



TIEMS
The International Emergency Management Society

Welcome to

TIEMS 2019 Annual Conference

November 12 - 15, 2019
GOYANG, KOREA



Conference Host:
**TIEMS Korea Chapter jointly with the
Korean Society of Disaster & Security**

At

KINTEX
217-60 Kintex-ro, Ilsanseo-gu,
Goyang-si, Gyeonggi-do, Korea

http://www.kintex.com/client/eng/c070101/c070101_00.isp

In cooperation with

**TIEMS Korea Chapter jointly
with the Korean Society of Disaster & Security**

The Conference Motto is:

***Toward the Bright
Future of Safety***

Sponsors

Bronze



TIEMS 2019 Annual Conference Topics

In an interconnected and interdependent world, coordination and collaboration between cities, provincial, national, international agencies and non-governmental organizations have become critical to the promotion of disaster management, disaster risk reduction and climate change mitigation. The TIEMS 2019 Annual Conference will explore best practices and emerging technologies, to facilitate the coordination of valuable resources and urban planning strategies to build resilient communities.

The main topic is:

Toward the Bright Future of Safety

Presentations from International and Korean experts will provide valuable insights and the interactive workshops will create an exceptional opportunity to discuss national and international perspectives.

List of Topics (not limited to)

- Disaster Risk Reduction
- Climate change
- Education in crisis and emergency management
- Technology for first responders
- Volunteers in disaster relief and armed conflict zones
- Human factors and organizational aspects for disaster-resilient societies
- Best practices
- Standards & Certification
- Natural disaster analysis
- Environmental effect of disaster and emergency
- Health and welfare aspect of disaster and emergency
- Social and economic impact of disaster and emergency
- Emergency response
- Chemical, Biological, Radiological, Nuclear, and Explosive materials (CBRNE)

Call for Papers and Posters

Please, use the following link to submit an abstract for a Paper or Poster:

<https://easychair.org/conferences/?conf=tiems2019ac>

- Abstract submission: **September 1, 2019**
- Notification of acceptance: **September 15, 2019**
- Full paper submission: **October 15, 2019**

- Early bird registration: **September 15, 2019**

International Program Committee

- Conference Chair - **Kåre Harald DRAGER**, Professor, President of The International Emergency Management Society TIEMS (Norway)
- Co-chair - **Soon-Joo Wang**, Professor, Medical Doctor, Hallym University Medical Center (South Korea)
- **D.K. (Dong Keun) Yoon**, Associate Professor, Yonsei University, Department of Urban Planning and Engineering (South Korea)
- **Guosheng QU**, Professor and Director of S&T, National Earthquake Response Support Service (NERSS), Ministry of Emergency Management of P. R. China, and Vice President of TIEMS, and Expert of UNOCHA INSARAG (China)
- **Andre SAMBERG**, Professor of Practice, Head of TIEMS Mission to Ukraine (Finland)
- **Thomas ROBERTSON**, TIEMS Regional Director for North America
- **Jaroslav PEJCOCH**, Chairman of the Board of T-Soft a.s. (Czech Republic)
- **Sandro BOLOGNA**, TIEMS International Program Committee Chair, Past President of the Italian Association of Critical Infrastructure Experts AIIC (Italy)
- **Meen Bahadur Poudyal CHHETRI**, Professor, President of Nepal Center for Disaster Management and Director of the Department of Disaster Management of Dhading District, Under Secretary of the Ministry of Home Affairs, TIEMS Paper Review Committee Chair (Nepal)
- **Jean-Paul MONET**, Lieutenant-colonel, Head of Fire District, Chief of Division of Bouches-du-Rhône Fire Brigade (France)
- **Snježana KNEZIĆ**, Professor, University of Split, Faculty of Civil Engineering, Architecture and Geodesy (Croatia)
- **Young Jai LEE**, Professor, Dongguk University, and Principle Investigator of Global DRR Technology Platform (South Korea)
- **George MARKOWSKY**, Professor, Missouri University of Science and Technology, Chair of TIEMS Academy (USA)

Local Organizing Committee

- **Ji-Hyeob Ryu**, Professor, President of Hanlyo University, President of Korean Society of Disaster and Security
- **Soon-Joo Wang**, Professor, Medical Doctor, Hallym University Medical Center, Chairman of Local Organizing Committee of Korean Society of Disaster and Security
- **Gwonhyun Ko**, Professor, Dongyang University, Secretary General of Korean Society of Disaster and Security
- **Dong-Heon Kim**, Ph.D. President of Disaster Safety Institute, Scientific Program Committee of Korean Society of Disaster and Security

- **Chang-Sam Jeong**, Professor, Induk University, Department of Civil & Environmental Engineering, Scientific Program Committee of Korean Society of Disaster and Security
- **Kye-Won Jun**, Professor, Kangwon National University, General Management/Support Committee of Korean Society of Disaster and Security
- **Ho-Jin Lee**, Professor, Chungbuk National University, General Management/Support Committee of Korean Society of Disaster and Security
- **Moon-Se Lee**, Ph.D. National Forestry Cooperative Federation, Finance/Treasury Committee of Korean Society of Disaster and Security
- **Tae-Shik Lee**, Ph.D. External Cooperation/Public Relation Committee of Korean Society of Disaster and Security
- **D.K. (Dong Keun) Yoon**, Associate Professor, Yonsei University, Department of Urban Planning and Engineering, International Committee Chair of Korean Society of Disaster and Security

Publication

TIEMS 2019 Annual Conference presentations will be published in the TIEMS Open Access Proceedings on the TIEMS website, www.tiems.org. Selected papers will be invited for peer-review publishing in an international journal.

Preliminary Conference Program Overview

Tuesday 12 th November	Wednesday 13 th November	Thursday 14 th November	Friday 15 th November
Registration	Registration	Registration	Guided Tour
Welcome & Introduction of the Workshops	Welcome & Opening	Plenary Session 2 Keynote Speakers	
Workshop 1	Plenary Sessions 1 Keynote Speakers		
Coffee Break with visit to Posters & Exhibition			
Workshop 2	Technical Session 1	Technical Session 4	
	TIEMS Annual General Meeting		
Lunch with visit to Posters & Exhibition			Late Lunch
Workshop 3	Technical Session 2	Technical Session 5	Farewell
Coffee Break with visit to Posters & Exhibition			
Workshop 4	Technical Session 3	Summary & Conclusions	
Welcome Reception	Gala Dinner		

Keynote Speakers

Korean Keynote Speakers

- Dr. Sangseom Jeong, Korea; ***“Adaptation technology of infrastructure under climate change”***



Sangseom Jeong is a professor of Yonsei University, an immediately past president of Korean Geotechnical Society (KGS), a vice chair of TC212 (Deep foundations) in ISSMGE (International Society of Soil Mechanics and Geotechnical Engineering), a chair of Asian TC-18 (Mega Foundations), a president of GIT4CC center. The main field of expertise is mega foundation of long span bridges and high-rise buildings, LRFD, pile foundation, deep excavation, landslides, debris-flow and slope stability. He is a passionate researcher of pile, drilled shafts deep foundation, landslide assessment and innovative engineer with proven leadership in management of a wide variety of national and international projects.

He has authored and served as a reviewer for many geotechnical journals. He has co-edited 15 national geotechnical engineering text books and authored about 87 SCI articles in major reputable international journals, 140 national journals, 83 international conference papers, 80 technical consulting reports and 50 patents in deep and shallow foundations, excavation and landslides and debris flow.

- Dr. Sangjun Im, Korea; ***“Engineering Design Considerations for Small Debris-Flow Mitigation Structures”***



Dr. Sangjun IM is a professor of Department of Forest Sciences, Seoul National University, Korea. He has served as the advisory board member of Urban Biodiversity & Design (URBIO), deputy coordinate of International Consortium of Landslides (ICL) network, and division board member of International Union of Forest Research organizations (IUFRO). He also worked as vice president of Korean Society of Environmental Restoration Technology, and Korean Society of Forest Engineering.

The main interest of his research is the hydrologic and hydraulic processes of landslide and associated debris flow on forested terrain and steep torrents. He has served as a reviewer for many scientific journals, and also a member of editorial board for Landslides (Springer), Landscape Ecological Engineering (Springer) and other journals. He published about 40 articles in high indexed journal, 100 papers for journals, and delivered many presentations in international conferences on forest hydrology, landslide and debris flow, and forest influences.

- Dr. Ja-Yeong Gu, Korea; ***“Current status and tasks of marine disasters management in Korea”***



Gu, Ja Young, the current Commander of Central Region Korea Coast Guard Head-Quarters has served Korea Coast Guard for 22 years and have been entitled Commander of West Region Korea Coast Guard Head-Quarters, Chief of Pyeong-Taek and Po-Hang Korea Coast Guard Station. He also has served in major position at the Korea Coast Guard Head-Quarters as the Director General of Equipment & Technology Bureau, Director of Audit and Inspection Division, Korea Coast Guard Spokesman.

Completing education at Korea Maritime University, he is profound with maritime environment as well as achieving great knowledge in maritime shipping and logistics during his overseas study in Japan. He also has accumulated experience in various fields such as Planning, Performance management, Situation Plan and control and so forth. Gu, Ja young is a leader who has a reasonable organizational management philosophy and a person with a warm sensitivity whom enjoys solving numerous issues by proactive communication approach.

- Dr. Seok Hong Lee, Korea; ***“Safety Issues in Construction Market Facing Industry 4.0.”***



In January 2015, Dr. Seok Hong Lee was appointed to the position of CTO as a Senior Vice President for Hyundai E&C in Korea, after serving for nearly 20 years in the company. He has taken full control of R&D activities in Hyundai E&C since then. He leads the R&D Division not only in developing novel technologies but also building an R&D paradigm innovation system for creating sustainable and higher value. Marquis who’s who in the world has nominated him for construction technology development and contribution to the construction industry. Following upon the launch of the NTU-Hyundai Urban System Centre, supported by EDB, at Nanyang Technological University of Singapore in January 2016, his role was extended to the Chairman of the joint R&D centre. He has also served as a member of Industrial Advisory Board at NEWRI (Nanyang Environment & Water Research Institute) since March in 2019. He is also in pursuit of more R&D collaboration with Singapore government agencies such as JTC Corporation. In 2015, Presidential Medal for Industry was awarded to Dr. Lee by Korean government for great achievement in construction sector.

In October 1995, he commenced working for Advanced Material R&D Team in Hyundai E&C, and led the research on concrete, asphalt, road pavement and Intelligent Transport Systems for many years. In 2011 he became a Team Leader of R&D Planning

& Strategy Team. Whilst in the team he focused on business creation-type R&D activities, and laid the groundwork for innovative global R&D. At the beginning of 2013 he was transferred to Energy & Environment R&D Group, rising to the position of Director for the R&D Group's operations in the renewable energy, desalination and water & environment technology sectors.

International Keynote Speakers

- Mr. Mare Lo and Dr. Josef Leitmann, USA; ***“Public Safety: The State of Civil Protection Around the World”***



Mare Lo is a Senior Disaster Risk Management Specialist at the World Bank, GFDRR, the Resilient Recovery Team. He is leading many trusts funds dedicated to strengthening recovery systems, providing technical assistance and financial support for just-in-time post disaster assessments and recovery planning, and promoting knowledge creation and dissemination. He leads the WB global study on Civil Protection and contributes to new strategies to make recovery quicker, better coordinated, and more resilient.

He provides specialized cross-support to Global Practices and national country offices at the World Bank Group.

With over 20 years of national, regional and international experience, at managerial or advisory positions in various sectors, he is working at the forefront of developing proactive strategies, policies and innovative solutions related to resilience to disasters and climate change adaptation. He has demonstrated experience in the formulation and implementation of public policies and programs, institutional and legal framework related to disaster management and its linkages with the development processes.



Dr. Leitmann is Lead Disaster Risk Management Specialist at the World Bank, heading teams on Resilient Recovery and Urban Resilience at the Global Facility for Disaster Reduction and Recovery (GFDRR). He is also GFDRR's focal point for humanitarian and fragility/conflict issues. Previously, Joe spent four years managing the \$400 million Haiti Reconstruction Fund which supports post-earthquake recovery in partnership with the Government and the international community.

He also developed and managed the \$650 million Multi Donor Fund to help rebuild after the tsunami in Indonesia. Joe has over 30 years of development experience with the World Bank in disaster risk management, climate change, natural resource management, urban development, forestry, and clean energy. He has worked in over 40 countries and held long-term assignments in Turkey, Brazil, Indonesia, Haiti, and the South Pacific (the latter as a U.S. Peace Corps volunteer).

Dr. Leitmann holds a PhD in city and regional planning from UC Berkeley and a Master's from the Harvard Kennedy School. He is the author of a textbook on urban environmental management (*SUSTAINING CITIES*), co-author of *INVESTING IN URBAN RESILIENCE* and numerous articles.

- Bent - Ove Jamtli, Norway; *“Search and Rescue (SAR) in the Arctic, Status and Challenges”*



Bent - Ove Jamtli is General Director at Joint Rescue Coordination Centre North-Norway (JRCC NN) in Bodø, Norway since 2013. He has background from The Norwegian Airforce as a Fighter Controller, and several staff and command positions. His education covers; Royal Norwegian Airforce Academy 1983-1986; Royal Norwegian Forces Staff College 2003-2004; Royal Norwegian Defence University College, Executive Course 2011; Masters degree in Political Science, Nord university, Bodø, Norway 2012.

His career development is as follows: 1981-1993, several operational positions at operational and tactical level units. 1993-1994, United Nations Military Observer in Israel, Syria and Lebanon (UNTSO). 1994-1996, Staff officer Exercise planning, Air Operations Centre, Joint Defence Command North-Norway. 1996-2000, Search and Rescue Mission Coordinator (SMC) at Joint Rescue Coordination Centre (JRCC) North-Norway (Civilian Organization). 2000-2003, Staff officer Operations Analysis, NATO Air Component Command, Ramstein Germany. 2003-2007, Duty Controller (DC) NATO CAOC 3, Reitan, Norway. 2006, Chief Current Operations Air, ISAF, TAO, Kabul, Afghanistan. 2007-2011, Deputy Commander and Chief of Staff at Bodø Fighter Airbase. 2011-2013, Chief Current Operations J3 Air, Norwegian National Military Joint Operational Headquarters, Reitan, Bodø. 2018-2023, Project Coordinator for ARCSAR www.arcsar.eu.

- Dr. Thomas Robertson, USA; *“Emergency Benefits and Risks of Artificial Intelligence”*



Thomas Robertson is TIEMS Director for North America and Principal of the consulting practice Thinking Teams, which specializes in harmonizing artificial and natural intelligence. He has published and presented numerous papers on risk communication during emergencies, disaster risk reduction, virtual simulation in emergency management, pandemic response, climate change resilience, and applications of advanced technologies in the US, France, Italy, China, Japan, Belgium, Greece, Ukraine, Saudi Arabia, and the Philippines. He is visiting faculty at Écoles des Mines d'Alès Master's program in Disaster Management and Environmental Impact Studies, a European Innovation Council Expert, and a Senior Life Member of the Institute of Electrical and Electronic Engineers.

In past he has performed and led research in bioengineering, artificial intelligence, image processing, simulation, and advanced computing at Bell Laboratories, The Analytic

Sciences Corporation, Lockheed Martin, Atlantic Aerospace, and BAE Systems. He has held the positions of researcher, Chief Scientist, Program Manager, Director of Engineering, and Vice President/General Manager. Dr. Robertson holds BS, MS, and Ph.D. degrees from Purdue University's School of Electrical Engineering.

- Dalibor Drljaca, Bosnia & Herzegovina; ***“EU’s RTD Programs, and the Participation of Non-EU countries in RTD Proposals”***



Dalibor Drljaca is MSc in Information Technologies and PhD student. Working as the business consultant in Europrojekt centar Banja Luka in Bosnia and Herzegovina Mr Drljaca organized and participated in dozens of different training sessions and workshops related to the project management and management of the EU funded projects. Since 1996 he implemented dozens of EU and other international projects (The World Bank, SIDA, JICA...).

As a senior teaching assistant is part-time engaged on subjects related to development of the information systems. He published more than 30 research papers on conferences and in journals related to the information systems of the public administration, which is his area of research interest.

Since 2008 Mr Drljaca represents Bosnia and Herzegovina in EU Framework programs as a National Contact Point (NPC) and a Program Committee Member and since 2017 also as a member of two ERAC Steering working groups.

During last two years, Mr Drljaca was engaged in several occasions by the International Cooperation Service Facility of the European Commission for training missions on Horizon2020 program in ASEAN countries. Most recent one was in July 2019 when he organized and implemented training sessions in Jakarta, Bali and Manila on “How to write successful H2020 proposal” where the main working topic was Disaster Resilience Society call SU-DRS01-2018-2019-2020.

- Tor - Helge Lyngstøl, Norway; ***“Dependable and Satisfactory Systems for Critical Communication in a Future without Dedicated Networks?”***



Tor Helge Lyngstøl (MSc) was responsible for conducting all activities related to realisation of the nationwide TETRA-based mobile communication system Nødnett in Norway, including preparations for political decisions. It took 20 years from the first initiative until full operation all over the country in 2015.

The system covers 86% of the land mass. It delivers full air-ground-air communication and coverage inside close to 400 road tunnels. Mobile

base stations with satellite links are available. Nødnett is connected to the TETRA networks in Sweden and Finland.

Nødnett is a major state investment in public safety. It is the number one collaboration tool for Norwegian preparedness. The police, the fire department and the public health services are the primary users of Nødnett. It serves 1000 organisations and 52,000 users.

The Norwegian Directorate for Civil Protection (DSB), a state body under the Norwegian Ministry of Justice and Public Security shall ensure good emergency preparedness in society and be a driving force in the State's efforts to prevent accidents, crises and other unwanted incidents. DSB is responsible for Nødnett.

Lyngstøl is now responsible for DSB's work to ensure that Public Protection and Disaster Relief organisations in Norway will get access to robust and secure mobile broadband when Nødnett is turned off. A concept study with recommendations shall be delivered to the Government by June 2020.

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, AR/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.

Detailed 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
 - 16:00 End user expectations and preliminary considerations
Roman Tandlich, South Africa
 - Q&A and Discussions
- **Workshop 3: Chaired by Dr. Guosehng 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**

Emergency Management and Techniques Courses System and Scenario Simulation Infrastructures for Education, Training and Exercise

The workshop will address: 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.

Venue

KINTEX
217-60 Kintex-ro, Ilsanseo-gu, Goyang-si, Gyeonggi-do, Korea

http://www.kintex.com/client/_eng/c070101/c070101_00.jsp

Contact

Conference questions should be e-mailed to: D.K. Yoon at dkyoon@yonsei.ac.kr

Exhibition

The international emergency management industries are welcome to exhibit their products, systems and solutions for improved resilience, and arrange local workshops for demonstrations.

Registration and Payment

TIEMS 2019 Annual Conference Registration Fees

Registration Type	Early Bird Until September 15 th 2019	September 16 th - November 12 th , 2019	On registration
TIEMS Member	200 USD	250 USD	300 USD
Non TIEMS Member	250 USD	300 USD	350 USD
Government/Military/NGO	150 USD	200 USD	250 USD
Active Student	100 USD	125 USD	150 USD
Korean Local Resident	100,000 KRW	125,000 KRW	150,000 KRW
Exhibition Space (6 m ²) ¹	1500 USD	1500 USD	1500 USD

1. Exhibition Space Registration includes one full personnel registration
2. Registration fee includes one year TIEMS membership fee
3. No refund of registration fee after October 1st 2019
4. Registration fee includes access to the full conference program, lunch and coffee every day, social events, gala dinner, tour, conference paper program and conference proceedings on an USB
5. Volunteer options are available!

There will be arranged a TIEMS Gala Dinner on Wednesday 13th November 2019, and more details of this event will be given shortly. TIEMS accepts payment with PayPal, Credit Cards (Visa, Master Card and American Express) and Bank Transfer to TIEMS Account.

Please, use the following link for registration and payment:

<http://www.tiems.info/index.php/events-reg-pay/tiems-2019-annual-conference>

SPONSORS

TIEMS 2019 BRONZE SPONSOR



<http://m.dorapower.com.cn/>

Beijing Dorapower Company was established in November 2014 by its founders including experts for emergency management industry, famous cultural producers of the entertainment industry and MBA graduates from renowned universities in China. As the production base of the *Film, TV, Audio and Video Center of the China National School of Administration*, the project taker of the “Future School 2030” initiated by the *Ministry of Education of PRC* and the National-level Safety Education Training Base for Primary and Middle School Students of China, the company has actively developed the safety education series products of stage plays, short movies and movies for primary and middle school students called “A+CCDRR” (Art + Child-Centered Disaster Risk Reduction).

Dorapower has served more than 2,000 elementary and middle schools in China and aims to be the leading company in the campus safety-education company in China.



Further Sponsors are Welcome!

See below for sponsor levels and benefits!

TIEMS 2019 SPONSORSHIP PACKAGES

Enhance your business exposure and on-site awareness with one of our following sponsorship packages:

SPONSOR LEVEL	Bronze 2,000 USD	Silver 4,000 USD	Gold 6,000 USD
SPONSOR BENEFITS			
Recognition on Conference Program and Pre-conference Announcements	X	X	X
Recognition in TIEMS Newsletter (4 issues per year)	X	X	X
Recognition on TIEMS web site (for 12 months)		X	X
Recognition on TIEMS Conference web- site for 6 months (Preceding the Conference)		X	X
One quarter page Advertisement Space in TIEMS Newsletter (4 issues per year)	X		
One half page Advertisement Space in TIEMS Newsletter (4 issues per year)		X	
One page Advertisement Space in TIEMS Newsletter (4 issues per year)			X
Sponsor insert in Participant Handout/Bag at Conference		X	X
One Exhibition Space for Presentations at Conferences	X	X	X
One Sponsor-provided Banner at Conference			X
One Complementary Registration*) at TIEMS Annual Conference	X		
Two Complementary Registrations*) at TIEMS Annual Conference		X	
Three Complementary Registrations*) at TIEMS Annual Conference			X

For interest, please, contact TIEMS President: khdrager@online.no
or conference Host: D.K. Yoon at dkyoon@yonsei.ac.kr

HOTELS

The MVL hotel is located very close to the conference venue, KINTEX, see below link:

<https://www.mvlhotel.com/daemyung.mvl.goyang.eng.main.ds/dmparse.dm>

The Korean chapter will ask the hotel to reserve a block of rooms for conference participants.

KINTEX provides some additional accommodation information in Seoul in their website.

http://www.kintex.com/client/eng/c040201/c040201_01.jsp

But most hotels are not located close to KINTEX except the MVL Hotel.

However, there are many local hotels near KINTEX less than 100 US\$ per night

More information will be given later.

TIEMS/KOREAN HOST SECRETARIAT

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