SEMINAR NOTICE

Department of Physics and Engineering Physics
University of Saskatchewan

SPEAKER: Dr. Chary Rangacharyulu
Department of Physics & Engineering Physics

TOPIC: *Photons and Neutrons: For Food and Medicine*

DATE: November 22\textsuperscript{nd}, 2016

TIME: 3:30-4:30 p.m.

PLACE: Physics 103

ABSTRACT:

Currently, nearly 700 million people are undernourished in the world. The situation is expected to get worse with projected growth in the population. While there is a lot of focus to increase the amount and varieties of food production, not much attention is paid to enhance the food quality and make it safer by food irradiation. Irradiation technologies optimized for photon beam energies can enhance the food quality and its shelf life, which will contribute to better food security at the current production levels.

Nuclear imaging has been increasingly used for medical diagnostics. Positron emitters and gamma emitter isotopes are in demand for this purpose. Neutron and photon beams can be employed to produce multiple isotopes with unenriched fissionable elements.

My talk will address these two topics with suggestions for R&D in this regard.

*Coffee and Cookies will be served in Physics 103 at 3:00 p.m. for those attending the seminar.*