



# Physical Research Laboratory, Ahmedabad

## Special Colloquium

- Speaker:** Dr. Murthy S. Gudipati  
Principal Scientist, NASA Jet Propulsion Laboratory, California  
Institute of Technology, USA
- Title:** “Astrophysics, Astrochemistry, and Astrobiology  
Exploring the Universe in Search of Life Beyond Earth”
- Time:** Tuesday, 14 March 2017, 14.00 hrs.
- Venue:** K. R. Ramanathan Auditorium, PRL

### Abstract

Observation of Planets, Stars, and Galaxies was the beginning of Human Intellect to think beyond Earth. Once our own Solar System was recognized and its place in our galaxy was noted, the quest for Life beyond Earth has also started. Spectroscopy using telescopes became a tool to detect atoms and molecules beyond Earth and the first pieces of the puzzle have been put together. Human and robotic (spacecraft) space explorations started looking for the signs of Life on humanly reachable Solar System objects. Meanwhile, the puzzle of “the Origins of Life on Earth” is still unsolved. Exoplanets have been detected and their atmospheres are being characterized with the hope that at least one of them would be exactly like Earth, giving birth to Life. Humans are yet to find Life beyond Earth! My research path is to determine if, when, and how water and organics in the form of comets could have brought the prebiotic material to Earth and helped trigger the Origin of Life on Earth. I will share my journey with you in this talk.

### The Speaker

Murthy S. Gudipati (aka G. S. Murthy at IISc) is a Principal Scientist at the NASA Jet Propulsion Laboratory, California Institute of Technology. His research focuses on the evolution of organic matter and ice in the Universe, particularly the outer solar system, comets, and the potential origin(s) of life on Earth. Astrophysics, Astrochemistry, Astrobiology, Planetary Sciences, and the Search for Life beyond Earth are his research interests. Murthy is a part of Rosetta Mission and Europa Orbiter Mission. He published over 80 peer-reviewed research articles, edited one book on the “Science of Solar System Ices”, and delivered scientific and popular talks all around the world. He worked at the University of Texas at Austin, at the University of Cologne, Germany, University of Maryland, College Park, and at NASA Ames Research Center before joining JPL/Caltech in 2007. Murthy obtained M.Sc. at the Central University of Hyderabad (1981), Ph.D. from the Department of Chemistry, Indian Institute of Science (1987), and Habilitation (similar to tenure) at the University of Col, Germany (1998). His PhD research was recognized with the “Guha Medal – Best Thesis Award”. Murthy is one of the founding members of the IIScAANA.

**Tea at 15:00 hrs.**

**ALL ARE WELCOME**

