Journal of Combustion

Special Issue on

Combustion Noise and Instability in Gas Turbines, Rockets, and IC Engines

CALL FOR PAPERS

Combustion is essential to the world's energy generation and transport needs. Mitigating its impact on the climate and human health, by reducing its associated emissions, is thus a priority.

Combustion noise and instability are becoming increasingly important as major challenges in aeroengines, ground based gas turbines, and rockets as well as diesel engines. This is mainly because next generation combustion devices will be operated under more unsteady combustion conditions, resulting in increased combustion instability and external noise from the combustion.

In the recent literature, many significant contributions to both combustion noise and instability contexts have been provided by several authors. This special issue aims at creating a multidisciplinary forum of discussion on recent advances in studying noise and instability problems from combustion system and in developing reliable active control strategies for their suppression. The accepted papers will show a diversity of new developments in these areas. This issue accepts high quality articles containing original research results as well as review articles of exceptional merit, and it will let the readers of this journal know more about this fundamental area of combustion.

Potential topics include but are not limited to the following:

- Turbulence effects on combustion dynamic
- Noise and acoustics of open turbulent flames
- Rumble and combustion instability in gas turbines
- Direct and indirect noise in combustors
- Impact of turbine on combustion noise and instability
- Biofuel and combustion instability in modern aeroengines
- Combustion noise and instability in the turbocharged diesel engine
- System identification
- Flame response modelling

Authors can submit their manuscripts through the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/jc/cnin/.

Lead Guest Editor
Yasser Mahmoudi, University of Cambridge, Cambridge, UK
sm2027@cam.ac.uk

Guest Editors
Ramanarayanan Balachandran, University College London, London, UK
r.balachandran@ucl.ac.uk

Yuki Minamoto, Tokyo Institute of Technology, Tokyo, Japan
yminamot@navier.mes.titech.ac.jp

Vishal Acharya, Georgia Institute of Technology, Atlanta, USA
vishal@aerospace.gatech.edu

Manuscript Due
Friday, 13 January 2017

First Round of Reviews
Friday, 7 April 2017

Publication Date
Friday, 2 June 2017