Institution of Mechanical Engineers
Central Canada Branch

2011/12 PROGRAMME: TECHNICAL PRESENTATION

SPEAKER: Dr. Jaideep Mathur, Ph.D., Laboratory of Plant Development & Interactions, Department of Molecular & Cellular Biology, University of Guelph.
DATE: Tuesday, February 21, 2012, (Food will be served at 6:30 pm; Lecture starts at 7:30 pm.)
WHERE: Kinectrics Facility, 800 Kipling Avenue, Toronto ON M8Z 6C4
DIRECTIONS: See map overleaf
REGISTRATION: Contact Tony Hamilton at tony.hamilton@kinectrics.com or (647) 938-2431

OUR SPEAKER

Dr. Jaideep Mathur is an Associate Professor at the Department of Molecular & Cellular Biology, University of Guelph. In 1992, after earning a Ph.D. in Botany from India he moved to the Biological Research Center, Hungarian Academy of Sciences, in Szeged, Hungary, to investigate the molecular basis of differentiation in higher plants. Soon after he was recruited into the burgeoning field of Arabidopsis Molecular Genetics and joined the Max-Planck Institute fur Zuchtungsforschung, in Cologne, Germany. In 1997 Dr. Mathur moved to the Institute of Molecular Agrobiology, Singapore to investigate the role of the cytoskeleton in determining plant shape.

In 2000 he joined the Centre for Plant Molecular Biology at the University of Tuebingen, Germany and soon after moved to the University of Cologne, Germany as an Assistant Professor.

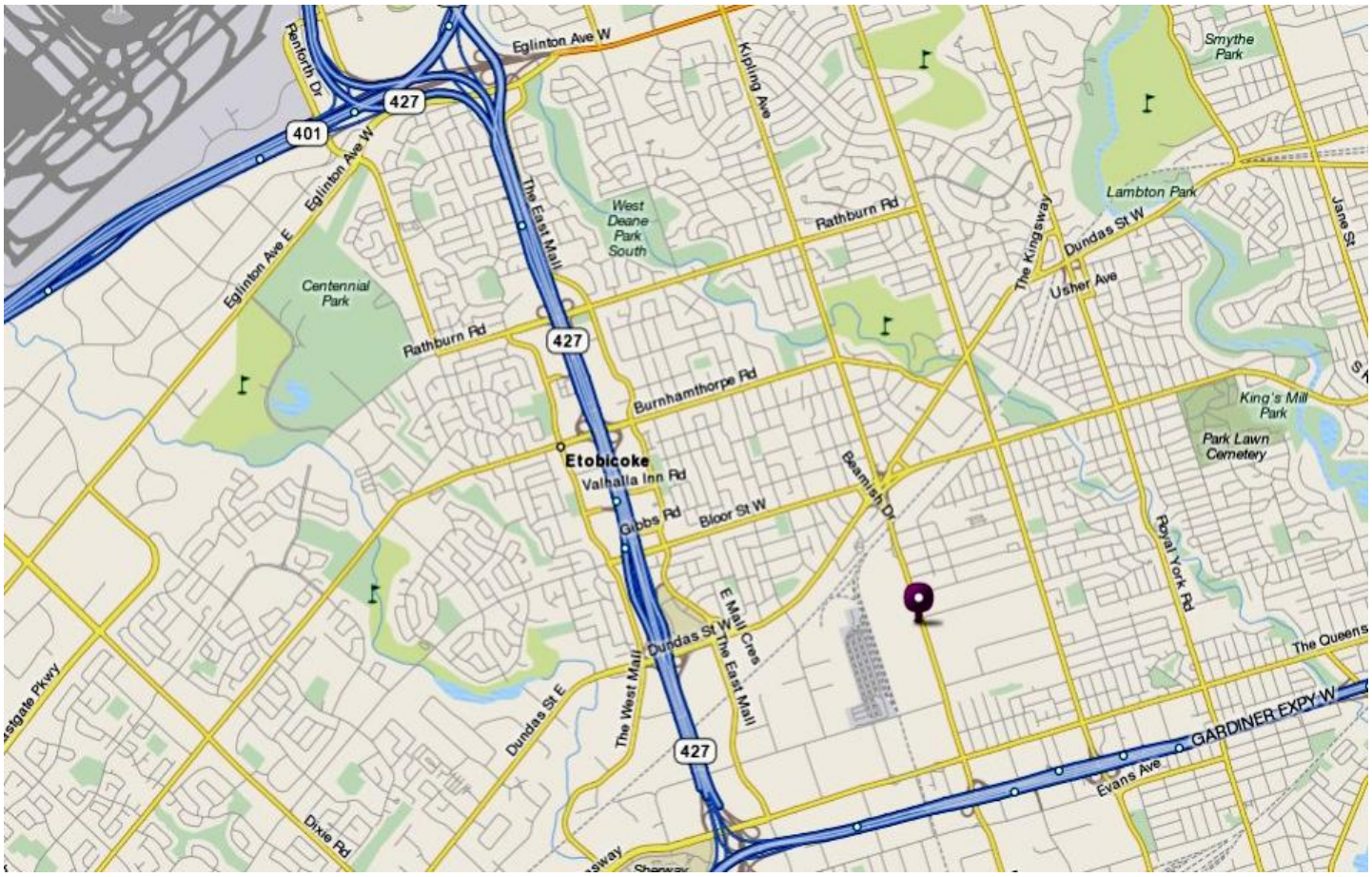
Dr. Mathur joined the University of Guelph in 2004. In addition to his tenure at different institutes Dr. Mathur has also visited and lectured at several premier American, Japanese, Dutch, Chinese and Indian research institutions. He serves on the editorial boards of several scientific journals and is a reviewer on different international grant panels.

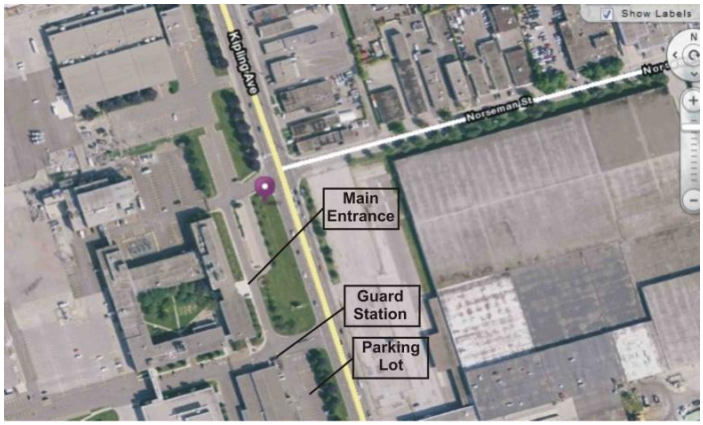
Dr. Mathur's expertise spans three key disciplines of modern biology; Cell biology, Genetics and Molecular biology. He has published nearly seventy papers on various aspects of Plant Growth & Development. His research group is considered as a pioneer-lab for live imaging of plants using transgenic fluorescent proteins and works on questions related to Rapid Intracellular responses of plants.

LEARNING TO ADAPT: THE ILLUMINATED PLANT CELL

The earth is home to animals and plants. Everyday both kinds of organisms are subjected to the same environmental stresses. Whereas animals are able to move away to less stressful locations plants are 'rooted' and have to deal with the stress as and when it occurs. Nonetheless, it is clear that despite their inability to move, plants leave the animals far behind when it comes to survival. Recent advances in Molecular-Cell Biology and the imaging of living cells through the use of diverse, colourful, fluorescent protein tags have started providing fresh insights into the internal workings of plant cells. The lecture will present succinct examples of how fluorescent proteins obtained from diverse marine organisms have been used to increase our understanding of plants specifically and of living organisms in general.

DIRECTIONS:





The entrance to the Kinectrics facility is on the west side of Kipling Avenue and is not too far south from the Kipling subway station (about 10 min walk). There is free parking directly in front of the main entrance but it is limited to about 12 spaces. There is plenty of additional parking directly east and south of the guard station, located south of the main building entrance.