

Amaravati Quantum Valley Workshop 2025

Theme: "Envisioning Amaravati as a Global Capital for Quantum Technologies"

30th June 2025 (Monday)

08:00 – 10:00 AM | Roundtable Discussions (Parallel Sessions)

Theme	Moderators / Leads	Participants
Roundtable 1 – Quantum Computing & Algorithms + Hardware Ecosystem Time: 8:00 – 10:00 AM Moderator: <ul style="list-style-type: none">• Dr. Venkata L Subramanian, India Lead – IBM Quantum• Dr. Rajamani Vijayaraghavan, Associate Professor – TIFR		
Participants	<ul style="list-style-type: none">• Mr. Nikhil Malhotra, Chief Innovation Officer – Tech Mahindra• Mr. Nagendra Nagarajan, Founder & CEO – QpiAI• Mr. Manoj Nambiar, Chief Scientist – TCS Research• Mr. Pullarao Gurram, Senior Vice President – Axis Bank• Prof. Dipti Gupta (CEO), Dimira Technologies• Dr. Suranitha Kanjilal, PrenishQ Private Limited• Mr. Sesha Raghunathan, <i>Business Development Lead IBM</i>• Microsoft team	
Roundtable 2 – Sensing & Communications + Quantum Materials & Chips Time: 8:00 – 10:00 AM Moderator: <ul style="list-style-type: none">• Mr. Sridhar CV, Head Strategic Initiatives TCS Research• Mr. Praveen Scientist G, Govt of India		
Participants	<ul style="list-style-type: none">• Dr. Kasturi Saha, Assistant Professor – IIT Bombay• Dr. S. D Sudarsan, Executive Director, Centre for Development of Advanced Computing Bangalore• Prof. Anil Prabhakar, Professor – IIT Madras• Mr. Sunil Gupta, Founder & CEO – QNu Labs• Dr. Vijaya Rao, Quantum Research Lead – LTI Mindtree• Mr. Srinivasa Rao, Former Director General, Scientist-E – DRDO (NSTL)• Mr. Sourav Chatterjee, Scientist – TCS Research• Dr. Ashwani Kumar (CEO) Pristine Diamonds Private Limited• Dr. Vidur Raj (CEO), Quanastra Private Limited• Mr. Ravi, Quantum Biosciences• Mr. Nilesh Raosaheb Dhande (Founder & CEO), Fortytwo42 Technology Innovations Private Limited• Mr. Avinash, Quantfocus Labs Private Limited• Dr Venugopal Achanta, <i>Director, NPL</i>	

Roundtable 3 – Capacity Building & Standardization + Startup & Innovation Ecosystem

Time: 8:00 – 10:00 AM

Moderators:

- **Mr. Anil Sharma**, Global Head of TCS Co-Innovation Network
- **Dr. Amith Singhee**, – Director, IBM Research India and CTO, IBM India and South Asia.

Participants

- **Prof. Arindam Ghosh** Prof IISC
- **Dr. Henry Sukumar** Scientist F- CDAC
- **Dr. Karthik Raman**, Associate Professor – TIFR
- **Venkata Rama Raju Chelle** - Director, Telecommunication Engineering Center, Dept of Telecommunications, Govt of India
- **Prof. RP Singh**, Professor – National Physical Laboratory (NPL)
- **Dr. JBV Reddy**, Mission Director – Department of Science & Technology (DST)
- **Prof. Satyanarayana**, Director – IIT Tirupati
- **Dr. Anjani Priyadarsini**, Quantum Technologies Lead – AWS India
- **Mr. Rajender Bedi**, Resident Fellow – NITI Aayog
- **Mr. Achyut Chandra**, Group Manager and Lead, GovTech Strategy and Open Innovation, HCL
- **Mr. Prudhvi**, Quibitech
- **Mr. Rushikesh Ubale**, Q Krishi
- **Mr. Sanjay**, QAIG Private Limited

10:00 – 10:30

Tea Break

10:30

Arrival of Hon'ble Chief Minister to Novotel

10:30 – 10:50

Hon'ble Chief Minister will visit Startup Exhibition

- **DST Awarded Quantum Startups & Others**
 - QNu Labs
 - QPiAI India,
 - Dimira Technologies
 - PrenishQ Private Limited
 - Quanastra Private Limited
 - Pristine Diamonds Private Limited
 - Quan2D Technologies Private Limited.
 - Quibitech
 - Q Krishi
 - QAIG Private Limited
 - Quantfocus Labs Private Limited
 - Fortytwo42 Technology Innovations Private Limited

10:50 – 10:55

Model Quantum Computer – Demonstrated by **IBM** team.

10:55 – 11:00

HCM will Proceed to Main Plenary hall

Inaugural Session- 30th June (11:00 – 01:00 PM)


Time	Agenda Item	Speaker(s)
11:00 – 11:05	Lighting of the lamp ceremony	
11:05 – 11:10	Welcome & Opening Remarks	Sri Bhaskar Katamneni, IAS <i>Secretary, ITE&C, Government of Andhra Pradesh</i>
11:10 – 11:20	Address	Mr. Sandip Patel, <i>Managing Director of IBM India Pvt Ltd.</i> Sri. Scott Crowder, <i>Vice President IBM Quantum adoption</i> <i>IBM India Pvt Ltd.</i>
11:20 – 11:30	Address	Sri. Krithivasan (TBC) <i>Chief Executive Officer & Managing Director</i> <i>Tata Consultancy Services.</i> Sri.V Rajanna <i>President, Technology, Software & Services, and Head</i> <i>of Technology and Software Businesses</i> <i>Tata Consultancy Services.</i>
11:30 – 11:40	Address	H.E Jennifer Larson <i>Consul General Hyderabad, United States of America.</i>
11:40 – 11:50	Address	Prof. Kamakoti <i>Director IIT Madras</i>
11:50 – 12:00	Address	TBA from L&T
12:00 – 12:10	Address	Prof. Abhay Karandikar <i>Secretary, Department of Science & Technology</i> <i>(DST), Government of India</i>
12:10 – 12:20	Address	Prof. Ajay Kumar Sood <i>Principal Scientific Adviser to Government of India</i>
12:20 – 12:30	Key Note Address	Sri. Nara Lokesh <i>Hon'ble Minister for IT, Electronics, RTGS &</i> <i>Education, Government of Andhra Pradesh</i>
12:30 – 12:35	Video Message	Dr. Jitendra Singh <i>Hon'ble Minister of State, Ministry of Science &</i> <i>Technology, Government of India</i>
12:35 – 12:50	Special Address	Sri Nara Chandrababu Naidu <i>Hon'ble Chief Minister of Andhra Pradesh</i>
12:50 – 12:55	MOUs with CSIR & NSTL	
12:55 – 01:00	Vote of thanks	Sri. Kona Sasidhar IAS <i>Secretary to Government, Higher Education</i> <i>Department</i> <i>Government of Andhra Pradesh</i>
01:00	Interaction & Photo Session	All Dignitaries and Participants


Overview of National Quantum Mission Initiatives

Time	Speaker	Agenda
1:50 – 02:00	Dr. JBV Reddy <i>Scientist 'F' & Head, Quantum Technology Cell Dept of Science and Technology Govt of India</i>	Overview of the National Quantum Mission (NQM)

Session -1 Quantum Computing & Algorithms

 Time: 02:00 PM – 03:30 PM

 Theme: **Quantum Computing and Algorithms**

 Moderator: **Dr. Venkata L Subramanian, IBM Quantum India Lead**

Background: India's ability to participate in the global quantum movement hinges on its hardware capability – from algorithms to physical qubit systems, cryogenic infrastructure, chip fabrication, and control electronics. While most efforts have focused on software or abstract simulations, the real economic edge lies in owning the stack. This session explores how India can nurture a full-stack quantum ecosystem – with Andhra Pradesh as a hardware pilot site.

Time	Speaker	Agenda Item
02:00 – 02:10	Dr. Venkata L Subramanian <i>IBM Quantum, India Lead</i>	Opening remarks
02:10 – 02:18	Mr. Nikhil Malhotra <i>Chief Innovation Officer, Tech Mahindra</i>	Briefly introduce your organization's current work in quantum technologies
02:18 – 02:26	Dr. Saji VF <i>Scientist, DRDO – NSTL</i>	
02:26 – 02:34	Dr. Rajamani Vijayaraghavan <i>Associate Professor Tata Institute of Fundamental Research</i>	
02:34 – 02:42	Mr. Nagendra Nagarajan, <i>Founder & CEO Qpi AI</i>	Share your vision and future plans in the quantum domain
02:42 – 02:50	<i>Microsoft, India and South Asia</i>	
02:50 – 02:58	Dr. Shailaja Donempudi <i>Distinguished Scientist & Head, Business Development Group, CSIR</i>	
02:58 – 03:06	Mr. Manoj Nambiar, <i>Chief Scientist, Research Tata Consultancy Services</i>	Highlight any international collaborations, standards participation, or global projects.
03:06 – 03:14	Mr. Pullarao Gurram <i>Senior Vice President , Axis Bank</i>	
03:14 – 03:22	Prof. Tummala Rao <i>Emeritus Professor, Georgia Tech, USA</i>	
03:22 – 03:30	Dr. Venkata L Subramanian <i>IBM Quantum, India Lead</i>	Wrap-up & key takeaways

Session -2 Sensing & Communications

 Time: 03:45 PM – 05:15 PM

 Theme: "Quantum Sensing & Communications: From Defence to Diagnostics"

 Moderator: Mr. Sridhar CV, Head, Alliances, Incubation, Research & Innovation TCS

Background: Quantum sensing and communication are among the most commercially ready quantum applications. In defence, it enables highly accurate submarine detection; in medicine, it offers quantum-enhanced imaging. PKD/QKD is already deployed in Indian cybersecurity pilots. This session examines real-world sensing and communication applications and AP's potential in hosting testbeds.

Time	Speaker	Agenda Item
03:45 – 03:55	Mr. Sridhar CV <i>Head Strategic Initiatives TCS Research</i>	Opening remarks
03:55 – 04:05	Dr. S. D Sudarsan <i>Executive Director, Centre for Development of Advanced Computing Bangalore</i>	Briefly introduce your organization's current work in quantum technologies Share your vision and future plans in the quantum domain Highlight any international collaborations, standards participation, or global projects. Suggest how your organization can contribute to the Amaravati Quantum Valley initiative.
04:05 – 04:15	Ms. Kasturi Saha <i>Asst Professor Dept of Electrical Engineering IIT Bombay</i>	
04:15 – 04:25	Mr. Anil Prabhakar <i>Professor IIT Madras</i>	
04:25 – 04:35	Mr. Srinivasa Rao <i>Former Director General Scientist E NSTL DRDO</i>	
04:35 – 04:45	Dr. Vijaya Rao <i>Lead in Quantum Research LTI Mindtree</i>	
04:45 – 04:55	Mr. Sunil Gupta <i>Founder & CEO Qnu Labs</i>	
04:55 – 05:05	Dr Venugopal Achanta, <i>Director, NPL</i>	
05:05 – 05:13	Mr. Sourav Chatterjee <i>Scientist at TCS Research</i>	
05:13 – 05:15	Mr. Sridhar CV <i>Head Strategic Initiatives TCS Research</i>	Wrap-up & key takeaways

Session – 3 Capacity Building & Standardization of Quantum Technologies

 Time: 05:30 PM – 06:30 PM

 Theme: “From Lab to Law: Establishing Standards for Quantum India”


 Moderator: **Prof. Arindam Gosh** *Professor Dept of Physics IISC Bangalore*

Background: As quantum technologies move from lab research to real-world implementation, robust standards are essential to ensure interoperability, certification, benchmarking, and trust. Globally, ISO, IEEE, ETSI, and ITU-T are defining quantum norms – India must participate actively and concurrently develop national standards. This session aims to chart a Quantum Standards Roadmap for India, with Andhra Pradesh envisioned as a proactive host for standards validation zones and testbeds within its Quantum Valley. It will also touch on capacity-building frameworks, curriculum standardization, and regulatory infrastructure.

Time	Speaker	Agenda Item
05:30 – 05:40	Prof. Arindam Gosh <i>Professor Dept of Physics IISC Bangalore</i>	Opening remarks
05:40 – 05:46	Mr. Venkata Rama Raju Chelle <i>Director, Telecommunication Engineering Center, Dept of Telecommunications, Govt of India</i>	<p>Briefly introduce your organization's current work in quantum technologies</p> <p>Share your vision and future plans in the quantum domain</p> <p>Highlight any international collaborations, standards participation, or global projects.</p> <p>Suggest how your organization can contribute to the Amaravati Quantum Valley initiative.</p>
05:46 – 05:52	Mr. Karthik Raman <i>Associate Professor Tata Institute of Fundamental Research</i>	
05:52 – 05:58	Mr. RP Singh <i>Professor National Physics Laboratory</i>	
05:58 – 06:04	Dr. Anjani Priyadarsini <i>Quantum Technologies Lead, AWS India</i>	
06:04 – 06:10	Prof. Satyanarayana <i>IIT Tirupati Director</i>	
06:10 – 06:16	Mr. Indranil Mitra <i>Vice President at LTIMindtree Research</i>	
06:16 – 06:22	Mr. Achyut Chandra <i>Group Manager and Lead, GovTech Strategy and Open Innovation, HCL.</i>	
06:22 – 06:28	Mr. Rajender Bedi <i>Resident Fellow, NITI Aayog and Lead Architect, NITI Frontier Tech Hub</i>	
06:28 – 06:30	Dr. Henry Sukumar <i>Associate Director Scientist F, Centre for Development of Advanced Computing</i>	
05:30 – 05:40	Prof. Arindam Gosh <i>Professor Dept of Physics IISC Bangalore</i>	Wrap-up & key takeaways

Final Session | 6:30 PM – 06:45 PM

 Venue: **Main Plenary Hall**

 Theme: *Amaravati Quantum Valley – Stakeholder Commitment & Road Ahead*

Time	Agenda Item	Description / Participants
6:30 – 06:35	Release of “Quantum Declaration”	Launch of compiled recommendations from roundtables sessions and stakeholder inputs to Amaravati a Global Quantum Hub.
6:35 – 06:45	Valedictory Ceremony	Vote of thanks