TATA INSTITUTE OF FUNDAMENTAL RESEARCH
Homi Bhabha Road, Mumbai-400 005

January 13, 2019

ASET Colloquium

Speaker   :   **Prof. Pratim Sengupta** *(University of Calgary, Canada)*

Title   :   **Knowing and Being with Computational Agents: Views From the Learning Sciences**

Date &Time   :   **Friday 22 February 2019 at 16:00 hrs.**

Venue   :   **Lecture Theater (AG-66)**

<u>**Abstract**</u> :

With its roots in the cognitive revolution in the 1960s, Learning Sciences was formally established as a discipline in the 1990s in order to develop an interdisciplinary understanding of learning, teaching, and design by integrating computational, cognitive, socio-cultural-historical and critical theoretical perspectives on human cognition. In this talk, I will highlight how these different perspectives on human cognition have shaped research on a specific form of technology - agent-based computing - in the contexts of science education and scientific literacy. Drawing upon my personal research trajectory in conversation with the field, I will illustrate the following: a) how different epistemological positions (i.e., theories of knowing and learning) shape technology design, and highlight different grain sizes of human experience; and b) the emergent picture, across these images, is one that urges us to consider the intersubjective dimensions of human experience as central to - and not in opposition with - the more deterministic forms of inquiry.

About the Speaker:

Dr. Pratim Sengupta is the recipient of US National Science Foundation's CAREER Award, and his public computing installations have been featured as at Museum of Modern Art (New York), Telus SPARK Science Center (Calgary), Bell Studio - National Music Center (Calgary), etc. Until 2015, Dr. Sengupta was a professor at Vanderbilt University, USA, where he co-founded and chaired the Learning Sciences PhD program. He is currently the Research Chair of STEM Education and an Associate Professor of Learning Sciences at University of Calgary, Canada. An alumnus of North-western University, USA, IIT Kharagpur and Presidency College, Kolkata, Dr.Sengupta is the author of a forthcoming book "Voicing Code in STEM: A Dialogical Imagination" (MIT Press; Co-authors: Dr. Amanda Dickes, Harvard University and Dr. Amy Farris, Penn State University).

Dr. Satyanarayana Bheesette
(Coordinator, ASET Forum)