

**Speaker: Assoc. Professor Dr Ehsan Ahmed**

**Title: Profiled Steel Sheet Dry Board Composite Floor Panel: Development, Structural Performance and Application**

The Profiled Steel Sheet Dry Board (PSSDB) sandwich panel is a structural system consisting of profiled steel sheet, connected to dry board by simple mechanical connectors. This results in a strong and efficient composite structural system, which can be exploited for a variety of structural purposes such as in its use as load bearing walls, floors and folded plate structures. This paper briefly describes the component materials research and the development in evaluating the structural performances of such composite floor panel system. The role of profiled steel sheet, dry board, connector and its spacing on the structural performances of such panel is identified. It will also highlight the application of such panel in some real structures within Malaysia.

The present research at UNIMAS is mainly focusing on the vibration performances of such flooring system. It is realized that, human induced vibrations are becoming increasingly vital serviceability and safety issues for this flooring system. The up to-date research will be discussed in the seminar with the aim to get research feedback/collaboration from other interested faculties.

Keywords: Profiled steel sheet, Dry board, Light weight Floor panel, Deflection and Vibration.