THE UNIVERSITY OF QUEENSLAND
AUSTRALIA
CREATE CHANGE

11th International Conference on Structures in Fire

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Consulting Fire Engineers

Many thanks!

Local Organising Committee

Prof Priyan Mendes (The University of Melbourne)

Dr Kate Nguyen (RMIT)

Prof Mahen Mahendran (Queensland University of Technology)

A/Prof Anthony Abu (The University of Canterbury)

SiF Movement Steering Committee

Prof Jean-Marc Franssen (University of Liege, Belgium)

Prof Paulo Vila Real (University of Aveiro, Portugal)

Prof Venkatesh Kodur (Michigan State University, USA)

Prof Kang Hai Tan (Nanyang Technological University, Singapore) – ***Chair Scientific Committee SiF2020****

*With the active support from Dong Zhang, Yao Zhang, Shengxin Fan and Panwei Du

Many thanks **Members of the Scientific Committee**

Applications of structural fire engineering

Anthony Abu
Lisa Broberg
Yong Du
Jean-Marc Franssen
Qianru Guo
Jiayu Hu
Timo Jokinen
Inka Kleiboemer
Susan Lamont
Linus Lim
Tom Molkens
Eric Tonicello
Bernice Wong
Zhi Zhang

Steel structures

Florian Block
Ian Burgess
Carlos Couto
Michael Engelhardt
Leroy Gardner
Maria Garlock
François Hanus
Tomaž Hozjan
Michal Jandera
Markus Knobloch
Nuno Lopes
Paulo Piloto
Christophe Renaud
Peter Schaumann
Nicola Tondini
Paulo Vila Real
František Wald
Yong Wang
I Paya Zaforteza
Raul Zaharia
Bin Zhao

Many thanks **Members of the Scientific Committee**

Concrete and masonry structures

Anil Agarwal
Faris Ali
Luke Bisby
Byong Choi
Mohammadreza Eslami
Roberto Felicetti
Pietro Gambarova
Thomas Gernay
Mark Green
Rami Hawileh
Venkatesh Kodur
Vasant Matsagar
Priyan Mendis
M.Z. Naser
Ananth Ramaswamy
Luc Taerwe
Bernardo Tutikian
Bo Wu
Li Ye
Haiyan Zhang

Timber structures

David Barber
Andy Buchanan
Daniel Brandon
Steve Craft
Christian Dagenais
Massimo Fragiacomo
Andrea Frangi
Jean Marc Janssens
Alar Just
Koji Kagiya
Michael Klippel
Birgit Östman
Pedro Palma
Joachim Schmid
Colleen Wade
Norman Werther

Many thanks **Members of the Scientific Committee**

Numerical modelling

Pradeep Bhargava
Katherine Cashell
Suwen Chen
Mustesin Khan
Martin Gillie
Kazunori Harada
Ann Jeffers
Jian Jiang
David Lange
C.S. Manohar
Asif Usmani
Hamid Ronagh
Serdar Selamet
Ruben Van Coile
Chao Zhang

Composite structures

Lisa Choe
Panwei Du
Shengxin Fan
Liming Jiang
John Gales
Lou Guobiao
Shan-Shan Huang
Guo-Qiang Li
Ali Nadjai
João Paulo Rodrigues
Zhong Tao
Peijun Wang
Weiyong Wang
Yuzhuo Wang

Many thanks **Members of the Scientific Committee**

Experimental research and any other

Mariyana Aida Abk
Blanca Andres
Eleni Asimakopoulou
Antonio Bilotta
Piergiacomo Cancelliere
Iolanda del Prete
Richard Emberley
Ricardo Fakury
Erica Fischer
Carmen Ibanez Usach
Amar Khennane
Angus Law
Kathinka Leikanger Friquin
Cristian Maluk
Muhammad Masood Rafi
Kate Nguyen
Emidio Nigro
Aldina Santiago
Holly Warren
Felix Wiesner
Jochen Zehfuß

Many thanks **Session Chairs**

Eleni Asimakopoulou
David Barber
Ian Burgess
Suwen Chen
Roberto Felicetti
Erica Fischer
Andrea Frangi
Thomas Gernay
Shan-Shan Huang
Liming Jiang
Katherine Cashell
Susan Lamont
Guo-Qiang Li
Vasant Matsagar
M.Z. Naser
Kate Nguyen
Nicola Tondini
Asif Usmani
Ruben Van Coile
Paulo Vila Real
Colleen Wade

Many thanks **Speakers** *(in order of appearance)*

Ramla Qureshi
Nicola Tondini
Mhd Anwar Orabi
Jean-Marc Franssen
Jin Qiu
Naoya Yotsumoto
Takuya Kinoshita
Omar Al-Mansouri
Xialu Liu
Fuminobu Ozaki
Akinobu Takada
Yu Liu
Luca Possidente
Élio Maia
Antonio Cicione

Hitesh Lakhani
Vicente Albero
Jamie MacLean
Abdulrahman Zaben
David Barber
Colleen Wade
Joachim Schmid
Erica Fischer
Anil Agarwal
Ramla Qureshi
Xu Dai
Ira Banoth
Hemanth K Chinthapalli
Nan Hua
Srishti Banerji

Yusuke Shintani
Nakrani Dharmit Ashwin
Marion Charlier
Jian Jiang
Pedro Dias Simão
Lin-Xin Song
Wenyu Cai
Antonio Correia
Fuminobu Ozaki
Ramakanh DV Venkata
Flávio A Matias Arrais
Tom Molkens
Camilo Montoya Giraldo
Felix Wiesner
Thomas Rengshausen

Ye Li
Ali Nadjai
Mateo Gutierrez Gonzalez
Juan Cuevas Rodriguez
Oluwamuyiwa Okunrounmu
Tom Molkens
Bunthan Iea
Elke Mergny
Shuna Ni
Xiqiang Wu
Lisa Choe
Priya Natesh
Mohsen Roosefid
Natasa Kalaba
Thomas Thienpont

Md Abu Yusuf
Thomas Gernay
Mitsuo Ozawa
Ranjit K Chaudhary
Dong Zhang
Balša Jovanović
Hang T.N Nguyen
František Wald
Shaorun Lin
Paul Akagwu
Mohammad Heidari
Roberto Felicetti
Takeo Hirashima
Ambrosine Hartle
David Lange

Patrick Covi
Hao Zhou
Kamila Cabova
M.Z. Naser
Zhuojun Nan Jérôme Randaxhe
Andrea Lucherini
Benjamin Nicoletta
Xia Yan
Svetha Venkatachari
Shan Li
Panos Kotsovinos
Eric Guillaume

Team @ The University of Queensland

Team @ The University of Queensland

Abdulrahman Zaben

Wenxuan Wu

Julian Mendez Alvarez

Hangyu Xu

Selina Weller

Lily Bostrom

Simon Toh

Mary-Anne Marrington

Elena Danilova

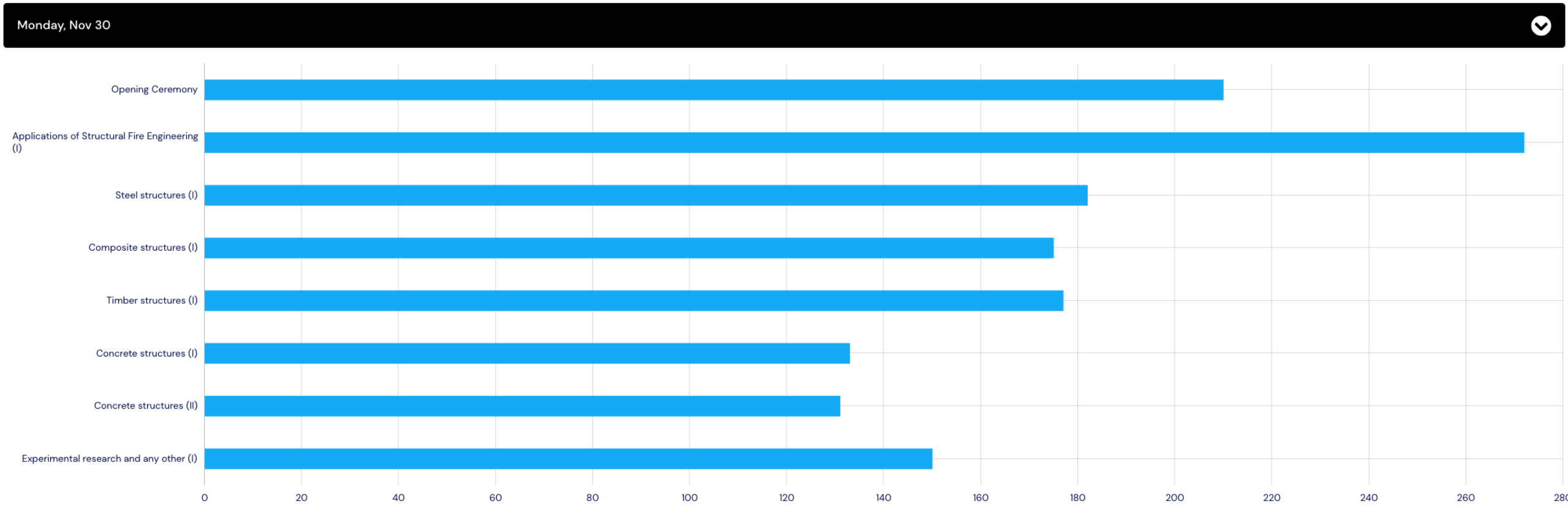
Numbers (right after the end of Day 4)

- 87 articles
- 87 online presentations
- 2 free workshops (OpenSees and fib)

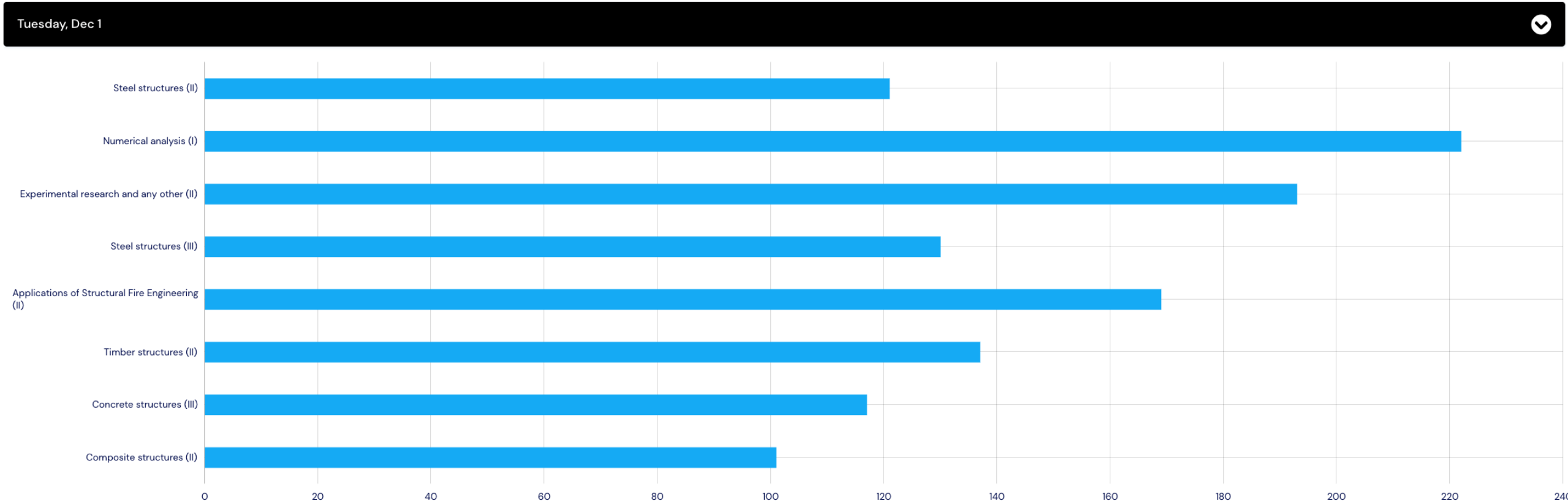
- 509 delegates
- 360 questions during Live Q&As (≈ 3.5 questions per presentation)
- 1,776 votes for Best Presentation Awards (≈ 3.5 nominations per delegate)
- 1,646 visits into the Meeting Hub and 414 connections made
- 540 views for on-demand sessions (to date)
- 1,115 visits to “Meet our Sponsors” rooms and 171 downloads of brochures and videos

Reminder that session videos are available on demand to all delegates!

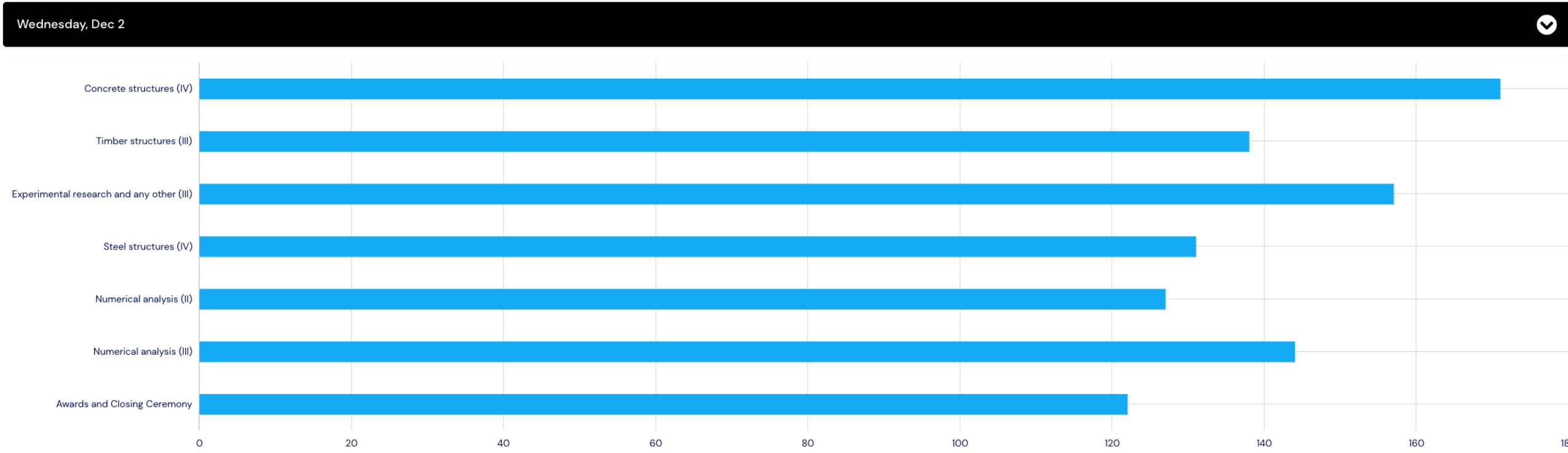
Numbers (right after the end of Day 4)



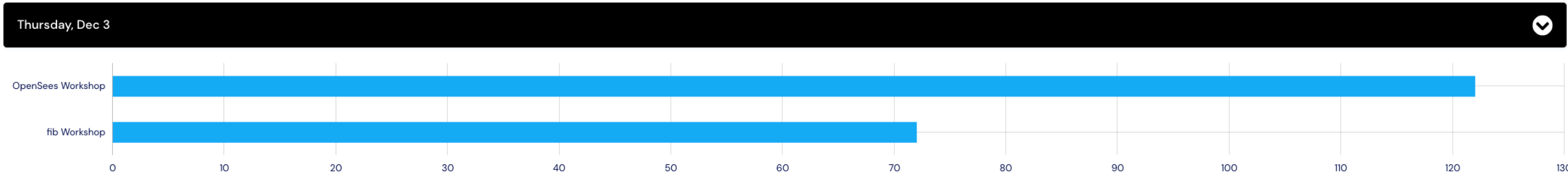
Numbers (right after the end of Day 4)



Numbers (right after the end of Day 4)



Numbers (right after the end of Day 4)



Global network *(41 countries)*

Australia
Austria
Belgium
Brazil
Cameroon
Canada
China
Colombia
Czech Republic
Denmark
Estonia
Finland
France
Germany
Hong Kong
Iceland
India
Iran
Ireland
Italy
Japan
Latvia
Macedonia
Malaysia
Netherlands
New Zealand
Norway
Poland
Portugal
Russia
Singapore
Slovenia
South Africa
South Korea
Spain
Sweden
Switzerland
Turkey
United Kingdom
United States
Vietnam

Structures in Fire 2020

Best Paper Awards

Journal of Structural Fire Engineering

Structures in Fire 2020

Best Student Paper Award

Runner-up

A static solver for hybrid fire simulation based on model reduction and dynamic relaxation

Patrick Covi, Giuseppe Abbiati, Nicola Tondini, Oreste Salvatore Bursi, Bozidar Stojadinovic

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Best Student Paper Award

1st place*

Developing real-time hybrid simulation to capture column buckling in a steel frame under fire

Ramla K Qureshi, Negar Elhami Khorasani, Mettupalayam Sivaselvan

* Price sponsored by the Journal of Structural Fire Engineering (£125 + three month free access to the journal)

Structures in Fire 2020

Best Paper Award

Runner-up

Fire fragility curves for steel pipe-racks exposed to localised fires

Jérôme Randaxhe, Olivier Vassart, Nicola Tondini

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Structures in Fire 2020

Best Paper Award

1st place*

Experimental study on fire resistance of a full-scale composite floor assembly in a two-story steel framed building

Lisa Choe, Selvarajah Ramesh, Xu Dai, Matthew Hoehler, Matthew Bundy

* Price sponsored by the Journal of Structural Fire Engineering (£125 + three month free access to the journal)

Structures in Fire 2020

Best Presentation Awards

International Association of Fire Safety Science (IAFSS)

Structures in Fire 2020

Best Student Presentation Award

Runner-up

Robust circle tracking for deflection measurements in structural fire experiments

Felix Wiesner and Luke Bisby

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Structures in Fire 2020

Best Student Presentation Award

1st place*

A practical tool for evaluating fire induced failure probability of steel columns designed based on U.S. prescriptive standards

Ramla Qureshi, Ruben Van Coile, Danny Hopkin, Thomas Gernay, Negar Elhami Khorasani

* Price sponsored by the International Association of Fire Safety Science (US$500)

Structures in Fire 2020

Best Presentation Award

Runner-up

A simplified representation of travelling fire development in large compartment using CFD analyses

Marion Charlier, Olivier Vassart, Xu Dai, Stephen Welch, Johan Sjöström, Johan Anderson, Ali Nadjai

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Structures in Fire 2020

Best Presentation Award

1st place*

Steel sheet piles exposed to fire experimental tests and numerical modelling

Jean-Marc Franssen and João Martins

* Price sponsored by the International Association of Fire Safety Science (US$500)

sif2020.com/workshops

One more day to go…Workshops!

OpenSees Workshop

Presentations (and discussions) on using OpenSees for the computational simulation of structures in fire.

Time (AEST)	Session	Speaker
20:00 - 20:45	Getting started and nonlinear analysis in OpenSees	Mhd Anwar Orabi
20:45 - 21:30	Using GiD for OpenSees and 3D thermo-mechanical analysis	Mhd Anwar Orabi
21:30 - 21:40	Short Break	
21:40 - 22:40	Heat transfer and Fire models in OpenSees, and coupling FDS and OpenSees	Aatif Alikhan and Mustesin Khan
22:40 - 22:50	Short Break	
22:50 - 23:30	DIY: Add your own code	Liming Jiang

sif2020.com/workshops

One more day to go…Workshops!

fib Workshop

Presentations (and discussions) on the progress of four new fib bulletins related to the fire design and assessment of concrete structures.

Time (AEST)	Session	Speaker
22:00 - 22:30	Performance-based fire design of concrete structures	Thomas Gernay
22:30 - 23:00	Fire-induced concrete spalling	Cristian Maluk
23:00 - 23:15	Break	
23:15 - 23:45	Fire resistance of concrete tunnels	Patrick Bamonte
23:45 - 00:15	Evaluation of concrete structures after fire	Ruben Van Coile

Thank you!

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Hopefully to host you in Brisbane next year…

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12th Asia-Oceania Symposium on Fire Science and Technology

6 - 10 December 2021

A.O.A.F.S.T.

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UQ Fire

Professor Jean-Marc Franssen

Head of the Steering Committee, Structures in Fire Movement