



Kaken Symposium, IIS, UTokyo

# Advanced Mobility Systems with Alternative Fuel Vehicles —Critical Path to Install AFV Infrastructures—

Monday, December 10th, 2018, from 03:00 to 06:10 PM  
in Presentation Room, S-building  
Institute of Industrial Science  
The University of Tokyo

## [Purpose]

In recent years, several countries have announced plans to ban the sale of any new fossil-fuel automobiles by 2040, and the shift to Electric Vehicles (EVs) or Hydrogen Fuel Cell Electric Vehicles (FCEVs) has become a global trend. In transitioning to such Alternative Fuel Vehicles (AFVs), it is essential to discuss not only from a macro viewpoint of energy policies and strengthening international competitiveness but also from the end user's views such as cost burden and infrastructure usabilities. In this symposium, we focus on the “spatial structure” of future transportation, and aim to clarify critical path (important path) to achieve more sustainable mobility system. We will develop multilateral discussions from optimization, traffic policy implementation, and ITS.

## [Schedule]

03:00- Opening Remarks

03:10- Keynote Lecture: Node-based vs. Path-based Planning for the Initial Roll-out of  
Alternative-Fuel Stations  
—Evidence from Optimization Models and Survey Research—

Dr. Michael Kuby (Professor, Arizona State University)

03:55- Lecture 1: Spatial Structure of Infrastructure Developments for Alternative-Fuel Vehicles

Dr. Yudai Honma (Associate Professor, ICUS, IIS, UTokyo)

20-minute Break

04:50- Lecture 2: Social Needs of Electric Vehicles and Several Examples in Practical Fields

Dr. Koichi Sakai (Associate Professor, ITS Center, IIS, UTokyo)

05:25- Lecture 3: Issues for Next Generation Transport Systems Management

Dr. Takashi Oguchi (Professor, Director of ITS Center, IIS, UTokyo)

06:00- Closing Remarks

## [Organizer]

Y.Honma Laboratory and Advanced Mobility Research Center (ITS Center)  
Institute of Industrial Science  
The University of Tokyo  
c/o Honma Lab. (honmalab@iis.u-tokyo.ac.jp)

## [Biography]

### Michael Kuby

Professor, Arizona State University

Michael Kuby is a professor of geographical sciences and urban planning at Arizona State University, where he has taught since 1988. He specializes in transportation, energy, optimal facility location and network design models, and alternative fuels, stations, vehicles, and drivers. His research has been funded by the National Science Foundation, U.S. Department of Energy, World Bank, U.S. Army Corps of Engineers, and NASA. He is lead author of the interactive textbook, "Human Geography in Action," published by John Wiley & Sons, and co-editor of the 2009 and 2015 "Arizona Town Hall background reports on Transportation." Kuby was a lead author the Transportation chapter in the National Climate Assessment (2014). He serves on the editorial boards of the Journal of Transport Geography and the International Regional Science Review, and previously served as chair and secretary/treasurer of the Transportation Geography Specialty Group of the Association of American Geographers. He has received Edward L. Ullman Award for Significant Contributions to Transportation Geography, Transportation Geography Specialty Group, Association of American Geographers, 2016.