

### In This Issue

From the President  
CIA NSW and the Universities  
Seminar Review - The Direction of  
Post-Tensioned Building Construction  
in 2013  
Seminar Preview - Concrete:  
Challenges and Solutions  
Did You Know?...Cement Australia -  
Joint Venture  
Featured Sponsors

### UPCOMING EVENTS

**15 MAY**

Concrete: Challenges and  
Solutions

**12 JUNE**

Bridges & AS5100  
(National Seminar)

**19 JUNE**

Water Retaining Concrete  
Structures

**17 JULY**

Piling & Foundations

**6 SEPTEMBER**

"Movers" & "Makers" 2013  
Awards for Excellence

**16-18 OCTOBER**

Concrete 2013

### From the President

Dear Member,

Civil engineers are the backbone of the concrete industry in Australia. Without them concrete cannot be designed, specified, made or placed.



Civil engineers are also innovators. The thirst for making something bigger, smaller, thinner, wider, smarter, cheaper, and ultimately better, drives research and development. The CIA NSW Branch is very conscious of this and the need for students, at the six universities in our state who offer civil engineering, to see what can be done and what's available to them in the concrete industry in Australia.

In this issue we introduce you to one of the innovations we have to help start civil engineering students start their career down a "concrete" path!

**David Millar**  
**NSW Branch President**

## 2013 NSW Branch Sponsors



SUBSIDIARY OF AUSTRALIAN OXIDES PTY. LTD.  
FINE COLOUR AND PRODUCTS FOR CONSTRUCTION



**Ash Development  
Association of  
Australia**



## CIA NSW and the Universities

Universities are unique environments. They are the place where most engineers first learn



about the complex and challenging characteristics of concrete as well as the place where academics undertake fundamental and applied research which pushes the boundaries of knowledge about the material and its behaviour leading to improved performance and exciting new applications.

For the students, there is limited time to come to understand the complexity of concrete before they enter industry and uncertainty about the resources available to them when they graduate. This is where the early introduction to the CIA provides an opportunity for not only an improved understanding of the material but also awareness of the support available to them in their ongoing careers.

For researchers, there are limited opportunities to present their work to industry outside of the formal publication and conference environment. By providing an opportunity for industry to come into the university environment there is increased potential for recognition of areas of mutual interest and development of ongoing contacts.

The CIA NSW Branch is proposing to address this in a number of ways. These include the development of programs for student information lectures, technical industry evenings and the provision of scholarship support and prizes.

The student information lectures will be facilitated through development of information packages which can be delivered by CIA representatives at an appropriate time during their lecture program. Where possible this could be coordinated with a student event to give students and sponsors an opportunity to get together.

**ITW** Construction Systems



[\*\*CLICK HERE\*\*](#)

The technical industry evenings are built around a blend of speakers with a particular focus on the specific research taking place within the university. This year, evenings are proposed for August at each of the Sydney campuses (USyd, UNSW, UTS and UWS) as well as in Wollongong (UoW) and in Newcastle (UoN). Development of a template around which these evenings can be facilitated is being undertaken to assist in their delivery and improve their effectiveness.

Provision of scholarship support and/or prizes to increase awareness and foster interest in student activities provide further opportunity to get in front of the students and raise awareness and interest in concrete technology. CIA NSW is looking at how this program can be expanded to increase its effectiveness.

**Malcolm Boyd**  
NSW Branch - University Portfolio Chair

## Seminar Review - The Direction of Post-Tensioned Building Construction in 2013

20th February 2013  
Harbourview Hotel, Nth Sydney



The content of this seminar was delivered by **PTIA**, and was themed to provide delegates with information about how post-tensioned construction is continually progressing to meet today's and future requirements for efficiency, effectiveness and sustainability rating schemes.

There were four presentations by **Matthew Obst**, Practice Manager Brisbane with ADG Consulting Engineers, **David Hocking**, Technical Manager Boral Construction Materials, **Daksh Baweja**, Director Engineered Material Solutions, and **Sam Fassaie**, Senior Design Engineer with



SUBSIDIARY OF AUSTRALIAN OXIDES PTY. LTD.  
FINE COLOUR AND PRODUCTS FOR CONSTRUCTION



**Ash Development  
Association of  
Australia**



## Structural Systems.

Delegates were presented with information, some of it complex, about relationships in design & construct projects, innovative design in complex structures with a range of demanding challenges, new methods for assessing and predicting in-situ concrete strengths, and directions to develop methodologies to recognise the significant reduction in embodied energy through post-tensioned construction in rating schemes such as GreenStar.

CIA and PTIA express their appreciation to the presenters for their valuable contributions, and for the time and effort they devoted to this event.

The seminar was well attended by some 60 delegates, and was followed by some lively discussion afterwards and over refreshments.

**Kevin Abrams**  
**PTIA Seminar Convenor**

## Seminar Preview - Concrete: Challenges and Solutions

**15th May 2013**  
**Harbourview Hotel, Nth Sydney**

The successful design and construction of major infrastructure presents major challenges to the engineering mind.



Our next seminar looks at four different major infrastructure challenges and how they were approached and successfully solved.

Two significant international projects are reviewed: The **Burj Khalifa** and the **Doha Port** Projects on the Arabian Peninsula and how the unique and challenging issues



were approached and resolved.

In addition, two challenging material issues: **Thermal modelling of mass concrete** and **Cathodic Protection**, are separately reviewed in relation to specific projects in Australia.

[Click here](#) for more information and to register.

**John Nichols**  
**Seminar Convenor**

## Did You Know? Cement Australia - Joint Venture

**Holcim** and **Heidelberg Cement** intend to balance their respective interests in **Cement Australia** and to operate the company as a joint venture.



Holcim plans to sell 25 percent of the share capital of Cement Australia to Heidelberg Cement. After signing the contract, the two construction materials Group will each hold a 50 percent interest in this joint venture. The transaction is already approved by the Australian authorities. The parties have agreed not to disclose the cash purchase price. In future, Holcim and Heidelberg Cement should be equally represented on the Board of Directors and the Chairmanship should rotate. This transaction is part of the Holcim Leadership Journey and the new joint venture will be proportionately consolidated by Holcim upon conclusion of the contract.

[Source](#)

### Quick Links...

- [CIA Website](#)
- [Events & Seminars](#)
- [Knowledge Centre](#)

## Featured Annual Sponsors

## UPCOMING EVENTS

Join Our Mailing List!

### **Australasian (iron & steel) Slag Association (ASA)**

The Australasian (iron & steel) Slag Association Incorporated (ASA) was



formed in 1990 by a group of leading steel, cement, quarrying and slag processing companies. Our members have the common interest of increasing community, business and government awareness of the superior construction properties, environmental and value added benefits derived from the various iron and steel furnace slags. Today, some 2.7 million tonnes of iron and steel furnace slags are recovered hence the current activities of the ASA are primarily focused on increasing users', stakeholders', and regulators' awareness of the uses and benefits arising through the effective utilisation of slag, which is a valuable renewable resource.

How do I found out more?

Visit the [ASA website](#) or contact our office on 02 4225 8466.

We have also recently published our first bi-annual newsletter for the year called Connections. [Click here](#) to download or subscribe.

---

### **Connolly - Concrete Jointing Systems**

We are 100% Australian and still family owned, in fact 30+ years, which to us is significant as it means exceptional customer service governs every aspect of our business to ensure continuous improvements to our business for our customers.



We pride ourselves on our full range of concrete jointing systems for all concrete slab on ground needs. Our products are designed and tested and have most certainly passed the tough engineering

demands and conditions required on job sites throughout Australia, New Zealand and overseas.

Connolly concrete jointing systems are designed by us, manufactured by us and distributed by us to over 200 mesh and bar resellers throughout Australia and New Zealand and supported and trusted through our adherence to ISO 9001.

Our products save time, save money and last a life time!

[Click here](#) for more information.

---

## The Construction Store

The Construction Store is an Australian owned company specializing in the supply of high



quality concrete construction products. Our aim is to provide the highest quality and technically superior product range to the construction industry. Our focus is service and solutions to our customers needs.

Our product range includes :

### Concrete Connections

- Metal Edge Joint Systems (Armoured Joint)
- Dowel Systems
- Deformed / Threaded bar
- Holding down bolts
- Key Joints
- Pour Through Expansion Joints

### Concrete Repair Products

- Roadware 10 Minute Mender
- Roadware Flexible Cement II
- Cementitious Grouts / Mortars

### Joint Sealants

- Dow Corning 888 Silicone
- Polyurethane
- TCS Tuffjoint Polyurea

### Jointing Materials

- Flexible & Rigid Foams
- Cork
- Bitumen Impregnated Fibre Board
- Foam Backer Rods

#### Concrete Treatments / Coatings

- Curing Compounds
- Aliphatic Polyurea/Aspartic clear coat

[Click here](#) for more information.

If you have any questions about NSW Branch activities or the Concrete Institute in general please contact...

Duncan Miller

NSW Member Services  
Concrete Institute of Australia

Email - [nsw@concreteinstitute.com.au](mailto:nsw@concreteinstitute.com.au)

Phone - 0423 731 837