

# Infrared observations of molecules in disks

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## **Abstract.**

Disks surrounding young stars play a fundamental role in the formation of stars and planets. Accretion through disks is responsible for the build up of stellar masses and the gas and dust in the disk provide the material from which planets may form. Significant progress has been made over the last decade in probing the inner regions of gaseous disks through the use of infrared molecular transitions. I will discuss the observational tools that are currently available to study the gaseous component. These tools can be used to explore the evolution of gas in the inner disk and thereby help us to understand the processes of giant and terrestrial planet formation. These same tools may also be used to place constraints on the physical mechanisms that drive the disk accretion process.

**Keywords.** stars: pre-main-sequence, accretion disks, planetary systems: protoplanetary disks, planetary systems: formation

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