CALL FOR PAPERS

In complex urban areas mixed traffic consists of various users, including motor vehicles, motorcycles, scooters, bicycles, and pedestrians, which causes numerous problems not only in traffic operation but also in traffic safety. Combined with roadways with complex features and/or inclement weather, this kind of mixed traffic flow environment can cause difficulty for drivers in making the right choices and decisions within a given time. These problems have attracted more and more attention in the transportation research field.

Furthermore, with the rapid development of autonomous driving, an emerging type of mixed traffic flow with manual driving and connected/autonomous vehicles has also arisen. In such an environment, more studies are needed to tackle the questions of traffic safety, drivers' behavior, and facility sustainability for this different traffic environment. Intelligent transportation systems and driving assistance systems could potential solutions to improve safety, behavior, and sustainability under this mixed traffic flow environment.

The proposed special issue aims to compile recent studies particularly related to three topics—traffic safety, driving behavior, and sustainability—under the mixed traffic flow environment. Original research and review articles related to the influence of a mixed traffic flow environment will be considered. All aspects of statistical analyses, machine learning, driving simulator experiments, and naturalistic driving experiments are of interest. We also welcome submissions with a focus on field tests or surveys, to better understand the interactions between the mixed traffic flow environment and driver behavior considering traffic safety and sustainability.

Potential topics include but are not limited to the following:

- Crash risk assessment under the mixed traffic flow environment

- Drivers' behavior under the mixed traffic flow environment

- Facility sustainability and optimal design under the mixed traffic flow environment

- Data analysis, modeling, and simulation studies on the mixed traffic flow environment

- Driver simulators and naturalistic driving experiments under the mixed traffic flow environment

- The effect of intelligent and connected vehicle (ICV) on the mixed traffic flow environment

- Evaluation of driving assistance systems in the mixed traffic flow environment

- Analysis of traffic safety and/or operation under the mixed traffic flow environment with complex features or under inclement weather

- Investigation of safety of vulnerable road users (e.g., motorcyclists, scooters, bicycles, and pedestrians) in the mixed traffic flow environment

- Novel urban planning strategies for maintaining sustainability under the mixed traffic flow environment of the future

Authors can submit their manuscripts through the Manuscript Tracking System at https://mts.hindawi.com/submit/journals/jat/sbsmt/.

Papers are published upon acceptance, regardless of the Special Issue publication date.

Lead Guest Editor
Feng Chen, Tongji University, Shanghai, China
fengchen@tongji.edu.cn

Guest Editors
Jaeyoung Lee, University of Central Florida, Orlando, USA
jaeyoung@knights.ucf.edu

Young-Ji Byon, Khalifa University of Science and Technology, Abu Dhabi, UAE
youngji.byon@ku.ac.ae

Qiang Zeng, South China University of Technology, Guangzhou, China
zengqiang@scut.edu.cn

Submission Deadline
Friday, 3 January 2020

Publication Date
May 2020