

Electromagnetic compatibility rules at UTHM

Electromagnetic Compatibility is to ensure electrical and electronic products do not emit excessive electromagnetic fields and still functional in external electromagnetic interference.

Local manufacturers often face extra challenges when it comes to the enforcement of Electromagnetic Compatibility (EMC) regulations on electrical and electronic products marketed in the US, EC, Japan and other major countries.

To avoid non-compliance of finished products, EMC requirements should be considered at all developmental stages.

The EMC centre at UTHM has been set up to provide compliance and pre-compliance EMC testing facilities for manufacturers to test their products throughout the design and production phases.

This will not only reduce the cost of testing failed products but also enhance the developments and production capabilities of a company. The center also offers consultancy and troubleshooting for failed products.

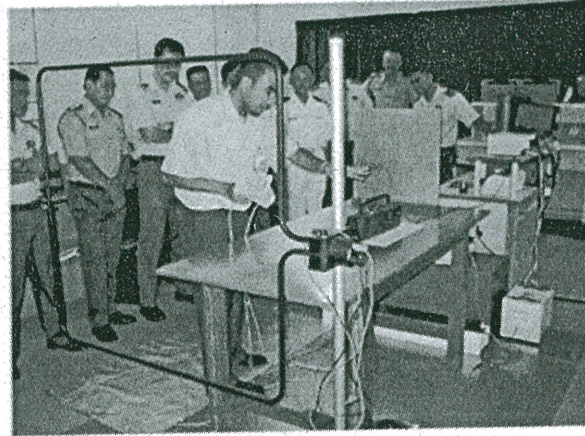
Sound theoretical and practical exposures in EMC and related areas are crucial for local engineers to develop electrical and electronic products, which comply with EMC requirements.

The center organizes courses, workshops and seminars to enhance the level of understanding and competence in EMC testing and design among participants.

It is well-equipped for post-graduate research programmes. It provides information to organizations that develop EMC guidelines and host annual forums to discuss EMC issues and research.

The centre can perform emission and immunity measurements using the testing facilities like the reverberation chamber, GTEM Cell and 3m Semi Anechoic Chambers which is under construction.

Among the equipment used are EMC Analyser, Digital Oscilloscope, LCR Meter, Line Impedance Stabilisation Network, Transient Limiter, Antennas and cables, Electric and Magnetic Field Probe and Vector Network Analyser.



Research areas include emission and immunity measurements, enclosure design and modelling, EMI reduction techniques, effects of Electromagnetic Emission on medical equipment, printed Circuit Board Design and modelling, grounding, filtering and shielding, Mode-Stirred Chamber and Numerical Modelling of EMC Problems.

The centre is headed by Prof. Dr. Mohd Zarar Mohd Jenu and supported by engineer, technician and research students. The website of the centre is www.uthm.edu.my/pc/emc

