ABOUT GNITS

G. Narayanamma Institute of Technology & Science (GNITS) (for Women), established by G.Pulla Reddy charities Trust was started on 15th December, 1997. Sri G.Pulla Reddy was an eminent businessman of great integrity and impeccable reputation. GNITS is one of the top most colleges in Telangana and AP States. The objective of GNITS is to provide an excellent learning facility for women in order to pursue education in engineering. The institute aims to promote technical education among women to enhance and build-up a new generation of thinkers, innovators and planners in the technical realms of Science & Technology. GNITS received UGC autonomous status for a period of 10 years from 2018 and is affiliated to Jawaharlal Nehru Technological University (JNTUH), Hyderabad. GNITS has been accredited by NAAC A+ for a period of five years from 2024. GNITS is approved by AICTE, accredited by NBA, and is ISO 9001:2015 Certified. GNITS offers 7 B.Tech. Programmes in CSE, CSE(AI&ML), CSE(DataSience), ECE, EEE, ETM and IT and 5 M.Tech programmes in CSE, DECS, PEED, WMC & CNIS in respective departments with 3615 students enrolled in B.Tech. stream and 120 in M.Tech stream. GNITS provides hostel facility with modern amenities catering the needs of 1195 students in the campus itself. GNITS campus is enabled with Wi-Fi connectivity and has 1000 Mbps leased line Internet.

ABOUT R&D and I& I Cell

Research and Development Cell is proactive at GNITS to inculcate research and innovative skills among faculty and students. Collaboration with different government and nongovernment institutes eventually lead to several MoUs, interdisciplinary research, sharing of resources, and the development of innovative solution to complex problems. At GNITS, there are 15 Center of Excellences in collaboration with various government agencies/industries and 15 research centers where the faculty members and students are actively involved building solutions to various problems through projects in cutting edge research areas of Artificial Intelligence and Machine Learning, Electric Vehicles, 4G/5G Communications, Virtual and Mixed Reality and Cyber Security. GNITS has secured Rs.233 lakhs for 83 projects, Rs.1.2 crores for the CURIE project and Rs.100.84 lakhs in SEED grants.

The Innovation and Incubation Centre, launched in July 2022, is a pioneering academic incubator focusing on women-led Deep Tech startups. In February 2023, GNITS was selected by Atal Innovation Mission (AIM). NITI Aayog to establish the Atal Incubation Centre (AIC-GNITS Foundation). This initiative promotes women entrepreneurs, focusing on creating sustainable and tech-driven solutions aligned with UN sustainable Development Goals (SDGs).

IMPORTANT DATES

Last Date of Registration: 20/02/2025

ALL CORRESPONDENCE TO

R&D Cell, I&I Cell

E-mail: rndcell@gnits.ac.in

PATRONS

Sri. G. Raghava Reddy, Chairman, GNITS. Smt. G. Srividya Reddy, Vice-Chairperson, GNITS.

CHAIRMAN

Dr. K. Ramesh Reddy, Principal, GNITS.

CONVENORS

Dr. Seetha M, Professor of CSE, Dean R&D,GNITS Dr. Kalyani N, Professor of CSE, Dean, I&I, GNITS

CO-ORDINATORS

Dr. Swapna Raghunath, Professor of ECE, GNITS Dr. B. Sasidhar, Assistant Professor of CSE (AI & ML), GNITS

Dr. Gouthami E, Assistant Professor of EEE, GNITS

ORGANIZING COMMITTEE MEMBERS

All R&D Department Coordinators
All I&I Department Coordinators

LOCATION & TRANSPORT

The college is located 5kms from Mehdipatnam (on the way to HCU) near Darga bus stop. BUS Route Nos (from Mehdipatnam): 116,118G, 216, 217, 6C, 126.









National Symposium

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FUTURE HORIZONS IN QUANTUM COMPUTING AND SUSTAINABLE INNOVATIONS

RESEARCH AND INNOVATION DAY 22nd Feb 2025



Organized by

Research and Development Cell & Innovation and Incubation Cell



G. Narayanamma Institute of Technology & Science

(Autonomous) (For Women)

Shaikpet, Hyderabad – 500 104, Telangana State, India. Phone: +91-(0)-40- 23565648/649 Fax: +91-(0)-4023564187 Website: www.gnits.ac.in Accredited by NAAC 'A+' Grade & NBA

An ISO 9001:2015 Certified Institute

ABOUT THE SYMPOSIUM

This symposium brings together experts, researchers, and industry leaders to explore cutting-edge advancements in quantum computing and their role in driving sustainable innovations. The event will feature two keynote speakers, offering visionary insights into the future of quantum technologies and sustainability. Additionally, there will be two engaging panel discussions that foster thought-provoking debates on emerging trends and real-world applications. Attendees will have the opportunity to network, collaborate, and exchange ideas with global thought leaders. This symposium aims to bridge the gap between scientific breakthroughs and sustainable solutions for a better future. Join us for an insightful day of knowledge-sharing and innovation

OBJECTIVES OF COURSE

- □ Exploring Future Trends in Quantum Computing − To discuss the latest advancements in quantum computing and their potential impact on various domains, including artificial intelligence, cyber security, and data processing.
 - □ **Promoting Sustainable Innovations** − To highlight how quantum technologies can contribute to sustainable solutions in energy, climate change, and resource optimization for a greener future.
 - ☐ Fostering Collaboration and Knowledge Exchange To bring together researchers, industry leaders, and policymakers for meaningful discussions, networking, and interdisciplinary collaboration on cutting-edge technologies and their real-world applications.

SYMPOSIUM SCHEDULE

- **8:45 9:15 AM Registration**
- ☐ 9:15 9:45 AM Welcome address & Inaugral Ceremony
- □9:45 10:00 AM Keynote Address on The Future of R&D for Sustainable India

- □ 10:00 10:45 AM Panel Discussion on Achieving Net Zero: The Role of Clean Energy in Sustainable Future
 □ 10:45 11:00 AM Networking break
 □ 11:15 AM Keynote address on Quantum Computing: Roadmap for Future
- ☐ 11:15 12:00 PM Panel Discussion on Challenges and Opportunities: Crossroads of Quantum and AI
- ☐ 12:00 1:00 PM Address by Chief Guest and Closing Ceremony
- $\hfill \square$ 1:00 2:00 PM Visit to AIC Building followed by Networking Lunch.

CHIEF GUEST, KEYNOTE SPEAKERS, PANEL MEMEBERS
CHIEF GUEST:

Prof. BS Murthy, Director, IITH, Hyderabad

Keynote Speakers:

- 1. Dr. Paravastu Rambabu Chief Sustainability Officer, Greenko, Hyderabad
- 2. Dr. V. Subrahmanyam School of Physics, University of Hyderabad, Hyderabad

Panel Discussion: Achieving Net Zero: The Role of Clean Energy in Sustainable Future
Panel Members:

- Dr. Paravastu Rambabu,
 Chief Sustainability Officer, Greenko,
 Hyderabad
- 2. Dr. Rajkiran V Bilolikar, Professor & Centre director, Energy Studies, ASCI, Hyderabad
- 3. Dr. Mutyala Sarath, Associate Faculty Member, NIMSME, Hyderabad

Moderator:

Dr Shashwat Pathak CEO, Atal Incubation Centre – GNITS, Hyderabad.

Panel Discussion: Challenges and Opportunities: Crossroads of Quantum and AI

Panel Members:

1. Dr. V. Subrahmanyam, School of Physics, University of Hyderabad, Hyderabad

- 2. Mr. Sasanka Valety ,
 Principal Data Scientist, Gen AI, IBM,
 Hyderabad
- 3. Mr. Ahmad Aamer, CIO, Sky Computing, Hyderabad

Moderator:

Prof. Muralikrishna Iyyanki, Former Dr Raja Ramanna DRDO Distinguished Fellow, Hyderabad.

ELIGIBILITY

Faculty members, Research scholars, Industry persons, and UG & PG students from various engineering colleges are eligible to attend the program. Industry professionals working in the relevant discipline are also welcome to participate.

REGISTRATION

REGISTRATION FEE:

Faculty/Research Scholars/Industry: Rs. 500/(Includes lunch, E-Certificate and Registration kit)
UG & PG Student: Rs. 100/-

(Includes E-Certificate and Registration kit)

REGISTRATION LINK:

https://forms.gle/pYTuutL8bNdkjfKj7



VENUE: Main Seminar Hall, GNITS

NOTE: We kindly suggest that each participant completes only one registration, as group registrations are not permitted.

For any queries, please contact:

Dr. Sasidhar B, Assistant Professor, Dept. of CSE(AI&ML)–9739372137

Dr. Gouthami E, Assistant Professor, Dept. of EEE – 9948883800

Student Co-ordinators:

K. Gayathri – 9542035485

Madhusree Cheruvu - 8297788647

CHIEF GUEST

Prof. BS Murthy, Director, IITH, Hyderabad



Prof. Budaraju Srinivasa Murty is an Indian metallurgical engineer. He was awarded the Shanti Swarup Bhatnagar Prize for Science and Technology, the highest science award in India, in 2007 in the engineering science category. He has also established the Deakin-IITM Centre of Excellence in Advanced Materials and Manufacturing at IIT Madras, in collaboration with Deakin University, Australia. He has authored over 400 journal publications and four books. He has supervised 39 Ph.D.'s, with 20 more currently ongoing. He has completed more than 55 sponsored research projects and is currently handling 13 projects, in addition to filing 20 patents.

KEYNOTE SPEAKERS & PANEL CHAIRS

Dr. Parvavastu Rambabu, Chief Sustainability Officer, Greenko, Hyderabad



Dr. Rambabu serves as an Advisor to the Greenko Group, Director at the World Bank Group, and Chairman of the GC Advisory and Forum for Sustainable Enterprises. He obtained his Ph.D. from IIT Bombay. His areas of expertise include Cleantech, Carbon Markets, Sustainability, Carbon Credits, Energy, Carbon Finance, Environmental Management Systems, Solar Energy, and Energy Management.

Dr. V. Subrahmanyam, School of Physics, University of Hyderabad, Hyderabad



Professor V. Subrahmanyam will be a core member of the Thematic Group (TG) working on "Field-Deployable Quantum-Enhanced Field Sensing on an Integrated Hybrid Platform." This TG is led by the esteemed Professor Saikat Ghosh from IIT Kanpur, who serves as the lead Principal Investigator. Professor Subrahmanyam's role in the project will involve providing critical theoretical support on quantum entanglement and quantum information.

PANEL DISCUSSION MEMBERS

1. Dr. Rajkiran V Bilolikar, Centre Director and Professor, Director, Energy Studies, ASCI, Hyderabad



Prof. Rajkiran V. Bilolikar is currently working as a Professor in the Centre for Energy Studies at the Administrative Staff College of India (ASCI). ASCI provides training to senior civil servants and other top officials of Public Sector Undertakings in India and also offers advisory services to various governments. At the Centre for Energy Studies, he leads projects on Energy Efficiency, e-Mobility, Renewable Energy, and the Power Sector. He has previously worked at the Maharashtra State Electricity Distribution Company.

2. Mr. Mutyala Sarath, Associate Faculty Member, NIMSME, Hyderabad



Mr. Sarath Mutyala is enthusiastic and dedicated to Entrepreneurship Education. Interacting with entrepreneurs, students, and government officials on the startup ecosystem and MSME development in the country always provides new insights into how to support the ecosystem in achieving "Aatmanirbhar." He is currently working as an Associate Faculty Member in the School of Enterprise Development at the National Institute for Micro, Small, and Medium Enterprises (ni-msme), an organization under the Ministry of MSME, Government of India, Hyderabad.

3. Mr. Sasanka Valety, Principal Data Scientist, Gen AI, IBM, Hyderabad



Mr. Sasanka has been working as a Principal Data Scientist since April 2018 and has primarily been in the data space since March 2010. He has proven expertise in architecting, designing, and delivering solutions to IBM's customers across all industries in which IBM has operated over the past 18+ years, since he joined in June 2004. He is knowledgeable in tools and technologies such as Content Analytics and NLP using Python, R, Spacy, Spark, SPSS, Watson Explorer, OneWEX Platform, and Watson Discovery on AWS, Azure, GCP, IBM CP4D platforms, and Watson Studio on IBM Cloud Private Enterprise using Kubernetes containers.

4. Mr. Ahmad Aamer, CIO, Sky Computing, Hyderabad



Mr. Ahmad Aamer is a Technology Evangelist, Speaker, Author, Trainer, Entrepreneur, Researcher, and Thought Leader with over 25 years of professional experience in IT business consultancy, training, and project delivery across 24 countries. He has assisted organizations with digital transformation and business analytics, and is capable of designing, developing, and delivering DaaS (Data as a Service) through Big Data Operations Architecture (BDOA).

PANEL MODERATORS

1. Dr. Shashwat Pathak, CEO, Atal Incubation Centre – GNITS, Hyderabad



Dr. Shashwat Pathak has hands-on experience on Technologies in Wireless Communication, Telemedicine, Medical Diagnostic Devices, Digital Transformation, Setting up Innovation/Incubation Centre, Funds Raising and Mentor Level experience in finding Problem-Solution Fit and Product-Market Fit. Drafting Institute Level Policies for Innovation and start-up support, for creating a Design-Led Innovation Ecosystem targeting the implementation of Sustainable Development Goals, including the operational SoPs. Leadership skills to envisage, implement and nurture the strategic projects for organizations.

2. Prof. Muralikrishna Iyyanki, Former Dr Raja Ramanna DRDO Distinguished Fellow, Hyderabad



Prof. Muralikrishna Iyyanki's current research and consultancy services focus on geospatial modeling, geospatial environment and health analytics, design thinking, open innovation, lean management, and hyperspectral remote sensing. He is the founding editor of the following journals: *Geospatial Today*, *Technology Spectrum* & *Science Spectrum*. He is a Fellow of the Institute of Engineers, Institute of Surveyors, and the AP Academy of Sciences. He holds positions as a guest scientist at: *DLR - German Space Research Institute & GKSS – Geesthacht*, *German*