



Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad - 500 046

## Colloquium

## **Emergence in Hydrogen Based System** G Baskaran

## IIT-M, Chennai and Perimeter Institute, Canada

Hydrogen, the simplest of all atoms, is most abundant in the universe. The simplest hydride namely water molecule and hydrogen bonds help sustain life on earth. Hydrogen and hydrides seem to play surprising roles in other planets and moons. Hydrogen fuel and H-storage offer exciting prospects for our increasing energy demands. Solid hydrides are creating waves in the field of high T<sub>c</sub> superconductivity. Dawn of an era of superconductivity at ambient conditions is visible. I will touch upon my recent work, where spinning electron bound to a dancing proton orchestrate different mechanisms for hot superconductivity, beyond wellknown phonon mechanism.

Monday, Aug 7th 2023 4:00 PM (Tea / Coffee 03.45 PM) Auditorium, TIFR-H