

## **Internal Seminar**

### **Biophysics of Cartilage, Bone and Extra-Cellular Matrix: Focus on Osteoarthritis**

**Rajesh Kumar**

**Norwegian University of Science and  
Technology, Trondheim**

Osteoarthritis (OA) is the most common form of arthritis (a chronic disease) that causes tremendous burden for the individual, society and the health-care sector. The novel techniques and tools which can reduce the direct and indirect cost of the disease are in demand. There are growing evidences which show that bio-photonics techniques are capable in providing structural, morphological and biochemical information of the tissues and cells that can be used in early diagnosis and hence better treatment and management of the disease. Development of photonics-based tools for medical applications in the form of bio-imaging and bio-spectroscopy based devices are in progress. Our ongoing novel and unique approach for basic OA analysis can play a significant role in solving the long-debated hypotheses in the arthritis research.

***Thursday, Aug 16<sup>th</sup> 2018***

***11:30 AM (Tea/Coffee at 11:00 AM)***

***Seminar Hall, TIFR-H***