# IEEE International Symposium on 6G Mobile Wireless Communications

(Vision, Roadmap, & Technologies) (**December 9-10, 2022**)



### **Organized By**



Department of Electrical Engineering
Indian Institute of Technology Patna
Bihta, Bihar-801106

#### **About IIT Patna**



Indian Institute of Technology Patna is one of the IITs established by Govt. of India by an act of parliament on August 06, 2008. IIT Patna has ten departments: These are Computer Science & Engineering, Electrical Engineering, Mechanical Engineering, Chemical, and Biochemical Engineering, Civil & Environmental Engineering, Materials Science & Engineering, Chemistry, Physics, Mathematics, and Humanities & Social Science departments. It is recognized as an Institute of National Importance by the Government of India. All the departments are committed to engage a high quality research and pursuit of excellence in teaching. The faculty memers are actively involved in research and development in challenging areas of both theory and experiment. The labs established here have been well equipped with the latest equipment. IIT Patna campus is located at Jihta which is approximately 40 km from Patna.

#### Symposium overview

A new paradigm of wireless communication, the sixth-generation (6G) system, with the full support of artificial intelligence, is expected to be implemented in near future. Research on 6G is now well underway and several large initiatives have been launoned around the globe to define what this new generation of wireless networks will be. Due to the wide variety of envisioned use cases, 6G will not load to a one-size-fits-all solution, but rather inspire a rich diversity in terms of devices, spectrum usage, and technologies. So tware-defined radio (SDR) employs reconfigurable software-based components for the processing and conversion of digital signals. Unlike traditional radio communication systems, these radio devices are highly flexible and versatile. It has already proved its worth in 5G testbed implementations and is supposed to play a pivotal role in the deployment of next-generation communication technologies.



In order to take a stock of the recent development and future endeavor, IIT Patna is organizing a **Symposium on 6G Mobile Wireless Communication.** The Symposium will focus on the following events:

- Talks on key emerging technologies for 6G i.e. OTFS, Intelligent Reflecting Surface, THz imaging, positioning/localization, 6G security, AI for 6G, Augmented Reality and Virtual Reality for 6G etc. will be delivered by prominent speakers from top research institutes and industry.
- SDR Workshop, where communication protocols using SDR will be implemented.
- Hands-on training in mmWave circuit design, characterization, and fabrication will be done.

This symposium will provide a platform for knowledge dissemination and is expected to provide young researchers with a unique opportunity to learn from experts and even build a network.

Patron
Prof. T.N. Singh
(Director, IIT Patna)

General Chair
Dr. Preetam Kumar, Professor,
Dept. of EE, IIT Patna

Co-Chair
Dr. Amit Kumar Singh, Assistant Professor,
Dept. of EE, HT Patna

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#### **Keynote Speakers**

- Φ Prof. A.K Chaturvedi, Ex. Director IIT Roorkee
- Φ Prof. Emil Björnson, KTH Royal Institute of Technology, Sweden
- Shri Santosh Kumar Mall, Principal Secretary, DIT Bihar
- ◆ Dr. P. Hanumantha Rao, Director

  General, SAMEER (MeitY, Government of India)
- Mahesh P. Abegaonkar, Associate Professor, IIT Delhi
- Abdul Kayum, Deputy Director General (6G Technologies), Department of Telecom, Government of India
- **♦ Shri Amit Mannan**, Vice President, Samsung R&D, India
- Shri Shyam Jha, Sr Vice President, Engineering and Managing Director, India Operations at NetSPI
- Shri Mudit Goel, Vice President, Rakuten, India
- Prof. Preetam Kumar, EE Department, IIT Patna
- Dr. Amit Kumar Singh, Assistant Professor, EE Department, IIT Patna
- Dr. Manoj Gupta, NTU, Singapore
- Shri Rajdeep Yadav, Vice President, Radisys Corporation
- **Dr. Abhishek Kumar**, NTU, Singapore

#### **Registration charges**

- Φ For Students
  (IIT Patna) Rs. 500/- + 18% GST \*
  (External) Rs. 1000/- + 18% GST \*
- Φ Faculty Members

Both internal and external – Rs. 2500/- + 18% GST \*

- Φ Government department/Lab Rs. 7000/- +18% GST\*
- Φ *Participants from Industry*Engineers or scientists Rs. 7500/- + 18% GST \*

### For more information click here:

### **Click here to Register:**

Accommodation will be available in guest house and hostel guest rooms with nominal charges.

Gueschouse	Rs. 550 per day	
Hoster guest rooms	Rs. 250 per day	ı

#### **Organizing Committee**

- Φ Dr. Ahmad Ali
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