## Title: Advanced functional polymeric materials for smart microfluidics

**Abstract:** Lab-on-a-chip technologies and microfluidic devices are of strategic importance for a variety ofapplications, ranging from in vitro cell culture, to biosensing and point of care diagnostics. This talk will cover recent advances achieved at the CIMalNa laboratories in functional polymeric and nanocomposite materials design, micro-fabrication and on-chip integration for the development and prototyping of smart microfluidic systems for cell biology applications.