

## 2015/16 PROGRAMME: Lecture "Remedy for Radiation Fear"

**SPEAKER:** Dr. Jerry M. Cuttler, PEng, President, Cuttler & Associates, Mississauga

**DATE:** Friday Oct 30, 2015

**TIMING:** Reception from 6:30 pm, Lecture starts at 7:00 pm.

**COST:** Free to members / guests.

**WHERE:** Novotel Hotel, 3 Park Home Avenue, North York, Ontario, M2N 6L3

**DIRECTIONS:** See map overleaf. Parking vouchers will be given out at the event

**REGISTRATION:** Please contact Peter Dennis at [hon-treasurer@imeche-ccb.org](mailto:hon-treasurer@imeche-ccb.org) or at (647) 821-1474

**OUR SPEAKER** Dr. Cuttler graduated from the University of Toronto (Engineering Physics, Nuclear) in 1964. He received his M.Sc. and D.Sc. degrees from the Israel Institute of Technology in 1967 and 1971 while employed by IAEC as a research engineer and by the IIT as a laboratory manager. He was the Technical Manager of Seforad Applied Radiation from 1971 to 74, and then began a 26-year career at Atomic Energy of Canada Limited. He led the team that designed and procured the nuclear instrumentation for three CANDU 6 reactors and for Pickering B and Bruce B stations. Jerry was later AECL's engineering manager for Bruce B, resident engineering manager in Romania, engineering manager of the SLOWPOKE district heating reactor, manager of AECL services at Pickering, CANDU 9 engineering integration manager, and a technical services manager. After retiring from AECL in 2000, Cuttler & Associates has been very busy serving Ontario Power Generation, AECL and Bruce Power for Pickering-4 return to service, the MAPLE medical isotope reactors, and the Bruce 1&2 Restart. He continues to provide services to Bruce Power and to OPG for nuclear plant life extension. Dr. Cuttler served on the council of the Canadian Nuclear Society for about 15 years and was president in 1995-96. He was appointed Fellow of the CNS in June 2000.



***"The remedy for radiation fear is to expose and discard the politicized science"***

Dr Cuttler was the guest speaker at our Annual Meeting Dinner in April 2013 when he spoke about events following the accident at the Fukushima Daiichi Nuclear Power Plant, In this talk, Dr. Cuttler will discuss several developments over the past two years and the ongoing crisis of radiation fear and examine the political motivation for creating this fear. Dr. Cuttler's work uncovered evidence of lower leukemia incidence of the Hiroshima atomic bomb survivors who were in the low radiation zone. The leukemia data fit a hormetic J-curve with a threshold of 50 rem. Dose-response on lifespan reduction also show a radiation threshold. This contradicts the basis for radiation protection and risk assessment that was established in 1956-1958. Beneficial effects, thresholds and the biological mechanism will also be explained. The rate of spontaneous DNA damage far exceeds the rate caused by background radiation. The effect of radiation on the very powerful adaptive protection systems is what determines the dose-response characteristic. Low radiation up-regulates the adaptive protection systems, while high radiation impairs these systems. The remedy for radiation fear is to expose and discard the politicized science.

## **Novotel North York**

**3 Park Home Avenue  
NORTH YORK  
M2N 6L3 TORONTO  
CANADA**

Tel (416) 733-2929

Fax (416) 733-3403

E-mail [novotel.northyork@accor.com](mailto:novotel.northyork@accor.com)

### **Location & access**

GPS. N 43° 46' 9.07" W 79° 24' 47.03"

### **Directions**

From Pearson Airport, follow Hwy 401 E., exit for Yonge Street N., follow 6 traffic lights then turn left onto Park Home Ave. The hotel and parking garage are on the left. From E. Ontario, Ottawa or Quebec, follow Hwy 401 to Toronto W., exit for Yonge Street N to Park Home Ave. From Niagara Falls, Buffalo, Rochester and the US, follow the QEW to Hwy 427 and head N. to Hwy 401 east, follow the same directions as from the airport.



- **Parking :** Public outdoor parking - Public indoor parking (paying) - Private indoor parking (paying)
- **Airport :** PEARSON INTL AIRPORT
- **Railway Station :** VIA/UNION STATION
- **Underground station :**

Line	Station
YONGE	NORTH YORK CENTR

- **Bus :**

Line	Station
YONGE	NORTH YORK CENTR