



Centre for Innovation in Construction and Infrastructure Development

SEMINAR

Jointly organised by **Department of Civil Engineering** and **CICID**, HKU

Modular and Offsite Construction Practice the Move to Fabrication or Manufacturing

Professor Mohamed Al-Hussein
Professor in Department of Civil & Environmental Engineering,
Hole School of Construction Engineering,
The University of Alberta, Canada

Date: June 5, 2019 (Wednesday) Time: 11:30 a.m. - 12:30 p.m.

Venue: Room 6-12B, Haking Wong Building, The University of Hong Kong

ABSTRACT

From the early dawn of the industrial revolution, efficiency has always been an important motivational element which allowed engineers to invent new processes or improve existing ones by means of new managerial approaches. In this respect, the quest for efficiency in the field of building construction has led to the emergence of modularization which in turn catalyzed the expansion of off-site construction. The latter improved quality, scheduling and enabled better safety standards to be implemented since work is performed within a controlled environment. The above enumerated benefits have created different challenges the most important of which is probably the necessity to rely on better design and drafting for manufacturing (k.a. BIM) and automation or semi-automation. In North America, the culture among construction professionals insofar as: a) BIM is concerned revolves around primitive CAD tools; and b) as automation is concerned is conventional construction under a roof. This presentation aims at examining the North American practice or "culture" considering: 1) Offsite prefabrication and industrialization of construction practice in North America; 2) Technological Innovations in prefabrication of construction: the move from conventional construction under a roof to a true manufacturing; and 3) Prefabricated systems and manufacturing technologies: products and components.

ABOUT THE SPEAKER

Dr. Mohamed Al-Hussein is a professor in Department of Civil & Environmental Engineering Hole School of Construction Engineering at the University of Alberta. He is also NSERC Industrial Research Chair in the Industrialization of Building Construction and a Director, Nasseri School of Building Science and Engineering; he is a highly sought researcher and consultant in the areas of modular and offsite construction, lean Manufacturing, construction process optimization, and Building Information Modeling (BIM). Dr. Al-Hussein's research has been published in over 200 scientific journal articles and conference proceedings.

- ALL ARE WELCOME -

Free parking is available at HKU. To be eligible for free Parking, please bring along your parking ticket to the Seminar Venue for validation.