

# Technology and disaster management education

## for “adult” テクノロジーと“大人の”防災教育

Institute of Industrial Science, The University of Tokyo

東京大学生産技術研究所

### Session schedule

11/11 MON  
15:30-17:00

Session Venue : 萩  
Session no : 02-14

In this session, we would like to discuss about disaster management education for adults in the future. There are various initiatives for disaster management education for children, but as technology and digital content with experiences such as VR are developing, we would like to reconsider how disaster management education should be for adults in the point of long-term perspective.

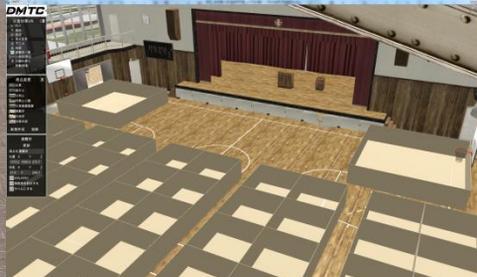
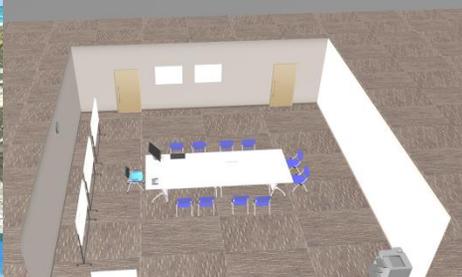
Eight years have passed since the 2011 Great East Japan Earthquake disaster, but inefficient responses have been carried out in recent disaster fields due to the lack of basic knowledge on disaster management and no-experience/ no- physical training in basic operations. According to the percentage of entrants to short-term higher education institutions over 25 years old (OECD, 2014), the average of OECD is 37.4%, while Japan is only 4.6%. Although there are factors such as difficulty in making study time and insufficient educational environment for adults, normally “general adults” will stop studying after starting their business.

Currently, various educational methods such as active learning, STEM education, and recurrent education are starting, and advanced technologies and rich digital contents such as VR and e-learning have been developed. In this situation, we want to discuss what kinds of educational system are suitable for adults to enhance creativity, judgment, problem solving, and execution capacities.

本セッションは、未来の大人に対する防災教育を議論したい。子供に対する防災教育は様々な取り組みがあるが、VRなど体験を伴うテクノロジーやデジタルコンテンツが発展してきている中、中長期的な視点で、大人に対する防災教育の在り方を再考したい。

東日本大震災から8年が経過するが、近年の災害現場において、災害対策に関する基本知識の欠如、基本動作の未体験などにより非効率な対応が目立つ。25歳以上の短期高等教育機関への入学者割合（OECD、2014）によると、OECD平均が37.4%に対して、日本は4.6%しかない。“社会人”になったら勉強時間の確保が難しい、大人に対する不十分な教育環境などの要因はあるが、“大人の私たち”は勉強を止めてしまう。

現在、アクティブラーニング、STEM教育、リカレント教育など様々な教育メソッドが試行錯誤され、VRやEラーニングなどの豊富なテクノロジーやデジタルコンテンツが発展している。このような中で、大人の私たちは、自発的に過去の教訓を“学び直し”、創造力、判断力、問題解決力、実行力を高めるために、どのような人材育成の仕組みを構築していくのかを議論したい。



## Speaker

**Sayaka YODA** is a Program Officer at the Tokyo Disaster Risk Management Hub, supporting teams working on integrated urban flood risk management, safer schools, resilient rails and transport programs, and knowledge management. Previously, Sayaka worked with local governments in the Asia Pacific Region on city-to-city cooperation projects in the urban setting to improve resiliency of cities. Previously, she also taught sustainable architecture and urban planning as a visiting professor at Tecnológico de Monterrey in Toluca, Mexico. In that role, she collaborated with the local government and communities on projects in tourism, city branding and green roofs.



依田さやか 世界銀行東京防災ハブ プログラム・オフィサー

大学院修了後、日本の民間企業での勤務を経て、メキシコ、モンテレー工科大学で客員講師として持続可能な建築デザインと都市計画の講義を担当。大学では観光、都市のブランディング、屋上緑化等のテーマで自治体やコミュニティと共同でプロジェクトに従事。その後、アジア太平洋地域において、都市の強靱性の向上を目的とした都市間協力プロジェクトに従事。防災ハブでは、都市における統合的洪水リスク管理、災害に強い学校づくり、建築規制を活用した防災チームの支援とナレッジマネジメントを担当。2018年より現職。



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## Speaker

### Kimiro MEGURO (Ph.D)



Professor,  
Institute of Industrial Science, the University of Tokyo

Dr. Kimiro MEGURO is a Director and Professor of ICUS, established in April 2001 at the Institute of Industrial Institute (IIS), the University of Tokyo (UTokyo) and a President of Japan Association of Earthquake Engineering (JAEE). After receiving his Ph.D. degree from UTokyo in 1991, he joined International Center for Disaster-Mitigation Engineering (INCEDE) as one of the founding members. ICUS is a successor research center of INCEDE.

### Muneyoshi NUMADA (Ph.D)

Associate Professor,  
Institute of Industrial Science, the University of Tokyo

Dr. Muneyoshi NUMADA researches the disaster management process engineering. The process approach is very important to understand the comprehensive/ diverse disaster activities as for the standard operation procedure of disaster management. The 48 kinds of 500 disaster management processes which were analyzed the whole process of disaster response are defined by the field research of past responses.



DMTC and the World Bank Tokyo Office cooperate to provide disaster response training for government officials in charge of disaster prevention.

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