

TIEMS 2019 Annual Conference Preliminary Program Overview

Keynotes & Submitted Abstracts & Workshops from 18 countries/Regions:
Norway, Korea, USA, Bosnia & Herzegovina, Croatia, Italy, Canada, China, South Africa,
Nigeria, Latvia, India, France, North Cyprus, Germany, Czech Republic, Singapore and
Australia.
08.09.2019

Keynote Speakers

1. K. Harald Drager, Norway,
“Emergency Management around the World - Challenges and Lessons Learned”
2. Dr. Sangseom Jeong; Korea,
“Adaptation technology of infrastructure under climate change”
3. Dr. Sangjun Im; Korea,
“Engineering Design Considerations for Small Debris-Flow Mitigation Structures”
4. Dr. Ja-Yeong Gu; Korea,
“Current status and tasks of marine disasters management in Korea”
5. Dr. Seok Hong Lee; Korea,
“Safety Issues in Construction Market Facing Industry 4.0.”
6. Mr. Mare Lo and Dr. Josef Leitmann; USA,
“Public Safety: The State of Civil Protection Around the World”
7. Bent - Ove Jamtli; Norway,
“Search and Rescue (SAR) in the Arctic, Status and Challenges”
8. Dr. Thomas Robertson, USA,
“Emergency Benefits and Risks of Artificial Intelligence”
9. Dalibor Drljaca; Bosnia and Herzegovina
“EU’s RTD Programs, and the Participation of Non-EU countries in RTD Proposals”
10. Tor - Helge Lyngstøl, Norway,
“Dependable and Satisfactory Systems for Critical Communication in a Future without Dedicated Networks?”
11. Dr. Guosheng Qu and Liu Weimin, China
“The New National Emergency Management Systems in China, its Focus, Experience so far, and Future Plans”

Submitted Abstracts

1	Snježana Knezić and Martina Baučić	Croatia	Social media based emergency decision support system
2	Sandro Bologna	Italy	A set of Good Practices and Recommendations for Smart City Resilience Engineering and Evaluation
3	Alex Fullick	Canada	Reduce Fear - Increase Resiliency
4	Jaewon Shim, Jiyoun Rhee, Taesun Chang and Nagyoun Kim	Korea	Simulation and Test on Explosion Resistance of Tunnel Lining Concrete using 3D-AUTODYN and Shock Tube
5	Bijia Zhang, Shufeng Xi, Yuyang Liu and Yuanyuan Jiao	China	Natural Disaster Prevention and Mitigation System Based on Disaster Investigation and Assessment
6	Jiyoun Rhee, Jaewon Shim, Taesun Chang and Nagyoun Kim	Korea	Fire Safety Plan at Occupation Areas under Bridge to Minimize Fire Damage on Bridge
7	Dai Quoc Tran, Minsoo Park, Vu Tuan Tran, Dae-Kyo Jung and Seunghee Park	Korea	A Survey on Machine Learning Approaches for Natural Disaster Management System
8	Ji Yoon Lee and Jung Eun Kang	Korea	Risk Assessment of sea level rise due to climate change using GIS: The case of Busan, Korea
9	Kim Dong Heon, Lim Sehun, Jeong Kyungok and Lee Dongeun	Korea	Applying the perspective of regional competitiveness of urban resilience A Study on Improvement of life safety Index
10	Ji Hye Ha and Jung Eun Kang	Korea	A study on Flood Prediction model in Busan Using Machine Learning
11	Vu Tuan Tran, Jihyun Lee, Junghyun Im, Dae-Kyo Jung and Seunghee Park	Korea	A conceptual framework for an intelligence natural disaster management system

12	Gi Hwan Kwon, Jeong Rim Oh, Young Jin Son, Jun Hyung Park and Min Jung Kim	Korea	A Study on the Professional Development Plan for disaster and safety management in Korea
13	Zhang Shifu, Xie Changhua, Mao Yuwen, Deng Xianyi, Zhang Dongmei and Li Cunjing	China	Development and application for mobile emergency drainage system in urban flood rescue
14	Zhang Shifu, Mao Yuwen, Xie Changhua and Hu Yongpan	China	First Response Mechanism and Support Technology in Highway Traffic Emergency Resume Process
15	Mao Yuwen, Hu Yongpan and Qin Tingxin	China	Development of disaster analysis and rescue treatment standard in plateau and ultra cold area of China
16	Hui Jiang, Guanqun Wen and Zhenxiong Wang	China	The influence of Conscientiousness on Team Performance among Emergency Rescue Teams: The role of Shared Mental Model, Shared Situation Awareness and Intrinsic motivation
17	Siviwe Shwababa, Rennifer Madondo and Roman Tandlich	South Africa	Assessing the impact of drought and wild fires among land reform beneficiaries farms in South Africa.
18	Roman Tandlich and Gbenga Morenikeji	South Africa and Nigeria	TIEMS in Africa: chapters and the way forward on the continent
19	Inese Barbare	Latvia	The impact of the project ONBOARDMED on development of study courses in maritime emergency management
20	Moonhyun Hong and Sangseom Jeong	Korea	Geodisaster-induced landslides and debris flows in Region scale area
21	Howard Mannella	USA	Built to be Blind: Managing Unforseeable Risk!

22	Howard Mannella	USA	FutureRisk: The Future is Not What It Used to Be! How to Manage the Unpredictable!
23	Yeon Woo Choi and Dong Keun Yoon	Korea	Accessibility vulnerability analysis of fire-fighting response service using network analysis in Seoul, Korea
24	Mijin Choo and Dong Keun Yoon	Korea	Examining the effects of community's social capital on disaster risk in Seoul, Korea
25	Yun Joo Lee, Ha Rim Kim, Soyeon Yoon and Dong Keun Yoon	Korea	Examining the disaster response system for the disabled in Korea
26	Woo Sik Kim and Dong Keun Yoon	Korea	Examining Factors Contributing to Crime Occurrence in Urban Areas, Korea
27	Bhaskara Rao Mulam	India	Mainstreaming Disaster Risk Reduction into Development in the SAARC Region: Need for Integration of DRR into Development Activities and Strengthen Knowledge Management
28	Kim Yong Moon and Lee Tae Shik	Korea	Evaluation of disaster resilience scorecard for the UN International Safety City Certification of Incheon city
29	Yong-Sang Choi, Hyesook Jeon, Kwonmin Lee, Yeseul Lee and Eun-Gyu Park	Korea	Study on the Effective Response for Disaster in Cambodia: Implications from Focus Group Interviews
30	Mannaioni A., Schaller P., Saint Jonsson A., Monet J.P.	France	International crisis management, how to evaluate the quality of interoperability? Definition of a methodology, study cases at national and international level.
31	Jaiho Oh, Mo-Ryang Hur, Ji-Won Oh, Hong-Hee Kim and Ji-Han Shim	Korea	Living Lab. in EDC: A Scientific Research Mesh Network for Future Disaster Management for Extreme

32	Yusuf Eker	North Cyprus	Disaster Emergency Services and Humanitarian Activities with the Goal of Disaster Resilient Society in Northern Cyprus, National Achievements, International Challenges and Obstacles
33	Gerald Walther	Germany	FIRE-IN: Fire and Rescue Innovation Network
34	Songyan Jin	China	Early geological disaster identification and assessment based on lidar technology
35	Jang-Gyeong Kim, Chang-Sam Jeong and Hyun-Han Kwon	Korea	A hierarchical Bayesian approach to the Neyman-Scott rectangular pulse model for a joint estimation of model parameters across stations
36	Namgyun Kim, Jaehwan Kwak and Man-Il Kim	Korea	Development of decision tree for response forest fire through the comparative case analysis of large wildfire
37	Hyungjun Park, Daejin Lee, Huiwon Yang and Junbeom Lee	Korea	Hyungjun Park, Daejin Lee, Huiwon Yang and Junbeom Lee
38	Kyung Tae Lee	Korea	Through analysis of domestic earthquake data Relationship between scale and epicenter damage
39	Chang Woo Lee, Sang- Hyeok Nam and Seonggon Kim	Korea	Practical use of geospatial data for extreme-temperature disaster response
40	Taeshik Lee and Yong-Moon Kim	Korea	A study on the Policy Direction of UNDRR International Safe City Certification
41	Jaroslav Pejcoch	Czech Republic	Pre-accident awareness made real

42	Phil Kyu Jung, Ji Yun Kim and Yung Il Yun	Korea	A Study on the Current Status and Method of Seismic Retrofit of Public Facilities in Gyeonggi-do
43	Seongyun Park, Gwangsun Shin and Sanghun Lee	Korea	Implication of Earthquake Disaster Prevention System in Japan to Mitigate Earthquake Damage in Korea
44	Dong Eun Lee, Ki Hoon Cho, Ho Jin Jang and Dong Heon Kim	Korea	A Study on the Evaluation of the Vulnerabilities in Climate Change
45	Se Noori	Korea	Discussions on "The Right for Security" in Korea - Constitutional Amendment Proposal by the Government and Interpretation of the Current Constitution
46	Soon-Joo Wang	Korea	New technologies in Emergency Situation: Focusing on Healthcare including Artificial Intelligence
47	Myoungsun Han	Korea	Installation of River Information display system
48	Bhaskara Rao Mulam	India	MDRR into Development in the SAARC Region: Need for Integration of DRR into Development Activities and Strengthen Knowledge Management
49	James Giles and Charles Du Plessis	Singapore and Australia	Training and Technology for a safer air environment

Workshops

- **Workshop 1:** Chaired by Dr. Yong Jai Lee, Korea

ICT Practices on Disaster management

Case Studies related to IoT/smart factory, Cloud service, Big Data analysis, A R/VR will be introduced. It is expected that 4-5 Korean companies will present. Q&A and Discussions

- **Workshop 2: Chaired by Dr. Sandro Bologna, Italy**

TIEMS International Certification - TQC

An update of the TQC concept, TQC functional requirements and implementation of TQC software platform - experience and further plans. Q&A and Discussions.

Workshop Program:

- Introduction to the Workshop and Needs for Certification
K. Harald Drager, Norway
 - TQC General Policy and Progress
Sandro Bologna, Italy
 - TQC Compliance and CV Minimum Requirements
Thomas Robertson, USA & Snježana Knezic, Croatia
 - TQC Examination Requirements and Procedures
Sandro Bologna, Italy
 - TQC Platform Requirements and State of Art Implementation
Sandro Bologna, Italy & K. Harald Drager, Norway
 - End User Expectations and Preliminary Considerations
Roman Tandlich, South Africa
 - Q&A and Discussions
 - Closing
- **Workshop 3: Chaired by Dr. Guosheng Qu, China**

Comprehensive Disaster Reduction, Preparedness, Emergency Response and Recovery

The workshop will address: Comprehensive Disaster Risk Assessment, Monitoring/Sensory and Early Warning for Comprehensive Disasters, Capacity Assessment of Emergency Preparedness of Comprehensive Disaster, Improvements of Regional Resilience, Emergency Response and Rescue: Capacity Buildings of Comprehensive Rescue for Various Disasters (Water/Flooding, Mountains, USARs, Aviation, Wildfire etc), Disaster Recovery.

- **Workshop 4: Chaired by Mr. Yang Wenlong and Dr. Zhang Qiang, China**

NGO Roles in Emergency Management and Platform for Coordination, and Techniques Courses System and Scenario Simulation Infrastructures for Education, Training and Exercise

The workshop will address: NGO Roles in Emergency Management and Platform for Coordination, Cases of NGO Roles in Disaster Management. Advanced Concepts and Developments of Emergency Management and Techniques, Emergency Management and Techniques Courses System, Scenario Simulation Infrastructures for Education, Training and Exercise, Education, Training and Exercise Courses for Emergency Management and Emergency Industry.

Panel Debate

“Improved future Emergency Communication through International Cooperation”

Panel Leader: Tor-Helge Lyngstøl, Norway

Panel Members: *Under Recruitment*