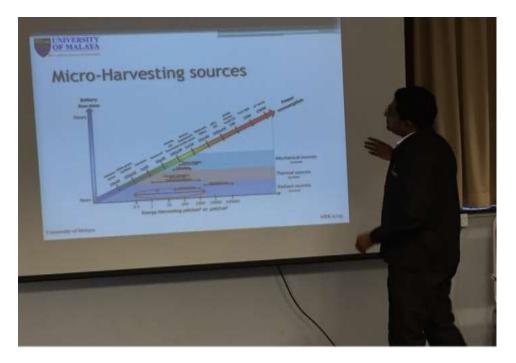


## **Efficient On-chip Power Module via RF Energy Harvesting** By Ir. Assoc. Prof. Dr Mandeep Singh

Ir. Assoc. Prof. Dr Mandeep Singh is currently the Chairman in IEM Engineering Education Technical Division (E2TD).

Ir. Dr. Harikrishnan Ramiah, senior lecturer at the Department of Electrical Engineering, University of Malaya presented a talk entitled Energy Sustainability Through Efficient On-chip Power Module via RF Energy Harvesting in February, 2015.

Much has been written about the benefits of wireless sensors and the potential of energy harvesting to provide power for the life of these devices. Disposable, long-life batteries will continue to be used in wireless sensor applications but, as the technologies mature, energy harvesting will create some shift in battery usage from primary to rechargeable batteries for applications that need higher power over the life of the device.



The greatest potential, however, lies in a new class of devices that will be battery-free and thus enable applications that would have been prohibitively expensive due to the maintenance cost of eventual and repeated battery replacement.

In line to the continuous technological breakthrough in RF Energy Harvesting, efficient power management module sets a fine line of consumer demand. Effective in performance and form factor, the integration of the power management module is well defined within the specification of the power conversion efficiency through the harvested energy.

