

# STEEL FUTURES

## WHAT'S ON: STRUCTURAL STEEL ELEMENTS OF METALS WEEK 2015

With only a few weeks to go until Metals Week 2015 (31 August – 6 September), it's all hands on deck here at SCNZ to ensure that the events we are involved with run smoothly.

We are aware that the schedule of events may seem rather confusing at first glance and would like to take this opportunity to clarify how the different events in Metals Week relate to our sector.

Metals Week 2015 is a unifying event run by Metals New Zealand. It aims to bring together the entire metals industry; providing industry leaders with an opportunity to celebrate success, network across their peer groups from other metals-related sectors and learn about business excellence.

Within Metals Week are a number of key events which encompass the structural steel sector. Some of these events continue the focus on business excellence, market conditions and opportunities. Others provide a more technical programme for engineers incorporating the latest innovations, applications and research.

Here is a brief programme of Metals Week events which are part of the SCNZ stream. More details on each event (including how to register) are given later in this newsletter but this programme, combined with the following target audience summary, should help you identify which events are for you.

**SteelCon Careers Updates** is aimed at tertiary-aged students, careers advisors, parents, and educators.

**Steel Innovations 2015** is for all practising structural engineers, researchers and university students to share the latest knowledge in the design and construction of steel structures.

**Metals Industry Conference** targets the metals sector with a set of inspiring speakers focused on business excellence (this session specifically encompasses the structural steel sector and is suitable for SCNZ industry members).

**Steel Agenda** is a breakout session from the Metals Industry Conference for SCNZ industry members. It fuses conference elements with the SCNZ AGM.

**Industry Gala Awards Dinner** is for the metals sector, SCNZ industry members and Steel Innovations attendees. Tickets can be purchased as part of delegate packages for Steel Innovations and the Metals Industry Conference / Steel Agenda.

We are very excited about this SCNZ stream of events as part of Metals Week 2015 and look forward to welcoming you in September. **Please don't delay – take time out of your busy day to visit [www.scnz.org](http://www.scnz.org) and register today.**

	Mon 31 <sup>st</sup> August	Tues 1 <sup>st</sup> September	Wed 2 <sup>nd</sup> September	Thursday 3 <sup>rd</sup> September		Friday 4 <sup>th</sup> September
8am				Metals Industry Conference	Steel Innovations (Day 1)	Steel Innovations (Day 2)
12pm		SteelCon Careers Update	Steel Agenda			
6pm				Metals Industry Gala Awards Dinner (Rendezvous Hotel)		

*Unless noted otherwise all events are in the Aotea Centre, Auckland.*

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### UPCOMING EVENTS

7 October	SCNZ Northern Fabricator Forum
14 October	SCNZ Central Fabricator Forum
21 October	SCNZ Southern Fabricator Forum

# METALS INDUSTRY CONFERENCE & STEEL AGENDA

## THURSDAY 3<sup>RD</sup> SEPTEMBER

These two events are ideal for our industry members and can be combined with the Metals Industry Awards Gala Dinner to bring you all the best of our industry in one day.

**8.30am – 12.55pm Metals Industry Conference** (Goodman Fielder, Aotea Centre). This event will bring together a set of thought provoking & inspirational speakers focused on business excellence topics for business owners, directors, managers and supervisors. The event will be held as a plenary session prior to individual Association meetings in the afternoon (including SCNZ's Steel Agenda breakout session). Highlights of the morning include:

**\*Near-Term Prospects: Manufacturing and Building & Construction in NZ.** *Rod Oram, journalist and economic commentator*, will offer his insights into the economic drivers shaping our markets and the strategic imperatives that our industry needs to consider.

**\*World Steel Market.** *Craig Dixon, General Manager of Pacific Steel NZ*, has extensive knowledge of steel manufacturing, the supply chain, and logistics; and will share his perspective on the global steel market.

**\*Health & Safety Leadership – I am Accountable...** *Roger McRae, Managing Director of McConnell Dowell Constructors Ltd*, will share important insights into the expected new health and safety legislation.

**\*Tendering and Clever Buying.** *Caroline Boot, Managing Director of Plan A*, one of New Zealand's largest professional tender and business writing companies.

**\*Pursuing Business Excellence.** *Fiona Gavriel, CEO of New Zealand Business Excellence Foundation*, a not-for-profit, membership-based organisation focused on supporting organisations to achieve world-class performance, productivity, and capability.

**\*Creating an 'Awesome' Future.**

*Cam Calkoen, athlete*, was born with cerebral palsy yet he pushed past his physical limitations to represent New Zealand in athletics. Cam is well-equipped to inspire our industry to set goals and strive to achieve them.

**2pm – 5pm Steel Agenda** (Limelight 2, Aotea Centre). This event is for our industry members and starts with the SCNZ AGM, which gives you the opportunity to have your say on the people representing your industry. The AGM is followed by a series of informative speakers focussing on market conditions and opportunities. The event finishes with a celebration of our newly certified fabricators.



**\*New Green Star Steel Credits.** *Dr Stephen Hicks, Structural Systems General Manager of HERA*, will explain the new Green Star steel credits and discuss the implications for our industry, including the potential benefits for fabricators to be Environ-Mark certified.

**\* Understanding the Chinese Structural Steel Sector.** *Daniel Pillai, Director of the AWI Group*, will provide an overview of the Chinese structural steel sector and discuss what we should do in the face of international competition to ensure our future sustainability.

**\* Case study: Christchurch Bus Interchange.** *Dave Anderson, General Manager of John Jones Steel*, will discuss the challenges of working on the high profile, architecturally designed new Bus Interchange which features a modulated structural steel design.

**\*Steel Fabricator Certification Presentation** (Upper NZI, Aotea Centre). One year on from the launch of the Steel Fabricator Certification (SFC) scheme, we present SFC certificates to our newly qualified structural steel fabricators.

### METALS INDUSTRY AWARDS GALA DINNER (Rendezvous Hotel)

**6.30pm Pre-Dinner Drinks\*** / **7.30pm Dinner** (Grand Ballroom)

The biennial Excellence in Steel Awards showcase the exceptional design and execution possible when steel is used as the principal construction material in buildings and infrastructure projects. This year the Awards will be presented alongside the wider Metals Industry Awards.

*\*The pre-dinner drinks is only for those who have registered for the Industry Awards Gala Dinner.*

**We are offering a complete range of price packages to choose from (so you can easily mix and match the various events on this day). Please visit [www.scnz.org](http://www.scnz.org) and click on the Steel Agenda tab for more information and to register.**

# STEEL INNOVATIONS 2015



SCNZ is proud to host the second Steel Innovations Conference during Metals Week. The biennial conference provides a forum for structural engineers, steel industry representatives, academics and students to share the latest knowledge in the design and construction of steel structures.

Over 40 papers will be presented at the two day event and key topics will include seismic engineering, composite steel construction, fire engineering, durability, sustainability, cost-effective design and stability.

Delegates will have the opportunity to learn about the latest innovations in damage-avoidance technology and listen to top local and international structural steel design experts. These include Professor Roberto T. León (Virginia Tech), Assistant Professor Lydell Wiebe (McMaster University), Walterio López (Rutherford + Chekene), Dr

Stephen Hicks (HERA), Associate Professor Gregory MacRae (University of Canterbury) and Brendon McNiven (ARUP).

**\*\*\*\* BREAKING NEWS:  
SCNZ is delighted to announce  
two more well-known faces  
now confirmed to join us at  
Steel Innovations 2015 \*\*\*\***



Connal Townsend, CEO of Property Council NZ, which represents the interests of the commercial property and investment industry in New Zealand, will be giving the welcome address.



Greg Ward, New Zealand's foremost, award-winning professional Master of Ceremonies (MC) and corporate entertainer will be acting as MC.

**Don't delay – book now to avoid disappointment!** For more information (including the full technical programme) and to register, please visit [www.scnz.org](http://www.scnz.org) and click on the Steel Innovations 2015 button to be directed to the conference website.



## WE WANT TO HEAR YOUR GOOD NEWS

Would you like to benefit from an increased industry profile?

It is well recognised that there are many major advantages to getting the name of your business known. The opportunity to build your reputation as industry-leading, innovative and successful company will give you the competitive advantage and help you to sell more steel. However, many companies in our industry don't have the time or the resources to invest in PR or marketing help.

The good news is that membership of SCNZ allows you to tap into our PR know-how and resources. All you need to do is share your good news stories with us: big contract wins,

new technology, exciting collaborations, etc.

Right now we are looking for stories to illustrate:

- Local industry capability and content
- Smart, high-tech industry
- Seismic resilience
- Strong commercial and design benefits.

Tell us what you have been doing and we'll do the hard work for you.

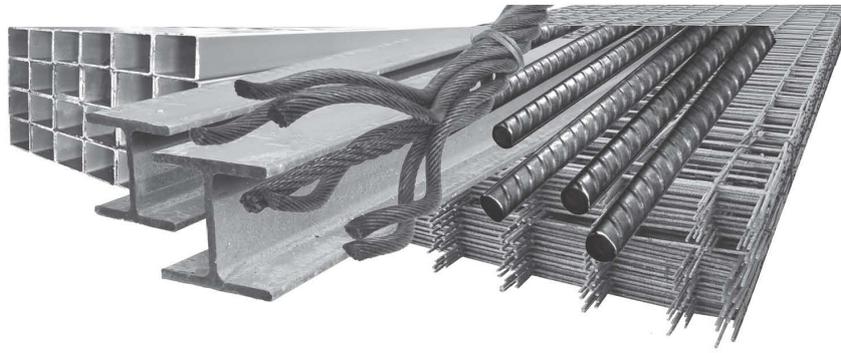
**Contact Rebecca Symonds, SCNZ Marketing Administrator (email: [rebecca.symonds@scnz.org](mailto:rebecca.symonds@scnz.org) or phone: 09 263 5635), now to share your news.**

**Would you like to become a SCNZ member?** For an annual subscription of only \$100 + GST you can enjoy the benefits of belonging to an association dedicated to the advancement of steel construction. Please visit <http://www.scnz.org/members/application>, fill in the application form and forward back to [info@scnz.org](mailto:info@scnz.org).

## UNDER CONSTRUCTION

[www.scnz.org](http://www.scnz.org) is getting a make-over. Watch this space for more information about the launch of the brand new site which promises to be an essential "one-stop-shop" for busy people.





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**Can you take the risk that you might  
be using non-compliant steel?**

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# Confidence.

**(noun.)** Full trust; belief in powers, trustworthiness, or reliability of a person or thing.

- As construction professionals using non-compliant steel could be your worst decision.
- Engineers, certifiers or suppliers have the responsibility and power to refuse the use of unidentifiable or non-compliant steel.
- You manage the risk to human safety, reputation, livelihood and cost. Control your risks of non-compliance.
- Reduce your liability through simple web downloads of ACRS Certificates at [www.steelcertification.co.nz](http://www.steelcertification.co.nz)
- Check your steel products' compliance to AS/NZS Standards and building codes.

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ACRS rigorously certifies steel product compliance at over 150 locations in 15 countries and is accredited by JAS-ANZ For more detail, register for STEEL CERTIFICATION NEWS at [www.steelcertification.co.nz](http://www.steelcertification.co.nz)

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**Non-compliance is just not worth it. Get the facts.  
Demand the ACRS Certificates of Product Compliance.**

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## Buckling Restrained Braces are now available in New Zealand!

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## WORLD EXPERTS JOIN FORCES AT STESSA 2015

At the beginning of July, Kevin Cowie, Senior Engineer (Technical), represented SCNZ at the eighth STESSA Conference in China, an international specialty conference which focuses on the seismic design of steel structures.

Held at Tongji University in Shanghai, STESSA15 brought together over 300 academics, researchers and engineers from around the world to discuss the latest international developments in the behaviour of steel structures in seismic areas.

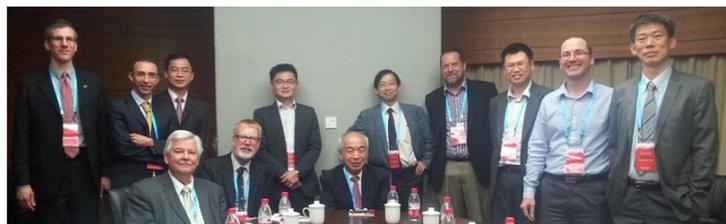
A total of 204 papers were presented and New Zealand was well represented with 16 delegates participating in the conference. Kevin Cowie gave a presentation entitled "Australian/New Zealand Standard for Composite Structures,



Representatives from the University of Canterbury, the University of Auckland and SCNZ attending STESSA15

AS/NZS 2327, Seismic Provision Development". Associate Professor Gregory MacRae (University of Canterbury) gave a keynote address on "New Zealand Research on Steel Structures in Seismic Areas".

Gregory MacRae also



Experts from around the world meeting to discuss BRBs

organised a special meeting of world experts to discuss Buckling Restrained Braced (BRBs) Frames which was chaired by Kevin Cowie. The experts participating in the meeting (including Associate Professor Charles Clifton from the University of Auckland) reached an important agreement to collaborate together and share research on BRBs.

Kevin Cowie commented, "New Zealand has a wealth of experience on earthquake engineering and low damage construction techniques to share with international researchers and practitioners. This conference provided fantastic networking opportunities and enabled us to significantly raise the profile of NZ research on an international level. It also improved our links to international BRB research which SCNZ will use in our work to develop a New Zealand BRB Design Guide, which is currently underway."

\*\*\*\* BREAKING NEWS Christchurch has won the bid to host the 2018 international STESSA Conference\*\*\*\*

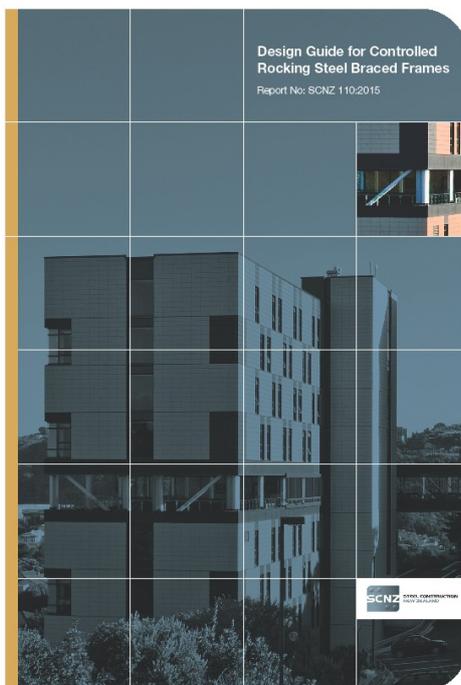
## NEW DESIGN GUIDE FOR CONTROLLED ROCKING STEEL BRACED FRAMES

SCNZ will be launching a new publication – "Design Guide for Controlled Rocking Steel Braced Frames" - at Steel Innovations 2015 in September.

Following the 2011 Christchurch earthquake, there has been significant interest in using better performing seismic load-resisting systems. Controlled Rocking Steel Braced Frames (CRSBFs) are a special form of structural system that sustains less damage than conventional ductile approaches. The system dissipates ductile energy by controlled rocking, forming part of a low damage or recoverable structural solution.

Selecting and using rocking structural systems requires specialist knowledge of their behaviour, key parameters, and suitable analysis and design techniques to deliver the intended performance. Within New Zealand, only a handful of companies have successfully undertaken research and development to enable them to deliver CRSBFs as part of building projects.

Sponsored by SCNZ and industry, this Guide was conceived to facilitate the use of CRSBFs, enabling experienced structural engineers to consider and harness the potential benefits of this type of alternative structural system.



The Design Guide summarises recent research developments and gives designers general guidance on application, limitations and key considerations. It includes two worked preliminary design examples, relating to a load

bearing and a non-load bearing steel braced frame, which will aid designers in the preliminary design to achieve frame sizes and consider the appropriate design effects.

CRSBFs will be a hot topic at the forthcoming Steel Innovations Conference with the principle author of the Guide - Associate Professor Lydell Wiebe (McMaster University and formerly University of Toronto) - giving a keynote speech on converting the research behind the Guide into practice. In addition a practitioners' presentation by New Zealand's leading designer of these type of structures, Aurecon New Zealand (Sean Gledhill and Geoff Sidwell), will focus on the design and delivery of CRSBFs.

**If you are interested in CRSBFs, sign up NOW for Steel Innovations 2015.** Delegates will have the opportunity to ask questions of leading researchers and designers specialising in this cutting edge technology; and purchase a copy of our new Design Guide at a special conference rate. Not to be missed! Visit [www.scnz.org](http://www.scnz.org).

# HAVE YOUR SAY IN OUR FUTURE

You should now have received your voting form for the 2015 SCNZ Council elections.

SCNZ is an incorporated society governed by an Executive Council made up of elected industry representatives. SCNZ exists to advance the interests of the New Zealand structural steel industry. Governance of SCNZ therefore offers a unique opportunity to look into and shape the future of our sector.

To do this effectively, the Executive Council needs Councillors who can think strategically at an industry-level and determine what activities SCNZ should undertake to best position industry to meet the challenges and opportunities of the future.



Four vacant Council positions (one professional, two Steel distributors and one Steel constructor) remain to be decided by postal ballot this year. Each candidate's information and vision are provided on the reverse of the Declaration and Voting Form you will have been sent.

Following the election of Councillors, the Council will nominate a Chairperson and a Vice Chairperson. These positions will then be ratified at the SCNZ AGM, to be held in Auckland on 3<sup>rd</sup> September. Please pencil this event into your diary.

**Who do you trust to shape the future of our sector? Please return your voting forms by 19<sup>th</sup> August and attend our September AGM.**

## SUCCESSFUL REGIONAL FABRICATOR FORUMS

The SCNZ Regional Fabricator Forums which took place during July in Christchurch, Hamilton and Palmerston North were very well received by the many delegates who attended the events.

Established following consultation with members, the Regional Fabricator Forums - covering the Northern, Central and Southern regions of the country - were established to support the commercial needs and interests of SCNZ members specific to their region, and raise the general awareness and understanding of sound business practices.

The general theme of the July Forums was Careers in Steel. Dawn Headley, SCNZ contractor, talked about the launch of the new Steel Ambassador Toolkit (which provides ideas and materials to improve your local networking) and the SteelCon Careers Update 2015, which takes place on Tuesday 1<sup>st</sup> September, 1.00-3.00pm, at the Aotea Centre. For more information, contact [dawn.headley@scnz.org](mailto:dawn.headley@scnz.org) or

visit [www.scnz.org](http://www.scnz.org).

Evan Kroll, Managing Director of Stevensons Structural Engineers, discussed his experience of engaging with high schools to secure our industry's future workforce and covered a number of related issues (including pre-employment drug tests, prison workers scheme, earn as you learn, etc). For more information, contact [evan@stevensonsteel.co.nz](mailto:evan@stevensonsteel.co.nz).

Chris Burns, Senior Structural Engineer (Industry), gave an overview of the UK versus NZ industry models specifically in relation to design and fabricator responsibilities. Contact [chris.burns@scnz.org](mailto:chris.burns@scnz.org).

Other key industry issues were discussed, including the current problem of overseas welders/fabricators having their request work permit renewals rejected and the upcoming Health and Safety Reform Bill.

## NZ BRIDGES 2015

Highlighting New Zealand's leading Bridges event – endorsed by NZTA with key industry leaders presenting.

New Zealand has over 4000 bridges that provide access across challenging geological topography. Catering to an ever growing population and regulatory environment requires continued investment and maintenance of our bridge structures across the country with its unique weather and environmental needs.

NZ Bridges 2015 will cover a range of topics around policy & standard updates, innovative design & technology, project updates, asset management, construction process and methodology as well as research findings. This event provides the space for engineers, asset owners, consultants, designers and bridge professionals to share, review and network.

To be held 28 & 29 October 2015 at the Pullman,

Auckland. See [www.conferenz.co.nz/nzbridges](http://www.conferenz.co.nz/nzbridges)

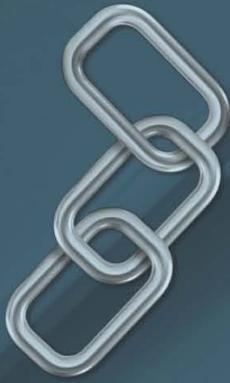
### Presentations & insights from:

- NZTA
- AECOM
- Beca
- Concrete Structures
- Holmes Consulting
- KiwiRail Engineering Services
- Opus International Consultants
- Manawatu District Council
- Synergy Positioning Systems
- TBS Group
- University of Auckland
- University of Canterbury

### Separately bookable workshops on:

- Risk mitigation of NZ Bridges
- Seismic design of concrete bridge pier/columns





# STEELCON CAREERS UPDATE

2015 | Aotea Centre, Auckland  
1.00-3.00pm September 1

## An invitation from SCNZ to tertiary-aged students, careers advisors, parents and educators

New building standards & industry innovations have massively increased the use of steel. It's a bright future! The Steel Construction industry recognises you may be out of touch with who we are and what we do. For the very first time, employers & educators are coming together to give you an industry-specific update.

- Learn about varied career opportunities across trades & professions
- Ask our Q&A panel your burning questions
- Check out industry tools like the Virtual Welding Simulator, 3D drawing pens, etc
- Connect with employers & training organisations and see what they're doing
- Make and inspire decisions based on current facts

### PROGRAMME

From 12.30pm	Arrival
1.00pm-1.10pm	Welcome and Introduction
1.10pm-1.20pm	A Debate - Which Tertiary Type?
1.20pm-1.40pm	The Steel Construction Industry - Then, Now, What Next?
1.40pm-1.55pm	Q&A Panel of Industry Reps & Tertiary/Skills Organisations
1.55pm-2.00pm	Introduction to Exhibitors
2.00pm-3.00pm	Interactive Industry & Education Exhibits



*Humorous MC, Te Radar, will also mix it up with you during exhibition time*

**Free ticket/s from Eventfinda until Tuesday 25 August 2015**

Entry by ticket only. Ticketing will close sooner if capacity is reached.



*Building a stronger bridge with our future workforce*

