

## **Title: Polymers in Cancer therapy**

### **Abstract:**

Polymeric materials are emerging as important component in health care and medical diagnostic tools in everyday life. Recent advancement in polymer nano-carriers helped introduce efficient protocols to administer therapeutic drugs and genes. This new technology has tremendous potential in the development of next generation protocols to improve the treatment efficacies in cancer and other diseases. There are several parameters that are directly associated in addressing these challenging tasks and the presentation will provide in-depth analysis in this topic and will shed light on the urgent need for active collaboration for multi-disciplinary research. Some specific examples from the speakers' group will be described with respect to the polymer design principle, drug loading and delving efficiency, and cellular up take mechanism in cancer research.