CSI SEMINAR

Thursday 10 July 2014
12.30-1.30pm
ATC 205, 2nd floor, Advanced Technologies Centre
Swinburne University of Technology, Hawthorn campus
Cnr Burwood Rd and John St, Hawthorn

Seminar

12.30-12.40pm  Light lunch and drinks
12.40-12.45pm  Welcome and Introduction
12.45 – 1pm

▶ Application of artificial intelligence techniques in civil engineering problems: performance and accuracy criteria

Ali Nazari (Research Fellow, CSI)

Artificial intelligence (AI)-based modelling as well as metaheuristic algorithms are widely used in civil engineering problems in both materials and structure concepts. However, their way of application depends on the defined problem and has to be checked carefully to deliver a high performance model. Attempts are made to present some useful hints for accurate formulation of these types of approaches in civil engineering.

1 – 1.15pm

▶ Stabilising of Subgrade soils using a non-traditional Additive

Romel Georgees (Full-time PhD Candidate – commenced July 2013)

Polyacrylamide (PAM) has been used successfully in the past ten years to stabilize road pavements in Australia. However, little quantifiable information has been published on the improved geotechnical characteristics from using these additives. This research aims at characterizing road materials suitable for stabilizing using PAM additive and assessing the levels of improvement in their engineering properties.

1.15 – 1.30pm

▶ Modelling Post-Construction Site Characterization for Low Rise Buildings

Dominic Lopes (Part-time PhD Candidate – commenced March 2007)

From 1997-2009 Melbourne has experienced the most severe drought conditions on record followed by the second wettest 2 year period on record. These conditions have caused slab movements that have exceeded the performance expectations outlined in AS2870 and have led to numerous complaints and legal cases. The research is designed to model more realistic post-construction conditions and allow for a variation in owners’ expectations.

▶ Further information: Miranda Beale csi@swin.edu.au or Telephone: 9214 8455