

The Lightweight Structures Association of Australasia in conjunction with Engineers Australia

Invite you to attend a Pre-conference Technical Seminar



Design of Tension Shadecloth Shade Structures

Wednesday October 12 2011 from 10.00am – 5.00pm

Venue - Novotel Hotel
Sydney Olympic Park

Phone: (02) 8762 1111 Web: www.novotelsydneyolympicpark.com.au

Cost: \$250 pp (\$225 for extra persons from the same company)

Tensioned membrane structures have become an important structural form for both large span roof structures as well as for smaller covered areas which also serve as an architectural statement. This seminar is an opportunity to learn about the basic structural design parameters, material selection, fabrication and erection techniques.

A particular focus of the seminar will be design factors, fabrication details, shade prediction and maintenance of smaller shade structures made from knitted porous shade-cloth with applications to providing shade to schools, playgrounds, car parking and storage, nurseries and domestic environments.

Topics which will be presented

- Brief history of tension membrane and shade cloth structures and modern architectural fabric materials
- Understanding the engineering design process and the nature of structural supports, edge and attachment details
- Fabrication, construction, installation and maintenance processes
- Particular issues (fire, shade prediction, legal, costing, vandalism, access etc) pertaining to shade cloth structures.

Speakers: A number of speakers drawn from LSAA and industry leaders with extensive experience in shade structures.

Dr Peter Kneen LSAA
Dr Kourosh Kayvani – Innovation Leader, Aurecon
Joseph Dean – Managing Director Wade Design Engineers
Bob Cahill – Managing Director, Hiroaka
John Greenwood – JGA Architects
Alan Stewart – Structureflex
Trevor Scott – Light Weight Structures Advisory Service

Sponsors and Supporters

The Seminar is supported by Engineers Australia and attendance counts towards CPD requirements. A Certificate of Attendance and Seminar Proceedings will be available for attendees following the Workshop.



 <p>Nolan.UDA <i>The Best of Both Worlds</i></p>	 <p>SOFiSTiK</p>  <p>ABES^{oz} Advanced Bridge Engineering Systems</p>
 <p>Ricky Richards</p>	 <p>Light Weight Structures Advisory Service</p>

Preliminary Program

9.30	Registration, Coffee and Networking with Exhibitors & Sponsors	
10.00	Welcome and Introduction	Dr Kouros Kayvani
10.10	Brief History of Tension Fabric and Shade Structures in Australia	Peter Kneen
10.30	Solid Fabric, Shade Cloth Materials, Threads - Engineering and other properties	Bob Cahill
11.00	Where's the Shade? Site and Orientation issues	John Greenwood
11.30	The Good, The Bad, and The Ugly - Examples of structural issues to be encouraged or avoided	Joseph Dean
12.15	Lunch	
13.00	Engineering Design Factors - Support structures, panel edge and corner attachment details	Joseph Dean
13.50	Software for shade structure design. Brief overview of two systems	Alan Stewart and Trevor Scott
14.40	Fabrication, Installation and Maintenance	Alan Stewart
15.15	Afternoon Tea	
15.45	Overview and example application of Draft LSAA Design Guidelines to the design of a shade structure. Q and A Session	Peter Kneen plus for Q&A Session
16.45	Summary and Closure	Dr Kouros Kayvani

Please use the separate Registration form to register for the Workshop.