

## **Title: Flow through plant cell: Mathematical modeling and Analysis**

### **Biosketch**

*Pranab K. Mondal is presently working as an Associate Professor in the department of Mechanical Engineering at Indian Institute of Technology Guwahati, India. He has developed 'Microfluidics and Microscale Transport processes laboratory' in the year of 2016, wherein facilities for doing state-of-the-art experiments are available. He has taught several courses since his joining in the department, including Fundamental courses, i.e., Thermodynamics, Fluid Mechanics, Engineering Mechanics and applied courses, i.e., Applied Thermodynamics, I C Engines, Fluid Machinery etc.*

*Mondal has received a few academic awards including prestigious JSPS fellowship. His research interests largely focus on Phytofluidics, Microfluidics, Microscale Transport Processes and Biomicrofluidics. Dr. Mondal's current research activities are involved with the design, development and use of microfluidic systems/devices for the smart farming/agricultural practice.*

*Mondal's has published more than 150 papers in different Journals of international repute and has filed a few patents. He has authored two books and a few book chapters. Mondal has guided eight (8) PhD students and more than thirty (30) Masters Students as of now. He is the guest editor of Journal of Microsystem Technology. He has also already completed a few sponsored research projects. His special interest lies in exploiting state-of-the-art technologies to support the challenges of Agricultural fields. He is fond writing proposals on interdisciplinary fields, setting the vision and strategy for the lab, projects and collaborations.*

*When not working, Mondal is found either on the sports field, typically in the indoor PlayStation acing trick-shots at carrom, or trying weak skills on billiard ball game. He loves hanging around with his lab members, and on a quiet day, you will catch him reading story books.*

**Profile: Webpage: <https://sites.google.com/view/microfluidiclabiitg/home>**