



Physics of Soft Condensed Matter: From Colloids to Cells and Microfluidics

- Speaker** : **Mallinckrodt Prof. David A. Weitz**
Harvard University, USA
Member, US National Academy of Sciences
Member, US National Academy of Engineering
Member, American Academy of Arts and Sciences
- Time** : 19 January 2024 (Friday), 2:00 pm
- Venue** : RRS Creative Media Centre, Room No.: M3017, CityU



Abstract:

This talk will discuss the use of microfluidic devices to precisely control the flow and mixing of fluids to make drops, and will explore a variety of uses of these drops. These drops can be used to create new materials that are difficult to synthesize with any other method. These materials have great potential for use for encapsulation and release. He will also show how the exquisite control afforded by microfluidic devices provides enabling technology to use droplets as microreactors to perform reactions at remarkably high rates using very small quantities of fluids.

Biography:

Professor David Weitz is the Mallinckrodt Professor of Physics and Applied Physics at Harvard University. Weitz received his Ph.D. in physics from Harvard University and then joined Exxon Research and Engineering Company, where he worked for nearly 18 years. He then became a professor of physics at the University of Pennsylvania and moved to Harvard at the end of the last millennium as a professor of physics and applied physics. He leads a group studying soft matter science with a focus on materials science, biophysics, microfluidics, and flow in porous media. Several startup companies have come from his lab to commercialize research concepts. Professor Weitz is a member of the National Academy of Sciences, the National Academy of Engineering, and the American Academy of Arts and Sciences.