

TALK ON

THE RISE OF CYBER-PHYSICAL SYSTEMS

with

Mr. Chandrakant D. Patel

Chief Engineer and Senior Fellow, HP Palo Alto, USA

Session Chair: Mr. Ashok Patel, Past President, FGI

Day & Date: Saturday, 21st January, 2023 | **Time:** 11:00 AM - 1:00 PM (Followed by Lunch)

Venue: FGI Business Centre, Sevasi, Vadodara

WHAT ARE CYBER-PHYSICAL SYSTEMS?

Engineering in the 19th and early 20th century was about the industrialization of physical and electro-mechanical systems like the steam engine and the utility grid. The latter half of the 20th century was about information management, cyber systems and the Internet. The 21st century is about the integration of the two and the proliferation of cyber-physical systems (CPS) that matter to society. The rise of these cyber physical systems stems from social, economic and ecological trends such as resource constraints, needs of the aging demography, human capital constraints, externalities such as pandemics and environmental pollution. The lack (on the supply side) of specialized human capital in domains such as medical and manufacturing, has highlighted the need for cyber-physical (and human) systems such as robotic surgery systems and virtual reality-based training systems.

The talk will focus on:

- Building Cyber Physical Operational Technologies (OT) and Information Technologies (IT) Integrated Systems.
- The Socio-Economic and Ecological Challenges.
- Technologies In Light of The Trends with Various Examples.
- Computing and Manufacturing.
- Cyber Physical Security.

Given Gujarat's industrial prowess and the future of digital manufacturing at the intersection of OT & IT, the talk will be indeed enlightening for everyone to attend.

ABOUT THE GUEST SPEAKER

- **Mr. Chandrakant Patel** is HP's Chief Engineer and Senior Fellow. He has led HP in delivering innovations in chips, systems, data centers, storage, networking, print engines and software platforms.
- Mr. Patel is a pioneer in thermal and energy management in data centers, and in application of the information technology to drive available energy management at city scales.
- His current technical interests are focused on 21st century cyber physical systems such as HP's 3D Additive Printing Systems.
- Mr. Patel is a Fellow of the American Society of Mechanical Engineers (ASME) and a Fellow of Institute of Electrical and Electronics Engineers (IEEE). He holds 157 patents and has published more than 150 technical papers.
- Mr. Patel was inducted into the Silicon Valley Engineering Hall of Fame in 2014 and into the National Academy of Engineering in 2018.



WHO SHOULD ATTEND?

- MDs ● CEOs ● CTOs ● IT Department Heads ● Sr. Executives ● Educational Institutions
- IT Students o Interested Individuals

HOW TO ATTEND?

Participation is FREE but prior registration is mandatory. Please confirm participation by clicking on the below-given confirmation link or scanning the QR Code and submitting the Confirmation form.

For more details, please get in touch with FGI on the below mentioned contact details.

