



**New course in January 2025**



**IP 328: Special Topics in Physical Chemistry**

***Astrochemistry – Understanding the Universe from the Laboratory***

**Course Instructors:**

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**Introduction: 2nd January, 8.30 AM,  
IPC Committee Room,  
Chemical Sciences Building.**

### **Important topics**

- Measuring the Universe: Spectroscopy, Doppler shift and line shape, Hubble constant and the age of Universe.
- Big bang to first atom, hydrogen and helium nuclei
- Heavier elements and stars, classes of stars.
- Interstellar chemistry .
- Meteorite and comet chemistry.
- Planetary Chemistry, formation of earth, etc
- Laboratory based astrochemistry :Spectroscopy and kinetics.



**Astrochemistry: Astronomy + Chemistry**

**More details on Astrochemistry lectures:**

**[https://ipc.iisc.ac.in/course\\_syllabi.php#ip328](https://ipc.iisc.ac.in/course_syllabi.php#ip328)**