

## **Gas Kinetics and Sustainable Mobility**

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The provision of mobility which is sustainable in every sense of the word (environmental, economic, and social) is a major challenge facing society. This talk will describe the contribution of gas kinetics research to progress made in reducing the vehicle contribution to local air quality and stratospheric ozone issues and the current challenge posed by climate change. The potential roles of advanced gasoline/diesel internal combustion engine vehicles (ICEV), hybrid electric vehicles (HEV), plug-in hybrid electric vehicles (PHEV), hydrogen internal combustion vehicles (H<sub>2</sub>ICE), hydrogen fuel cell vehicles (H<sub>2</sub>FCV) and gasoline, diesel, biofuel, electricity and hydrogen fuels in providing future personal mobility will be discussed.