



# ME Seminar



## Recent Research in the Green Engines Lab of RMIT University, Australia

**Dr Petros Lappas, RMIT University-Australia**

### ABSTRACT

Dr Lappas will present key research developments that have taken place in the Aerosol & Green Engines Lab of RMIT University in Melbourne, Australia. Topics covered will include optical measurements of flow structures downstream from gaseous fuel injectors, various measurements from engines using a range of gaseous fuel injection strategies and the development of a Shock Tube and Constant Volume Combustion Chamber.

### ABOUT THE SPEAKER



Petros Lappas has a Ph.D. degree in Mechanical Engineering from the University of British Columbia, Canada. Since completing his Ph.D. in 2003 he has worked as a Research Scientist at NRCan in Ottawa, Canada and as a post-doctoral researcher at the High Temperature Gas Dynamics Laboratory at Stanford University, U.S.A. A key component of his research experience is the measurement of quantities such as flow velocity, temperature and chemical composition using optical systems. His research interests include:

- Improving thermal efficiency of internal combustion engines
- Laser diagnostics of flow and combustion (e.g., PIV, LDV, spectroscopy, flow visualization, CARS and PLIF)
- Aerosols and two-phase flow
- Solar fuels
- Combustion characterization using Shock Tubes and Constant Volume Combustion Chambers

**November 17, 2023 (Friday)  
4:00 PM, A.R. Auditorium**