactical Training Simulator
- ▶ On-line Measurement system for Hydrogen Concentration in Steam Environment
- ▶ Experimental and numerical investigations on the failures of metallic and composite structures to hail-ice impact



Department of Science and Technology (DST)

- ▶ Development of Lead Free high performance piezoelectric materials
- ▶ Distance based topological indices problems in cheminformatics
- ▶ Edge Saturated Si₂BN Nano-Ribbon as High-Capacity Anode Materials for Next Generation Mg Ion Batteries
- ▶ Sn integrated 3D, porous carbon based Scaffolds as high capacity anode for Sodium-ion batteries
- ▶ carbon based materials with high antibacterial activity for face mask application to combat COVID-19
- ▶ Development of highly efficient direct Z-scheme heterostructure photo catalyst based on 2D metal sulfide for CO₂ reduction
- ▶ Adaptive control of robotic fettling for asymmetric geometry and close tolerance cast components



सत्यमेव जयते

Department of Science and Technology
Ministry of Science and Technology
Government of India



GLOBAL
INNOVATION &
TECHNOLOGY
ALLIANCE

- ▶ Probing the dynamic photocatalytic CO₂ reduction activity and interface carrier transport of direct Z-scheme heterostructure based on in-situ spectroscopy



ROYAL ACADEMY OF ENGINEERING

www.hindustanuniv.ac.in

Royal Academy of Engineering

- ▶ *Autonomous Heterogeneous Robotic Swarm Simulator for Faster Disaster Reconnaissance and Mitigation*
- ▶ *Mobile wall climbing robot for the internal non-destructive testing (NDT) of storage tanks*
- ▶ *Austempered Ductile Iron for Automotive Components*
- ▶ *Virtual Power Plant for Real Time EMS*
- ▶ *Automated 3-D Ultrasonic Inspection System*

DAAD

Deutscher Akademischer Austauschdienst
German Academic Exchange Service

German Academic Exchange Service (DAAD)

- ▶ German -Indian R & D study on innovative concepts for traffic and vehicle safety

Centre for Aircraft
Maintenance
Rs. 13.72cr

Minsistry of Mines Government of India

- ▶ Development of purification process technology for the preparation of 5N purity Aluminium for electronic and other speciality applications



खान मंत्रालय
**MINISTRY OF
MINES**



सत्यमेव जयते
Government of India
National Board for Higher Mathematics

National Board of Higher Mathematics(NBHM)

- ▶ Embedding Problems in Networks and Applications



सत्यमेव जयते
Ministry of New and Renewable Energy
Government of India

Total fund recived
Rs. 20cr+

Department of New and Renewable Energy (MNRE)

- ▶ Cyber-physical Controller for Hybrid Energy-Vertical Axis Windmill
- ▶ Hybrid Vertical Axis Wind Turbine System for Low Wind Speed Regimes

INAUGURATION OF CENTRES

GLIMPSES

Centre for Clean Energy and Nano Convergence (CENCON)



January 2011

Dr. A. P. J. Abdul Kalam,
Former President of India

Royal Enfield Experiential Training Hub



November 2022

Mr. B Govindarajan,
CEO, Royal Enfield

Structural Impact Crash Simulation Centre (SIMCRASH)

HAIL ICE and NSTL - HITS Research Lab



February 2024

Dr. Y. Sreenivas Rao,
DS & DG, (NS & M), DRDO, New Delhi
Dr. Abraham Varughese,
OS & Director NSTL, DRDO, Visakhapatnam

Centre for Underwater Robotics & Communication (URoC)



September 2022

Dr. M. Ravichandran,
Secretary, MoES

Centre for E-Hardware Innovative Test-Technology Systems (eHITS)



September 2023

General (Dr.) V.K. Singh,
Hon'ble Minister of State for Road Transport & Highways and Civil Aviation, Govt. of India

Cyber Physical Systems (CPS)



September 2025

Dr. Rajeev Ahuja,
Director, IIT Ropar

SEED GRANT 2024-25



Ongoing Projects

1 **Title:** Eco-Friendly Microplastic Removal through Recombinant Peptide Engineering in E. coli
Principal Investigator: Dr. Gayathri V, Associate Professor
Co-Principal Investigator: Ms. Lakshmi Sundeeep, Assistant Professor

2 **Title:** A holistic Clean technology solution of heavy metal removal using sustainable and green nano composites incorporated SPEEK as proton exchange membrane in microbial fuel cells
Principal Investigator: Mr. Vijay Samuel G, Assistant Professor(SG)
Co-Principal Investigator: Dr. J Sandhya, Assistant Professor(SG)

3 **Title:** An investigation on voice models using machine learning techniques for Parkinson's disease
Principal Investigator: Dr. Ashwini Jayachandran, Assistant Professor (SG)
Mentor: Dr. G Muthukumaran, Professor

4 **Title:** Development of Novel MXene based composite electrodes for Sodium-ion battery
Principal Investigator: Dr. Veena R, Associate Professor

5 **Title:** Development of testbed for the study and characterization of RF signals in underwater communication
Principal Investigator: Mr. Akshay Shaji, Assistant Professor
Mentor: Dr. G Muthukumaran, Professor

6 **Title:** Experimental Investigation and Development of a Child Presence Detection System with Diverse Sensor Modalities and Real-Time Communication Frameworks
Principal Investigator: Dr. A. Arikesh, Assistant Professor (SG)

7 **Title:** Prediction of Fault tolerance of batteries for UAV
Principal Investigator: Dr. R Devi, Assistant Professor (SS)
Mentor: Dr. AL Vallikannu, Professor, Professor & Associate Dean Sponsored Research

8 **Title:** Stray cow detection and analysis for Intelligent Driver Assistance systems
Principal Investigator: Dr. V. Sherlin Solomi, Associate Professor

9 **Title:** An exploratory research on localization of Panchayat Raj institutions towards holistic approach in achieving sustainable development goals
Principal Investigator: Dr. S. Stalin Panneer Selvam, Associate Professor

INTELLECTUAL PROPERTY

PATENTS GRANTED - 160

NATIONAL **32**



INTERNATIONAL **128**



TOTAL PATENTS FILED - 350

TOP 2% SCIENTISTS

GLOBAL ICONS OF RESEARCH EXCELLENCE



Dr. Panigrahi Pushpamitra
Centre for Clean Energy and Nano
Convergence



Dr. M. Prabakaran
Department of Chemistry



Dr. Adeye Samuel Ayofemi Olalekan
Department of Food Technology



Dr. K. Sakthidasan Sankaran
Department of Electronics and
Communication Engineering



Dr. M. Chandrasekar
Department of Aerospace
Engineering

Our professors are among the World's Top 2% Scientists as per the data compiled by Stanford University, USA. The announcement is based on a composite score calculated from citation metrics like h-index, total citations, and field-specific percentiles. The data is sourced from Scopus, an academic database managed by Elsevier.

CHANCELLOR'S AWARDS



Best Researcher Award



Dr. K. Ramajeyathilagam,
Senior Professor – Aerospace Engineering
Head - Structural Impact & Crash
Simulation Centre (SIMCRASH)

Best Academician Award



Dr. Indrajit Shown
Professor, Chemistry
Head - Centre for Hydrogen Technology and
Carbon Utilization (CeHy)

Recognition for Research Excellence

Satish Dhawan Award for Best Research Centre

SIMCRASH (Structural Impact & Crash Simulation Centre)

Dr. K. Ramajeyathilagam, Senior Professor – Aerospace | **Dr. M. Chandrasekar**, Associate Professor – Aerospace | **Dr. R Sundaramoorthy**, AP (SG) – Aeronautical | **Ms.T. Sivagangai**, Assistant P (SS) – Aerospace | **Mr. S Pragadheswaran**, AP (SS) – Aeronautical

Vishveshwaraya Award for Best Skill Development Centre

Royal Enfield Experiential Training Hub

Dr. Balaji D, Professor - Mechanical

Dr. V Ramanathan, Associate Professor – Automobile

Dr. E. Sangeeth Kumar, Associate Professor – Automobile

C.V. Raman Top Scientist Award

Dr. Pushpamitra Panigrahi, Professor & Scientist – F, CENCON | **Dr. Prabakaran M**, Professor, Chemistry | **Dr. Samuel Ayofemi Olalekan Adeyeye**, Associate Professor, Food Tech

Dr. K. Sakthidasan, Professor, ECE | **Dr. M Chandrasekar**, Associate Professor, Aerospace

Srinivasa Ramanujan Award for High Impact Publications

Dr. Indrajit Shown, Professor Chemistry | **Dr. V. Vasanth Kumar**, AP(SG), ECE

Dr. Sankarganesh P., Associate Professor & HOD I/C, Food Tech

Vikram Sarabhai Award for Best Consultancy Project

Dr. K. Ramajeyathilagam, Senior Professor – Aerospace | **Mr. S Pragadheswaran**, AP (SS) – Aeronautical

A. P. J. Abdul Kalam Award for Best Training Program

Dr. A Rajkumar, Associate Professor, Maths | **Dr. AL Vallikannu**, Professor, Associate Dean – Sponsored Research

Kalpna Chawla Best Publication Award

Dr. V Govindan, Associate Professor, Maths | **Dr. A Rajkumar**, Associate Professor, Maths
Dr. S. Seralathan, Professor, Aero | **Dr. Ahmad Hosseini**, Assistant Professor (SG), Aero

INTERNATIONAL CONFERENCE ON QUANTUM HORIZONS 2025



18-19 December 2025

The International Conference on Quantum Horizons 2025, themed “Quantum Materials, Intelligent Technologies and Sustainable Futures,” was jointly organised by Hindustan Institute of Technology and Science (HITS) and KCG College of Technology on 18–19 December 2025. The conference brought together leading academicians, researchers, industry experts, and students to explore advancements in quantum science and sustainable technologies. The inaugural session featured an inspiring address by Nobel Laureate Mouni Bawendi, who spoke on “Quantum Dots: From Curiosity to Technology,” emphasizing the role of fundamental research in driving innovation. The session also included keynote address by Ajayan Vinu and Rajeesh Ahuja, highlighting emerging developments in nanomaterials and quantum technologies. A key highlight of the conference was the panel discussion on “Quantum Materials and Intelligent Technologies,” which underscored the importance of interdisciplinary collaboration and industry–academia partnerships. The interactive session with students provided a unique opportunity for young minds to engage with global experts and gain insights into cutting-edge research.

RESEARCH ADVISORY BOARD

EXTERNAL MEMBERS



Dr. Senthil Murugan Ganapathy
Professor & Head, Integrated Photonic
Devices Group, Optoelectronics
Research Centre, University of
Southampton, UK



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Director, Global Innovative
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Nanomaterials, University of
Newcastle, Australia.



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Professor, Trier University of
Applied Sciences, Germany.



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DRDO, New Delhi



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Scientist-G & Director-COE,
Footwear Design & Development
Institute, New Delhi



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Hyderabad



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Senior Principal Scientific Officer, Indian
Pharmacopoeia Commission, Uttar
Pradesh



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Director MCF, ISTRAC, SatCom, INSAT,
ISRO, Bangalore



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Development, Advanced
Micro Devices (AMD),
Singapore (Alumni)



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Senior Principal Product
Manager - Oracle Cloud
Infrastructure, Oracle, Seattle
US.



Dr. Ravindra Gettu
V.S Raju Chair Professor,
Centre of Excellence (CoE) on
Technologies for Low Carbon
and Lean Construction(TLC2),
IIT Madras



Dr. Rajendra K Bandi
Professor IIM Bangalore



Dr. E. Bhaskaran
GM / Joint Director,
Department of Industries &
Commerce, MSME, Govt. of TN
(Alumni)



Dr. Lalit Gupta
Former Joint Director General,
Directorate General of Civil Aviation



Capt. Hemant Kumar
Vice President &
Chief of Flight Safety, Indigo

INTERNAL MEMBERS

Dr. Vikas Mishra
Vice Chancellor

Dr. N. Manoharan
Director Projects

Dr. S. Muttan
Director Research

Dr. AL. Vallikannu
Associate Dean - Sponsored Research

Dr. R. Asokan
Dean - Aeronautical

Dr. Puspamitra Panigrahi
Head, CENCON

Dr. K. Ramajeyathilagam
Head, SIMCRASH

Dr. Indrajit Shown
Head, CeHy

Dr. G. Muthukumaran
Head, CENSE

Dr. K. C. G. VERGHESE RESEARCH AND RESOURCE CENTRE



The Dr. K.C.G. Verghese Research and Resource Centre houses over 1,23,000 book volumes, 5,936 back volumes of national and international journals, and more than 3,500 DVDs, complemented by access to 25,465+ electronic journals and 2,43,500+ e-books. The institute subscribes to leading scholarly databases, including Scopus, IEEE, SAE International, Springer Nature, ScienceDirect, ProQuest (ABI/INFORM and Academic Complete), and Cambridge Journals, ensuring comprehensive support for advanced teaching and research. The digital library lab is equipped with 60 networked computers and high-speed Wi-Fi, enabling seamless access to online and cloud-based resources, while an additional 10 systems are dedicated to OPAC and e-resource access. Together with well-equipped departmental libraries, the central library functions as a vibrant knowledge hub that underpins the institute's teaching, research, and extension activities.



2.5
Lakh Books

20+
**Research
Databases**

4500 Sq.m.
**Carpet
Area**
814 Sq.m.
**Reading
Area**

600+
**Seats for
Readers**

700+
**Subscriptions
to Journals**

**Digital
Repository**

Books **338133**
Journals **47262**
Thesis **856**
Project Reports **4562**
CDs **3200**
News Papers **15**

RESEARCH SUPPORT SERVICES AND OUTREACH PROGRAMS

This department conducts author and publishing workshops and supports users in academic writing and research by providing access to tools such as Turnitin (with AI detection), Mendeley, JSTOR, RStudio, Python, Jupyter, SPSS, MATLAB, and a range of online bibliographic and full-text databases and eBooks. Research services are being further strengthened to help scholars discover and access library and archival materials, research data, and e-resources, and to guide students in exploring specific topics. Collaborative projects and partnerships between the library and the research community are actively encouraged, and workshop specialists offer training on research methods, the publication process, citation metrics, and reference management tools.

eLibrary@HITS – KNIMBUS: Library Anywhere, Anytime

The HITS eLibrary platform, powered by Knimbus, enables seamless remote access to subscribed e-resources and cloud-based content, ensuring that researchers can discover, read, and manage scholarly materials anytime and from anywhere.

CONDUCTIVE ENVIRONMENT

HITS is home to a well-stocked, modern, centrally air-conditioned library housed in a distinctive building featuring a six-storey curved glass façade that maximises natural light. The library is one of the most vibrant spaces on campus, offering a safe, comfortable, and welcoming environment that fosters learning, supports research, and inspires discovery. The rooftop provides spectacular views of Kovalam Beach, complemented by landscaped gardens and green open spaces, creating an attractive setting for academic and research activity.

LIST OF HONORIS CAUSA AWARDEES

2025



Alem Tsehay Woldemariam
Ambassador of Eritrea and
Dean of the Diplomatic Corps, India



Mr. Rajesh Nambiar
President at NASSCOM



Dr. Abraham Varughese
Director - NSTL



Dr. C. Emmanuel
Director – Academics and
Research, Gleneagles Global
Health City, Chennai

2024



Dr. Nambi Narayanan
Indian Aerospace Scientist
Padma Bhushan Awardee



Dr. P. Veeramuthuvel
Project Director of Chandrayaan 3

2023



Mr. Pablo Gandara
Team Leader, International
Urban Regional Cooperation
(IURC) Project of Europe and
Asia / Australasia

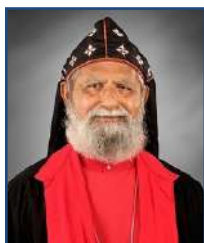


Mr. Sudhanshu Mani
Retd. General Manager,
Integral Coach Factory

2022



Dr. S.Somanath
Chairman, ISRO, Secretary,
Department of Space,
Govt. of India



Dr. Rt. Rev. Joseph Mar
Barnabas Suffragan Metropolitan
Malankara Mar Thoma Syrian Church

2021



Dr. Kris Gopalakrishnan
Co-Founder, Infosys.



Dr. H.E. Grace Akello
Ambassador of Uganda to India

2019



Dr. Tony Thomas
Corporate Vice president and Chief
Information Officer, Global IS/IT
Nissan Motor Company Ltd. Japan.



Prof. Col. Dr. James Thomas
Principal Advisor and Former Vice
Chancellor, Dr.D Y Patil University,
Navi Mumbai

2019



Dr. V K Mathews,
Executive Chairman, IBS Group
Trivandrum



Dr. Bala K Baradwaj
Managing Director, Boeing India
Engineering & Technology Centre,
Bengaluru & President SAEINDIA

2018



Dr. Lalit Gupta
Joint Director General of Civil Aviation, DGCA, New Delhi



Dr. E. Sreedharan
Principal Advisor, Delhi Metro Rail Corporation (DMRC)

2017



Dr. Mecca Rafeeqe Ahmed
Businessman & Entrepreneur, FALCON Group of Companies.



Dr. Alex Jacob
Managing Director and Sr. Structural Consultant, United Consultants

2017



Dr. Narain Karthikeyan
International Formula One Racing Driver



Dr. S. Christopher
Former Chairman, DRDO.

2016



Dr. Sekhar Basu
Chairman, Atomic Energy Commission & Secretary Dept. of Atomic Energy.



Dr. Ravindra Kumar Tyagi
Former Chairman, Hindustan Aeronautics Limited & President, Aeronautical Society of India

2016



Dr. Amithabh Matto
Prof, Jawaharlal Nehru University & University of Melbourne

2015



Dr. Isa Abdullatif Alansari
Chief Operating Officer, Aluminum Bahrain.



Dr. Berndt A. Buchmann
Director, Volkswagen Group India After Sales & Vehicle Logistics.



Dr. A. S. Kiran Kumar
Former Indian Space Scientist, Chairman of ISRO

2014



Dr. Tessy Thomas
Director, Advanced Systems Laboratory (ASL), DRDO, Ministry of Defence



Dr. Hee Ok Kim
President, Dongguk University, South Korea

2013



Dr. V. Sumantran
Vice Chairman, Ashok Leyland, Chennai,



Dr. B. Santhanam
Managing Director, Saint Gobain Glass India Pvt. Ltd.

2012



Dr. Vijay Kumar Saraswat
Member, NITI Ayog, Govt. of India Former Director General of DRDO.



Dr. Abdul Razzaq Ali Issa Al Sabbagh
Chief Executive, Bank Muscat, Sultanate.



Dr. Mallika Srinivasan
Chairperson & CEO, Tractors and Farm Equipments Ltd.



Dr. M. Narendra
Former Chairman & MD, Indian Overseas Bank.

INTERNATIONAL TO STRENGTHEN RESEARCH,



AGREEMENTS EDUCATION AND TRAINING





Directorate of Research and Consultancy

1, Rajiv Gandhi Salai, Old Mahabalipuram Road, Padur,
Kelambakam, Chennai, Tamil Nadu 603103, India.

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