

■Date: August 17<sup>th</sup>, Thursday 2017, 15:00-16:30  
■Venue: IDEC Large Conference Room,  
Hiroshima University

## The 114<sup>th</sup> Taoyaka Program Seminar

# STUDIES ON ENERGY SAVING AND EMISSION REDUCTION BASED ON MODAL SHIFT IN THE FIELD OF TRANSPORTATION

Prof. Zhongzhen YANG, Transportation Management  
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Since 1995, in line with Kyoto Protocol, researchers in the transportation field have taken the pollutant emissions into account in their studies. In addition to technology innovations, the most two common ideas concerning transportation planning and management are 1) modal shift, namely controlling for the car travel and increasing transit travel or encouraging the environmental friendly travel modes such as shipping transportation; 2) land use pattern optimization, namely locating the economic or industrial activities as the way that can reduce the travel demands, such as TOD or Compact City.

Prof. Yang will introduce his studies, focusing on the first aspect. One is how to design a Coastal Shipping Services network to attract more freight transport with an aim to reduce carbon mission with the help of governmental Subsidy. The second is how to collaboratively use truck fleets and bus-transit vehicles to deliver parcels to decreasing the CO<sub>2</sub> emissions. And the last one is the determination of car ownership level for a sustainability urban environment in a city.

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