Institution of Mechanical Engineers
Central Canada Branch

2013/14 PROGRAMME: Christmas Dinner and Lecture

SPEAKER: **Dr. Harry Ruda, University of Toronto**

DATE: Friday November 29, 2013

TIMING: Bar opens at 6:00 pm; Dinner will be served at 6:30 pm; Lecture starts at 8:00 pm.

WHERE: Novotel Hotel, 3 Park Home Avenue, North York, Ontario, M2N 6L3.
COST: $25 for members/guests. Cash or cheque only.
DIRECTIONS: See map below. Parking vouchers will be given at the event.
REGISTRATION: Contact Andrew Smith at hon-treasurer@imeche-ccb.org or (905) 392-8879 before Nov. 9, 2013.

OUR SPEAKER:

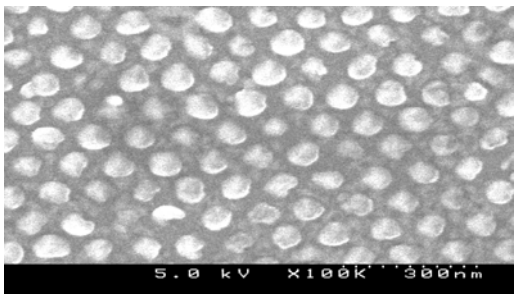
Harry Ruda is Director of the Centre for Advanced Nanotechnology, the Stanley Meek Chair in Nanotechnology, and Professor of Applied Science and Engineering at the University of Toronto. The Centre is Canada's first nanotechnology centre. From 1984 to 1989 he was a senior scientist at 3M Corporation. From 1982 to 1984 he developed one of the first theories for electron transport in selectively doped two dimensional electron gas heterostructures while working as an IBM postdoctoral fellow.

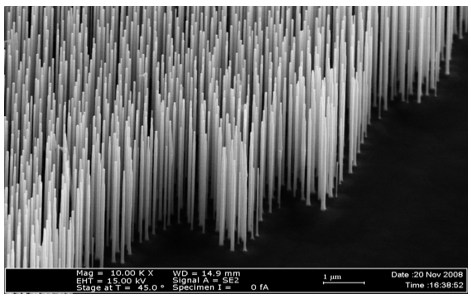
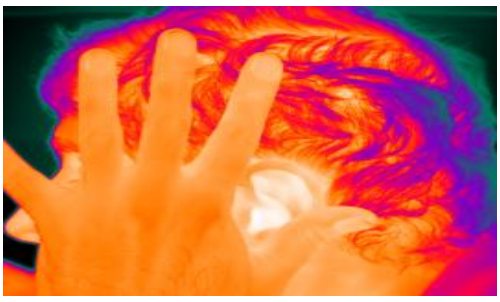
From 1979 to 1982 he worked on optical and transport properties of II-VI based infrared detector materials and obtained his PhD from MIT in 1982. Professor Ruda has published over 220 publications, has co-authored 4 books and has 14 patents. Professor Ruda's research interests focus on the fabrication and modeling of quantum functional nanostructures with applications in the fields of nanoelectronics and nanophotonics.

Harry Ruda is one of the founders of a Canadian National Centre of Excellence in Photonics. He serves on the National Science and Engineering Council of Canada. He also serves on the editorial boards of several journals. He is also a Fellow of the Royal Society of Canada.

Nanotechnology: The next big thing is really small

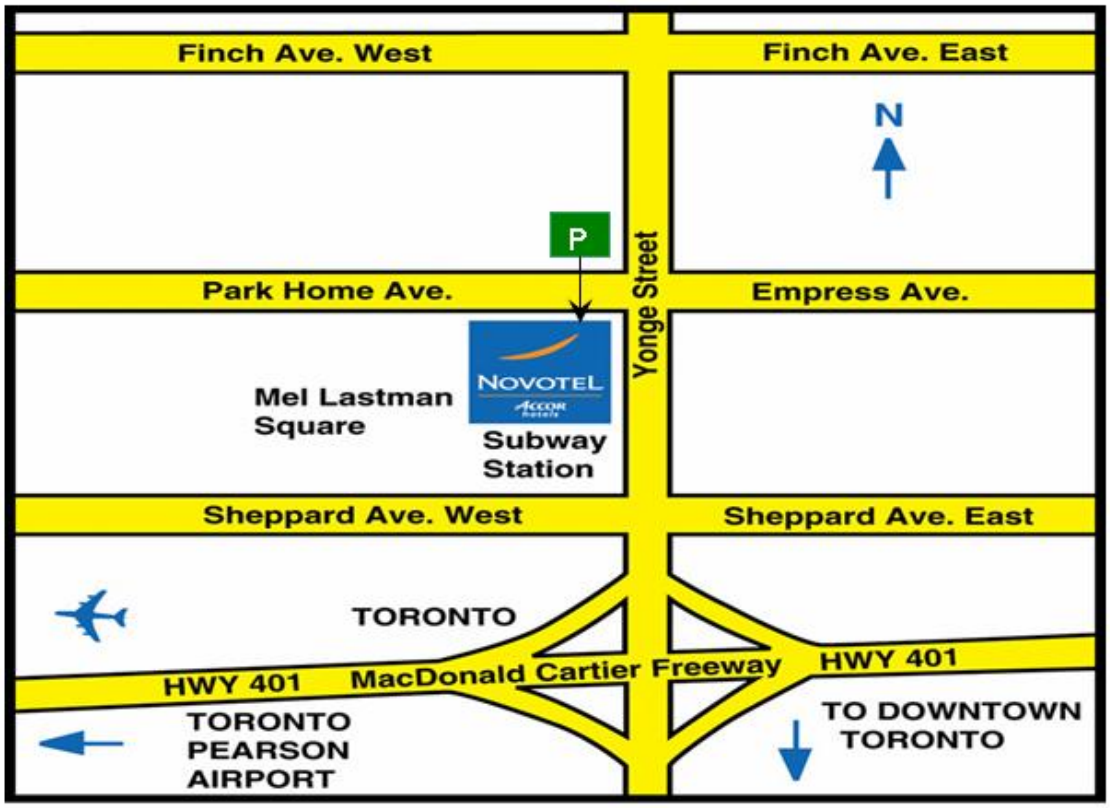
A selected view of nanotechnology is offered, looking at what it is, and what we might expect from it ahead.



Nanoscale objects that enable new applications: (a) quantum dot arrays, (b) nanowire arrays and (c) an infrared sensor made from a quantum dot array

Directions to the Novotel Toronto North York Hotel



From Pearson International Airport/Detroit/Windsor US Boarder:

Follow Hwy 401 (Toronto) East, exit Yonge Street North, and follow Yonge St. to Park Home Avenue, (6 traffic lights north of Hwy 401) turn left on Park Home Ave., Hotel entrance located on left.

From Eastern Ontario/Ottawa/Kingston & Quebec:

Follow Hwy 401 (Toronto) West exit Yonge St. North, follow Yonge St. to Park Home Ave., (6 traffic lights north of the Hwy 401) turn left on Park Home Ave., Hotel entrance located on left.

From Niagara Falls/ Buffalo/Rochester US Border:

Follow QEW (Toronto East (Queen Elizabeth Way) to Hwy 427 North exit Hwy 401 East,, follow Hwy 401 East exit Yonge St. North, follow Yonge St. to Park Home Ave, (6 traffic lights north of Hwy 401) turn left on Pak Home Ave., Hotel entrance located on left.

From Downtown Toronto via Highway:

Follow any street southbound to Lakeshore Blvd. East, enter Gardener Expressway East to Don Valley Parkway North (also called Hwy 404 North), exit Hwy 401 West Collectors to Yonge St. North, follow Yonge St. to Park Home Ave.(6 traffic lights north of the Hwy 401), turn left on Park Home Ave., Hotel entrance located on left.

From Downtown via City Streets, Most Direct Route:

Follow Yonge St. North to Park Home Ave. (3 lights north of Sheppard Ave.) turn left on Park Home Ave., Hotel entrance located on left.

From Barrie/North Ontario:

Follow Hwy 400 South to Hwy 401 East, exit Yonge St. North, and follow Yonge St. to Park Home Ave., (6 traffic lights north of Hwy 401) turn left on Park Home Ave., Hotel entrance located on left.

3 Park Home Avenue, North York, Ontario M2N 6L3 Tel#: (416) 733-229 Fax#: (416) 733-3403

Note: Novotel is accessible by TTC subway. The subway station is NORTH YORK on Yonge Line.