

Completion report for the Blast Design and Modelling Forum



Event : Blast Design and Modelling Forum

Location : Hotel Realm, Canberra

Date : 24 July 2008

Summary

In today's world, knowledge of modern protective structures is vital. This workshop will provide participants with a valuable overview of the research projects conducted in this area in Australia. The leading researchers in Australia will be presenting their research during the forum. There was a special presentation which allowed the participants an insight into the issues associated with load assessment, response analysis, available tools and factors that must be addressed in developing a successful blast resistant building design. Prof. Andrew Whittaker, a leading researcher in USA discussed the present research related to blast resistant design in USA.

Abstracts were submitted for consideration, and those accepted presented their research at the Forum.

The event was free to attend for abstract presenters, non-abstract presenters were charged a registration fee.

Professor Priyan Mendis was the facilitator.

19 people attended the event.

Athol Yates, Outreach Manager, RNSA organised the logistics.

Event rationale

This event was supported by the RNSA because it contributed to the RNSA mission statement of *facilitating a knowledge-sharing network for research organisations, government and the private sector to develop research tools and methods to mitigate emerging safety and security issues.*

A number of excellent contacts were made between the participants and speakers.

Evaluation

Below is the delegate evaluation from the event.

1. How do you rate:	Poor (%)	Fair (%)	Good (%)	Very Good (%)	Excellent (%)	Median
the Forum overall	0	0	37.5	43.75	18.75	Very good
the relevance of the material presented	0	0	18.75	37.5	43.75	Very good
the quality of the presentations	0	0	31.25	50	18.75	Very good

My expectations for the session were	Not met (%)	Met (%)	Exceeded (%)
	0	87.5	12.5

Issues needing more discussion on

- More discussion time

Other comments

- Need more time – make the day a little longer – 5pm or 5.30pm finish
- Also need to keep all presentation to time starting with the keynote
- Slightly longer time for presentations would have helped presenters avoid rushing through material
- More discussion time

Program

- 9:00am – Workshop registration
- 9:30am – Introduction, Professor Priyan Mendis, University of Melbourne
- 9:40am – Blast R&D in USA and performance of nuclear structures, Andrew Whittaker
- 10:20am – An Investigation of Impact and Blast Performance of Steel Sections with Infill Materials for Critical Infrastructure Protection, Alex Remennikov and Brian Uy
- 10:40am – Risk-based Optimisation of Protective Measures Against Terrorist Threats to Infrastructure, Mark G. Stewart
- 11:00am – Morning Break
- 11:20am – Numerical Analysis of Fiber Reinforced polymer Composite Strengthened RC Walls with Anchorages Against Blast Loads, A. Mutalib and H. Hao
- 11:40am – Numerical Modelling of High-Speed Impact Tests of Concrete Material Properties, Hong Hao, Ziaoqing Zhou, Zhong-Xian Li
- 12:00pm – Application of Distributed Nonlinearity for Progressive Collapse Analysis of Reinforced Concrete Frames, Hamid R. Valipour and Stephen J. Foster
- 12:20pm – Polymer Reinforced Concrete Panels to Resist Blast Loads, Sudharshan Raman, Tuan Ngo, Priyan Mendis
- 12:40pm – Lunch
- 1:20pm – Façade and Structural Systems Project, Ken Dale
- 1:40pm – Blast Resistance of FRP Retrofitted RC Slabs, Chenqing Wu, DJ Oehlers, M. Rebentrost, J. Leach, A. Whittaker
- 2:00pm – Behaviour of Glass Façade Panels, Raymond Lumantarna, Harry Susiswo, Priyan Mendis, Tuan Ngo
- 2:20pm – Challenges in High-Speed Impact Tests of Dynamic Concrete Material Properties, Yifei Hao, Hong Hao, Boris Tarasov
- 2:40pm – An Improved Procedure for Progressive Collapse Analysis of RC Frames to Blast Loading, Yanchao Shi, Hong Hao, Zhong-Xian Li
- 3:00pm – Behaviour of FRP Reinforced Concrete Panels, Ganchai Tanapornraweekit, N. Haritos, Priyan Mendis, Tuan Ngo
- 3:20pm – Closing remarks by Professor Priyan Mendis
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Information

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