

## **PROGRAM**

**Monday, October 13, 2008**

**6-9 p.m. Registration**

**Tuesday, October 14, 2008**

**7 a.m. – 4 p.m. Registration**

**8:00 a.m. Welcoming Remarks**

R.A. LaBoube, Missouri University of Science & Technology

Presentation of 2008 AISI Market Development Industry Leadership Award to Dr. J.M. Fisher, Computerized Structural Design, Milwaukee, WI,

**8:10 a.m. Technical Session No. 1**

**Elements and Cross-Section Behavior**

**Chairpersons:**

W.S. Easterling, Virginia Tech, Blacksburg, VA, USA

D.L. Johnson, Maus Engineering, Wolfeboro, NH, USA

**“Floor System Design for Distortional Buckling Including Sheathing Restraint;”**

B.W. Schafer, R.H. Sangree, Y. Guan, Johns Hopkins University, Baltimore, MD, USA

**“Simplified Methods for Predicting Elastic Buckling of Cold-Formed Steel Structural Members with Holes;”**

C.D. Moen, Virginia Tech, Blacksburg, VA, USA, and B.W. Schafer, Johns Hopkins University, Baltimore, MD, USA

**“Generalized Beam Theory Formulation Able to Capture Load Application and Localized Web Buckling Effects;”**

N.M.F. Silva, D. Camotim, N. Silvestre, Technical University of Lisbon, Lisbon, Portugal

**“GBTUL – A Code for the Buckling Analysis of Cold-Formed Steel Members,”**

R. Bebiano, N. Silvestre, D. Camotim, Technical University of Lisbon, Lisbon, Portugal

**9:30 a.m. Break**

**9:50 a.m. Technical Session No. 2**  
**Compression Members**

**Chairpersons:**

J. Rhodes, University of Strathclyde, Glasgow, Scotland  
W.L. Shoemaker, Metal Building Manufacturers Association, Cleveland, OH, USA

**“Impact of Global Flexural Imperfections on the Cold-Formed Steel Column Curve;”**

B.W. Schafer, V. M. Zeinoddini, Johns Hopkins University, Baltimore, MD, USA

**“Computed Flexural Buckling Stress for Cold-Formed Stainless Steel Columns;”**

S.H. Lin, Minghsin University of Science & Technology, Taiwan, R.O.C., C.L. Pan and C.P. Yu, Chaoyang University of Technology, Taiwan, R.O.C.

**“Stability of Cold-Formed Steel Simple and Lipped Angles under Compression;”**

W.R. Maia, J.M. Neto and M. Malite, University of Sao Paulo, Sao Carlos, Brazil

**“Structural Analysis of Scaffolding with Plank and Anchor Rod during Construction;”**

J.L. Peng, Yunlin University of Science & Technology, Taiwan, R.O.C., C.L. Pan, Chaoyang University of Technology, Taiwan, R.O.C., K.H. Chen, National Science Council, Taiwan, R.O.C., S.L. Chan, Hong Kong polytechnic University, Hong Kong, China

**11:10 a.m. Technical Session No. 3**  
**Design Standards and Guides Development**

**Chairpersons:**

R.L. Brockenbrough, R.L. Brockenbrough and Associates, Pittsburgh, PA, USA  
W.W. Yu, Missouri University of Science & Technology, Rolla, MO, USA

**“What's New in the 2007 Edition of the North American Cold-Formed Steel Specification?;”**

R. Brockenbrough, R.L. Brockenbrough and Associates, Pittsburgh, PA, R. Schuster, University of Waterloo, Waterloo, Ontario, Canada, R. LaBoube, Missouri University of Science & Technology, Rolla, MO, H. Chen, American Iron and Steel Institute, Washington, D.C.

**“An Update on AISI Standards for Cold-Formed Steel Framing;”**

J. Larson, American Iron and Steel Institute, Washington, D.C.

**“Overview of the Standard for Seismic Design of Cold-Formed Steel Structural Systems - Special Bolted Moment Frames;”**

H. Chen, American Iron and Steel Institute, Washington, D.C., C.M. Uang, University of California – San Diego, La Jolla, CA, R. Bjorhovde, The Bjorhovde Group, Tucson, AZ, B. Manley, American Iron and Steel Institute, Washington, D.C.

**12:10 p.m. Lunch**

**1:10 p.m. Technical Session No. 4  
Flexural Members**

**Chairpersons:**

R.M. Schuster, University of Waterloo, Ontario, Canada  
T. Sputo, Steel Deck Institute, Gainesville, FL USA

**“Buckling Studies of Thin-Walled Channel Sections under Combined Bending and Shear;”**

C.H. Pham, G.J. Hancock, University of Sydney, Sydney, Australia

**“Experimental Study on Web Crippling of Lapped Cold-Formed Steel Channels Subjected to Interior Two-Flange Loading;”**

Q. Rahman, Ryerson University, Toronto, Ontario, Canada, K. Sennah, Ryerson University, Toronto, Ontario, Canada, S. Fox, Canadian Sheet Steel Building Institute, Cambridge, Ontario, Canada

**“Simplified Models for Cross-section Stress Demands on C-Section Purlins in Uplift;”**

L.C.M. Vieira, Johns Hopkins University, Baltimore, MD, USA, M. Malite, University of Sao Paulo, Sa Carlos, Brazil, B.W. Schafer, Johns Hopkins University, Baltimore, MD, USA

**“Flexural Resistance of Cold-Formed Steel Built-Up Box Sections Subjected to Eccentric Loading;”**

L. Xu, P. Sultana, University of Waterloo, Waterloo, Ontario, Canada

**“Web Crippling Behaviour of Thin-Walled Lipped Channel Beams Subjected to EOF and ETF Loading;”**

M. Macdonald, Glasgow Caledonian University, Glasgow, Scotland, M.A. Heiyantuduwa, Glasgow Caledonian University, Glasgow, Scotland, J. Rhodes, University of Strathclyde, Glasgow, Scotland

**2:50 p.m. Break**

**3:10 p.m. Technical Session No. 5**  
**Rack Systems and Panel and Deck Assemblies**

**Chairpersons:**

B.W. Schafer, Johns Hopkins University, Baltimore, MD  
J. Crews, Unarco Material Handling, Springfield, TN USA

**“Simplified Consideration of Down-isle Stability in Pallet Racking;”**

J. Rhodes, University of Strathclyde, Glasgow, Scotland and M. Macdonald, Glasgow Caledonian University, Glasgow, Scotland

**“Response of Metal Roofs to Uniform Static and True Hurricane Wind Loads;”**

R. R. Sinno, Mississippi State University, Mississippi

**“State of the Art Report on Thin-walled Cold-formed Profiled Steel Decking;”**

N.A. Hedaoo, College of Engineering, Pune, India, L.M. Gupta, Visvesvaraya National Institute of Technology, Nagpur, India, G.N. Ronghe, Visvesvaraya National Institute of Technology, Nagpur, India, S.K. Parikh, College of Engineering, Pune, India

**4:10 p.m. Technical Session No. 6**  
**Floor Joists and Floor Joist Assemblies**

**Chairpersons:**

M. Macdonald, Glasgow Caledonian University, Glasgow, Scotland  
R.B. Haws, NUCONSTEEL, Denton, TX, USA

**“Vibration Performance of Lightweight Floor Systems Supported by Cold-Formed Steel Joists;”**

B.W. Davis, R. Parnell, L. Xu, University of Waterloo, Waterloo, Ontario, Canada

**“Innovative Composite Cold-Formed Steel Floor Joist System;”**

D.M. Fox, iSPAN Technologies, Richmond Hill, Ontario, Canada, R.M. Schuster, University of Waterloo, Waterloo, Ontario, Canada, M. Strickland, iSPAN Technologies, Richmond Hill, Ontario, Canada

**“Flexural Behaviour and Design of the New Built-up LiteSteel Beams;”**

S. Jeyaragan, M. Mahendran, Queensland University of Technology, Brisbane, Australia

**“Experimental and Numerical Studies of the Shear Behaviour of LiteSteel Beams;”**

P. Keerthan, M. Mahendran, Queensland University of Technology, Brisbane, Australia

**5:30 p.m. Adjourn**

**6:00-7:00 pm. Reception**

**Sponsored by:**

**American Iron and Steel Institute  
Cold-Formed Steel Engineers Institute of Steel Framing Alliance  
Metal Building Manufacturers Association  
Metal Construction Association  
Rack Manufacturers Institute  
Steel Deck Institute  
Steel Stud Manufacturers Association**

**Wednesday, October 15, 2008**

**8:00 a.m Technical Session No. 7  
Shear Wall Assemblies**

**Chairpersons:**

S.R. Fox, Canadian Sheet Steel Building Institute, Cambridge, Ontario, Canada  
J.W. Larson, American Iron and Steel Institute, Washington, D.C., USA

**“Inelastic Performance and Design of CFS Walls Braced with Straps Having  
Reduced Width Fuses;”**

K. Velchev, G. Comeau, N. Balh, C.A. Rogers, McGill University, Montreal, Canada

**“Pilot Research on Cold-Formed Steel Framed Shear Wall Assemblies with  
Corrugated Sheet Steel Sheathing;”**

H. Vora, C. Yu, University of North Texas, Denton, TX

**“Structural Testing of Corrugated Sheet Steel Shear Walls,”**

B. Stojadinovic, University of California at Berkeley, CA, USA, S. Tipping, Tipping Mar  
+ Associates, Berkeley, CA, USA

**“Shear Resistance of Cold-Formed Steel Framed Shear Wall Assemblies with 0.027-  
, 0.030-, 0.033-inch Sheet Steel Sheathing;”**

C. Yu, University of North Texas, Denton, TX, USA

**“Estimating the Effective Yield Strength of Cold-Formed Steel Light-Frame Shear  
Walls;”**

R.Serrette, Santa Clara University, Santa Clara, CA, USA

**9:40 a.m.Break**

**10:00 a.m. Technical Session No. 8**  
**Wall Stud and Wall Stud Assemblies**

**Chairpersons:**

D. Allen, Steel Stud Manufacturers Association, Washington, D.C., USA  
P.A. Seaburg, Consultant, Edwardsville, IL, USA

**“Effect of Varied Imperfections on Bracing Demand of Cold-Formed Steel Stud Walls;”**

T. Sputo, K. Beery, E. Wong, University of Florida, Gainesville, FL, USA

**“Finite Element Analytical Investigation of Torsional Bracing Requirements for Cold-Formed Steel C-Shaped Stud;”**

J. Tovar, Schwab Structural Engineering, New Braunfels, TX, T. Helwig, University of Texas, Austin, TX, T. Sputo, University of Florida, Gainesville, TX, USA

**“Strength of Cold-Formed Steel Jamb Stud-to-Track Connections;”**

A.V. Lewis, University of Waterloo, Waterloo, Ontario, Canada, S.R. Fox, Canadian Sheet Steel Building Institute, Cambridge, Ontario, Canada, R.M. Schuster, University of Waterloo, Waterloo, Ontario, Canada

**“Thermal Performance of Plasterboard Lined Steel Stud Walls;”**

P. Kolarkar, M. Mahendran, Queensland University of Technology, Brisbane, Australia

**“Testing and Evaluation of CFS L-Headers;”**

J. Pauls, University of Waterloo, Waterloo, Ontario, Canada, L.Xu, University of Waterloo, Waterloo, Ontario, Canada, S. Fox, Canadian Sheet Steel Building Institute, Cambridge, Ontario, Canada

**11:40 a.m. Lunch**

**1:00 p.m. Technical Session No. 9**  
**Connections**

**Chairpersons:**

J. Mattingly, CMC Joist & Deck, Summit, NJ, USA  
H. Chen, American Iron and Steel Institute, Washington, D.C., USA

**“Effects of Elevated Temperatures on Ultimate Moment Capacity of Bolted Moment-Connections between Cold-formed Steel Members;”**

J. B.P. Lim, University of Strathclyde, Glasgow, Scotland, Ben Young, University of Hong Kong, Hong Kong

**“Cold-Formed Steel Special Bolted Moment Frames: Cyclic Testing and Numerical Modeling of Moment Connections;”**

C.M. Uang, University of California, San Diego, La Jolla, CA, USA, J.K. Hong, Myers, Houghton & Partners, Long Beach, CA, USA, A. Sato, Kyoto University, Kyoto, Japan, K. Wood, KL Wood Engineering, Colorado Springs, CO, USA

**“Cold-Formed Steel Special Bolted Moment Frames: Capacity Designed Requirements;”**

A. Sato, Kyoto University, Kyoto, Japan, C.M. Uang, University of California, San Diego, La Jolla, CA, USA

**“Cold-Formed Steel Portal Frame Joints: A Review;”**

A. Wrzesien, J.B.P. Lim, University of Strathclyde, Glasgow, Scotland

**2:20 p.m. Break**

**2:30 p.m. Technical Session No. 9 (cont.)**

**“Strength of Arc-Spot Welds Made in Single and Multiple Steel Sheets;”**

G. Snow, W.S. Easterling, Virginia Tech, Blacksburg, VA, USA

**“Cold-Formed Steel Bolted Connections Without Washers on Oversized Holes: Shear and Bearing Failures in Sheets,”**

C. Yu and I. Sheerah, University of North Texas, Denton, TX

**“Experimental response of connections between cold-formed steel profile and cement-based panel;”**

L. Fiorino, O. Iuorio, R. Landolfo, University of Naples “FedericoII”, Naples, Italy

**“Test Standard for Joist Hangers and Similar Devices Attached to Cold-Formed Steel Framing;”**

G. Greenlee, USP Structural Connectors, Burnsville, MN, USA

**“New Test Standard for Hold-downs Attached to Cold-Formed Steel Structural Framing”**

J. Ellis, Simpson-Strong Tie, Pleasanton, CA, USA

**“Behavior of Arc Spot Weld Connections Subjected to Combined Shear and Tension Forces;”**

L.K. Stirneman, R.A. LaBoube, Missouri University of Science & Technology, Rolla, MO, USA