



INDIAN INSTITUTE OF TECHNOLOGY MANDI  
भारतीय प्रौद्योगिकी संस्थान मंडी

# Institute Colloquium

“AI NATIVE 6G - The New Frontier”



**Mr. Mohan Rao**

**Managing Director and Corporate  
Vice President at Samsung R&D  
Institute Bangalore, India**



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**05:45 PM**



**Auditorium,  
North Campus**

## “AI NATIVE 6G - The New Frontier”

Mr. Mohan Rao

Affiliation: - Managing Director and Corporate Vice President at Samsung R&D Institute  
Bangalore, India.

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### **Abstract: -**

We stand at the threshold of a new era where connectivity is no longer just about linking devices—but about empowering intelligence everywhere. As we look beyond 5G, 6G will mark a fundamental shift: from engineered networks to cognitive systems that perceive, learn, and evolve. In this talk, I share the vision for AI-native 6G—where artificial intelligence is deeply woven into the very fabric of the network, from the air interface to the core, from Physical layer to L2/L3 to Network Automation and Management. Specifically, the talk will cover the current challenges of the telecom industry and the futuristic requirements of 6G along with showcasing the examples of application of AI for critical signal processing blocks like channel estimation, network energy savings and parameter optimization. In addition, the talk will also highlight the underlying compute platforms that are essential to run the AI at a massive scale while also giving a peek into the way 3GPP is planning to incorporate AI into the wireless standards. 6G will not just be faster or more efficient—it will be fundamentally smarter, forming the cognitive backbone of a hyper-connected world.



# Mohan Rao Goli

**CVP and Managing Director,  
Samsung R&D Institute India – Bangalore (SRI-B)**

Mohan Rao Goli is among the leading voices shaping the future of innovation and emerging technologies globally. A veteran with over 29 years of experience, Mohan currently serves as the Corporate Vice President and Managing Director of Samsung Research and Development Institute India-Bangalore (SRI-B). In this role, he leads one of Samsung's largest and most strategic R&D centres worldwide, driving the development of advanced products and building a new era of innovation powered by artificial intelligence. Under his leadership, SRI-B continues to play a critical role in advancing Samsung's global technology roadmap across multiple business verticals.

Prior to his current role, Mohan served as the Chief Technology Officer at SRI-B, where he was responsible for defining the centre's technical strategy and strengthening its core engineering capabilities. During this time, he led initiatives to grow and transform SRI-B into a leading AI Excellence Hub, enabling the development of cutting-edge technologies and nurturing world-class engineering talent. Mohan and his team have been instrumental in bringing to life several of Samsung's breakthrough AI initiatives, including Galaxy AI, a suite of on-device and cloud-based artificial intelligence features designed to redefine the mobile experience.

Mohan also brings deep technical expertise in advanced communication research and development, with extensive experience spanning 5G and 6G standards, next-generation communication systems, and the development and deployment of 5G terminal and network solutions across the global ecosystem. A known innovator, he has filed over 70 patents globally in the areas of communication networks, next-generation wireless technologies, and AI-driven communication systems. His current areas of interest include advancements in AI/ML-driven wireless technologies, next-generation communication systems, and extended reality (XR).

Over the course of his illustrious career, Mohan has received several industry recognitions for his leadership and contributions to technology innovation. These include Zinnov's "High Impact Global Role" award in 2019, Zinnov's "Best in Class CoE" award in 2022, and the "Best Overseas R&D Employee" award twice from the President of Samsung Electronics. In 2024, he was recognised as "CTO of the Year" by the Indian Achievers' Forum and honoured as the "Zinnov Tech Role Model 2024." Mohan is also passionate about engaging with young talent and champions Samsung's flagship CSR initiatives such as Samsung Innovation Campus, which builds future-ready technology skills among Indian youth, and Solve for Tomorrow, a national competition that recognizes and supports innovative ideas from young Indians.

He holds a Bachelors in Engineering degree from Acharya Nagarjuna University and an Executive MBA from Indian Institute of Management, Bangalore.