

**Cordially Invites you to the  
INSTITUTE COLLOQUIUM  
(Divn. Of Chemical Sciences)**

by

**Professor G R Desiraju**

**Solid State and Structural Chemistry Unit**

**“Crystal Engineering: From Molecule to Crystal”**

**Date :Friday, 14<sup>th</sup> November 2014**

**Venue :Faculty Hall, Main Building**

**Time : 4-00 p.m.**

**Prof Anurag Kumar, Director  
will preside**

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**Abstract**

How do molecules aggregate in solution, and how do these aggregates consolidate themselves in crystals? What is the relationship between the structure of a molecule and the structure of the crystal it forms? Why do some molecules give more than one crystal structure? Why do some crystal structures contain solvent? How does one design a crystal structure with a specified topology of molecules, or a specified coordination of molecules and/or ions, or even with a specified property? What are the relationships between crystal structures and properties, for molecular crystals? These are some of the questions that are being addressed today by the crystal engineering community, which is drawn from the larger communities of organic, inorganic and physical chemists, and, of crystallographers and solid state scientists. This talk will give a brief historical introduction to crystal engineering itself, and an assessment of the importance and utility of the supramolecular synthon which is one of the most important concepts in the practical use and application of the subject. It is also hoped to provide a look to the future, and indicate some directions in which the subject of crystal engineering might be moving.

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**Tea : 5-00 p.m.**

**ALL ARE WELCOME**