



Teaching Creative Structural Design - Seminar

Martin Gillie

School of Mechanical, Aerospace and Civil Engineering University of Manchester, UK

Andrew Phillips

Department of Civil and Environmental Engineering, Imperial College London, UK

Contact: martin.gillie@manchester.ac.uk

Abstract

This seminar will examine how teaching structural design to encourage creativity is best approached. It will consist of four short presentations from different perspectives, followed by a facilitated discussion aimed at provoking debate.

Keywords: Structural design; creativity; teaching; conceptual design; higher education

1 Introduction

This seminar will examine how teaching structural design to encourage creativity is best approached. It will be chaired and facilitated by Dr Martin Gillie of the University of Manchester and Dr Andrew Phillips of Imperial College London, both of whom are academics actively involved in delivering and developing design teaching [1,2].

Structural design is changing rapidly as a result of new materials, analysis possibilities and construction methods. Currently, however, it is unclear how these changes are best reflected in higher education despite many new ideas and approaches being attempted, often imaginatively and successfully. This seminar will offer an opportunity for those interested in teaching structural design to exchange ideas, examples of good practice, discuss what has worked, and what hasn't and to identify the effects of emerging trends in practice. It will attempt to link those from higher education and industry, and also those coming at structural design from different perspectives, such as architects and engineers, to

encourage the free flow of ideas. It is anticipated that the session will be interactive and two-way, rather than dominated by formal presentation.

2 Presenters

The session will start with four short presentations from different perspectives. The speakers will be asked to challenge conventional thinking about teaching structural design to provoke discussion. They and their titles are

Roger Ridsdill-Smith, Senior Partner, Structural Design Lead at Foster + Partners. The Roles of Architects and Engineers in Structural Design.

Mark Evernden, Senior Lecturer, University of Bath. Educating Structural Engineers and Architects

Richard Harpin, University Teacher in Structural Design, University of Sheffield. Structural Design Teaching at University.

Paul Jeffries, Computational Design Lead at Ramboll. What everybody should know about computational design.