



**G-COE Members of Tokyo University of Science (TUS), Japan**

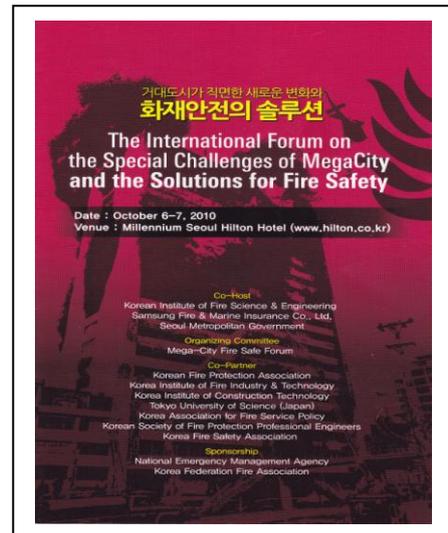
at

**The International Forum on the Special Challenges of Mega City and the Solutions for Fire Safety**

October 6-7, 2010. Seoul, South Korea

**Introduction:**

“The International Forum on the Special Challenges of Mega City and the Solutions for Fire Safety” was held at Millennium Seoul Hilton Hotel on last October 6-7, 2010 in Seoul, South Korea. The main purpose of this Forum was to exchange and share the latest knowledge, skill, technology and research output of several international experts on fire phenomena as the fire risks of the world specially in the Asian Mega Cities is increasing very rapidly with the markedly acceleration of the transformation of the human society.



**Schedule of the International Forum:**

It was 02 days forum where experts from various fields associated with fire safety throughout the world presented their views and experiences on almost **21 Topics**. The forum was divided into **05 sessions** such as: Fire Protection of High-Rise Spaces, Fire Protection of Multi-Use Buildings, The Role of Fire Service in Megacities & Strategy for Competitiveness Enhancement, Cases: Development of New Fire Protection Technologies under Academy-Industry Cooperation & Advancement Direction of Industry, Technology & Manpower in the Field of Fire Protection.



**Contribution of G-COE Members of Tokyo University of Science (TUS), Japan:**

Being recognized as one of the most renowned and experienced on the research on Fire Science & Technology in the world especially in the East Asia, the members of Global COE Program of Tokyo University of Science (TUS), Japan, also highly contributed in this International Forum. The experienced Professors of Graduate School of Fire Science & Technology of Tokyo University of Science (TUS), enriched the sessions by sharing their invaluable knowledge on

fire safety. There were 03 presentations on behalf of Global COE Program of Tokyo University of Science (TUS), Japan as mentioned below:



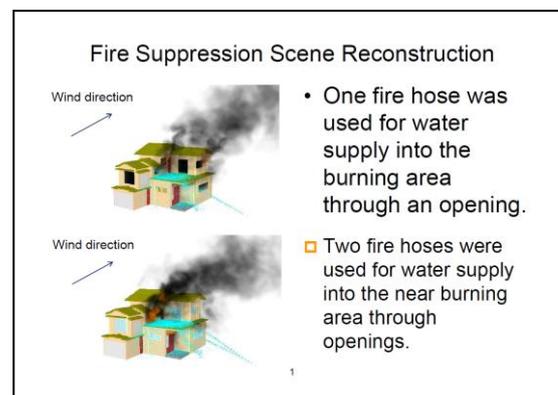
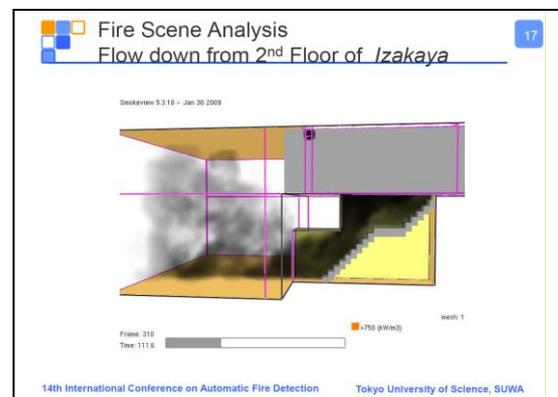
**Professor Ai Sekizawa, Dr. Eng.** of

Tokyo University of Science & *President of Japan Association for Fire Science and Engineering*, shared his invaluable knowledge on the “ **Comprehensive Disaster Mitigation Measures for a Group of Large-scale Buildings** ”. Since, now-a-days high-rise buildings are taking place at faster rate and consequently the fire risk is also accelerating vigorously, he shared the fire safety aspects of some mentionable large-scale building areas such as: **Tokyo Midtown, Harumi Toriton Square** etc. He briefly emphasized on the comprehensive disaster mitigation measures for proper urbanization which have great impact on the fire safety.



**Professor Osami Sugawa** of Tokyo

University of Science, Suwa Campus, presented his invaluable knowledge on the “ **Reconstructing Fire Scenes using the Fire Dynamics Simulator (FDS) for Complex Building Fires** ”. In his presentation, he discussed all the aspects of the use of FDS and emphasized that the FDS can be used to estimate the fire damage and fire fighting/suppression strategy before the fire takes place to any infrastructure by which the necessary measures might be taken for effective fire safety. Moreover, as an expert on Fire Investigation, he also discussed the importance of the use of FDS as a tool by which the estimation can be done on how the fire initialized and developed after fire for proper investigation and strengthens of future fire safety.





**Professor Kobayashi Kyoichi, Dr.**

**Eng.** of Tokyo University of Science, presented his invaluable knowledge and experience on the “ *Some Cases of Multi-Tenant Building Fires in Japan and Fire Safety Measures* ”. Since the past cases of fires may give us important lessons, he discussed the real experiences of previous critical fires occurred in Japan like *Shinjuku Multi-Tenant Fire*. By sharing some real experiences of fire incidents, he emphasized on some of the realistic fire safety measures which need to be taken in case of fire disaster. He also shared details database on the current trend of fire incidents for last few decades in Japan. Being an ex-administrator and specialists on fire legislation making, he addressed the common issues of fire safety of the society.



**釜山市室内射撃場火災**

- 2009年11月14日発生 死者15人
- 韓国釜山市の繁華街「国際市場」にある雑居ビルの2階
- 密閉性、遮音性が高く、避難ルートが一つ  
→雑居ビルの典型的な火災危険性を有する

All the presentations made by the G-COE members of Tokyo University of Science (TUS), Japan, were highly appreciated by the audiences of the forum and considered to be effective for future fire safety issues.



As one of the purposes of G-COE Program is *The Promotion of International Exchange*, one of the renowned **Professor Makoto Tsujimoto, Dr. Eng.** of Tokyo University of Science (TUS), Japan & member of G-COE also attended this International Forum. His active participation under International Personnel Exchange was found highly effective for the strengthen of fire safety.

**Mr. Muhammad Mamun**, one of the promising international students of Tokyo University of Science (TUS), Japan, under the Masters Course in Fire Science & Technology also attended this International Forum to enhance his academic knowledge and to be acquainted with the current advancement of knowledge and skill on fire safety issues in the world. As part of his Masters Course, he enriched his knowledge on modern trend of fire safety which will have a great impact on the strengthen of human resource development through the personal exchange program under G-COE program of TUS.



## Other Activities:

Besides the above mentioned presentations made by all presenters, there were *“Panel Discussion along with Suggestions from Various Fields”*, *“Tour of Seoul Metropolitan Fire Service Headquarters”* and *“Open Discussion with Fire Professionals of South Korea”* which had a great impact on the update of Fire Safety Issues.



## Conclusions:

The drastic modernization and technological enhancement of the world especially in the East Asia is possessing a great impact on the fire risks of the human society specially in the mega cities/urban areas. This kind of international forum provides great opportunity to exchange modern and recent research output and share key factors related to fire safety. The attendance of G-COE members of TUS will certainly strengthen the fire safety to meet the challenge of the 21<sup>st</sup> century.