

# CONFERENCE PROGRAMME

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3rd International Conference on  
Flood Recovery, Innovation and Response



## FRIAR 2012

### ***NOTES TO CHAIRMEN AND PRESENTERS***

- *Chairmen must be in their respective rooms 10 minutes before the start of their session to meet with the presenting authors.*
- *Authors must meet with the Chairman of their session 10 minutes before the start of the session.*
- *Authors must keep strictly to the time allocated for their presentation to ensure the smooth running of the programme.*
- *This programme is subject to last-minute alterations, please refer to the conference noticeboard for the most up-to-date information.*

**30 May - 1 June 2012**  
**Dubrovnik, Croatia**

### **Organised by:**

Wessex Institute of Technology, UK  
Politecnico di Milano, Italy  
University of the West of England, UK

### **Sponsored by:**

WIT Transactions on Engineering Sciences  
WIT Transactions on Ecology and the Environment

### **Supported by:**

International Journal of Safety and Security Engineering

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FRIAR 2012

30 May - 1 June, Dubrovnik, Croatia



Wednesday 30 May 2012

08.40 **Conference Opening** Page number  
in proceedings

**Session 1:**

**Chairman: C. A. Brebbia**

- 09.00 **Keynote address by D. Proverbs**  
Reducing the impact of flooding by better understanding of vulnerability  
and responses in the built environment Oral
- 09.40 Cooperation between NGOs and State in the matter of flood risk  
management in the Czech Republic FR 15  
*J. Dostal*
- 10.05 Geophysical study and structural modelling of a mass movement in  
upper Austria DF 37  
*M.G. Schreilechner, C.G. Eichkitz & J. Amtmann*
- 10.30 Estimation of spatial soil distribution changed by debris flow using  
the topography restoration method Oral  
*H J Youn, K H Kim, C S Woo, C W Lee, K S Won*

**REFRESHMENT BREAK**

**Session 2**

**Chairman: W. Kociuba**

- 11.25 Riparian forest structure, vegetation cover, floods and sediment  
transport in the Piave River DF 137  
*L. Picco, L. Mao, E. Rigon, J. Moretto, D. Ravazzoo, F. Delai  
& M.A. Lenzi*
- 11.50 Assessing short term erosion-deposition processes of the Brenta  
River using LiDAR surveys DF 149  
*J. Moretto, F. Delai, E. Rigon, L. Picco, L. Mao & M.A. Lenzi*
- 12.15 Medium term fluvial island evolution in relation with floods events  
in the Piava River DF 16  
*L. Picco, L. Mao, E. Rigon, J. Moretto, D. Ravazzolo, F. Delai  
& M.A. Lenzi*
- 12.40 **Keynote address by R. Bloch:**  
Cities and Flooding: Integrated Urban Flood Risk Management for  
the 21st Century Oral

**Guided city tour around Dubrovnik followed by Conference Dinner  
END OF DAY 1**

Thursday 31 May 2012

**Session 3**

**Chairman: D. Proverbs**

- 09.00 **Invited:**  
Flood-risk assessment of the dense downtown in Fukuoka City  
*H. Hashimoto & Y. Nonaka* FR 41
- 09.40 Damage and loss prediction model considering inundation level,  
flow velocity and vulnerability of building types  
*H. Maiwald & J. Schwarz* FR 53
- 10.05 On-line early warnign system for evacuation of socially vulnerable  
population during flooding  
*D. Mioc, K.K. Moreri, J.N. Nkhwanana, F. Anton, B. Nikerson,  
E. McGillivray, A. Morton & P. Tang* FR 67

**REFRESHMENT BREAK**

**Session 4**

**Chairman: C. Brebbia**

- 11.00 **Invited:**  
Ontology for flood management: A proposal  
*D. De Wrachien, J. Garrido, S. Mambretti & I. Requena* DF 3
- 11.40 Debris Flow rainfall thresholds in Val Canale Valley: First steps into  
their redefinition  
*C. Calligari, L. Zini & F. Cucchi* FR 49
- 12.00 Structural strategies and measures reducing flood action on  
architectural heritage  
*M. Drdacky & Z. Slizkova* Oral
- 12.25 Coastal risk communication complementary components in theory  
and practice: information and education, participation and behavior  
*R. Ernsteins, S. Muceniece, M. Lubuze, S. Abelniece, A. Sturma  
& I. Zilniece* Oral

**LUNCH BREAK**

Thursday 31 May 2012

**Session 5: Special Session organised by J. Lamond (I)**

15.00 The role of solid waste management as a response to urban flood risk in developing countries, a case study analysis  
*J. Lamond, N. Bhattacharya & R. Bloch* FR 193

15.25 **Invited:**  
Factors for the design of novel property-level flood resilient products: the Dado Wallboard  
*D. Beddoes & C. Booth* FR 205

15.50 Towards the development of a comprehensive systematic quantification of the costs and benefits of property level flood risk adaptation  
*R. Joseph, D. Proverbs, J. Lamond & P. Wassell* FR 221

**REFRESHMENT BREAK**

**Session 6: Special Session organised by J. Lamond (II)**

16.45 'Three times in enemy action' - Flood experiences and flood perceptions  
*C. Rose, D. Proverbs, C. Booth & K. Manktelow* FR 233

17.10 A framework for participatory assessment of vulnerability of commercial property values to flooding in the UK  
*N. Bhattacharya, J. Lamond, D. Proverbs, F. Hammond & D. Searle* FR 243

17.35 Sustainable flood memories, informal knowledges and the development of community resilience to future flood risk  
*L. McEwen, F. Krause, O. Jones & J.G. Hansen* FR 253

**END OF DAY 2**

Friday 1 June 2012

**Session 7**

**Chairman: C. Booth**

- 09.00 **Keynote address:**  
Floods Emergency Management: The value of potential and actual damage estimation  
*D. Molinari, F. Ballio & A. Menoni* FR 155
- 09.40 Impacts and preventative measures against flooding and coastal erosion in Thailand  
*S. Pongpiachan, T. Settacharnwit, P. Chalangsut, P. Hirunyatrakul & I. Kittikoon* FR 167
- 10.05 Ice jams and backwaters, a hydrological risk phenomena. Case study: the Bistrita, upstream of the Izvorul Mutelui Reservoir (Romania)  
*G. Romanescu & O. Bounegru* FR 179

**REFRESHMENT BREAK**

**Session 8**

**Chairman: C. Brebbia**

- 11.00 **Invited:**  
A multivariate model for flood forecasting of lake levels  
*M. Mohssen* FR 121
- 11.40 Comparison of data-driven model and physical model for flood forecasting  
*J. Ji, C. Choi, M. Yu & J Yi* FR 133
- 12.00 Analysis of runoff variation according to subbasin division  
*M. Yu, C. Choi, J. Ji & J. Yi* FR 143
- 12.25 Case study: effects of urban sustainable development on floods in Grand Paris project  
*J. Anese, P. Rigaudiere & M. Billard* Oral
- 12.55 VIDEO "The Great East Japan Earthquake" presented by Dr. Hashimoto

**END OF FRIAR 2012**

We hope you have enjoyed the conference and look forward to seeing you at the next meeting in the series, have a safe and pleasant journey home.