

## TIFR Centre for Interdisciplinary Sciences

21, Brundavan Colony, Narsingi, Hyderabad 500 075

## **Internal Seminar**

## Chemical tools for bioconjugation: Application of the thioacid-azide ligation Jamsad Mannuthodikayil

University of Konstanz, Germany

of thiocarboxylic acids with The reaction (thioacid-azide ligation, TAL) is a chemoselective transformation, leading to the formation of amide bonds. Especially in the case of electron-deficient sulfonyl azides, the reaction occurs in excellent yields, within minutes at room temperature, in a broad range of solvents. In this talk, I will present the application of the TAL for conjugating the peptides at their side chains. The chemoselectivity of this reaction under proteinogenic functional groups will be demonstrated in a variety of peptides. In addition, I will show the potentials of using this chemistry for synthesis of glycopeptides with the natural N-linkage.

Monday, Sep 19th 2016

2:00 PM (Tea/Coffee at 1:45 PM)

Seminar Hall, TCIS