

## Special Issue on Chemical Rocket Propulsion

### Call for Papers

Chemical rocket propulsion continues to be a proven option for the thrust delivery needs of a wide number of flight mission applications, from precision satellite attitude control at the low end of the thrust spectrum, to boosting space launch vehicles into orbit at the high end. While elements of chemical rocket technology can be considered mature, there is still an ongoing need to push the performance boundaries of these systems further. New chemical propulsion approaches and areas of application remain to be explored.

We invite authors to submit original research and review articles that are relevant to the advancement of this technology. For the purposes of this special issue, the general field of chemical rocket propulsion will be separated into four categories: (1) liquid propellant rocket engines (LREs), (2) solid propellant rocket motors (SRMs), (3) hybrid rocket engines (HREs), and (4) air-breathing rocket engines (ABREs). Potential topics include, but are not limited to:

- Propulsion system design (conceptual, preliminary, and advanced), overall or system components
- Performance modeling and simulation, overall or system components (fundamental and applied research)
- Experimental and prototype testing, overall or system components (fundamental and applied research)
- Development and related issues (e.g., integration of propulsion system to flight vehicle, control of propulsion system(s), use of advanced materials, reusability, costs, safety and environmental concerns, etc.)
- Design methods
- History (e.g., past successes or failures; lessons to be learned)

Before submission authors should carefully read over the journal's Author Guidelines, which are located at <http://www.hindawi.com/journals/ijae/guidelines/>. Prospective authors should submit an electronic copy of their complete manuscript through the journal Manuscript Tracking System at <http://mts.hindawi.com/> according to the following timetable:

Manuscript Due	Friday, 10 February 2012
First Round of Reviews	Friday, 11 May 2012
Publication Date	Friday, 10 August 2012

#### Lead Guest Editor

**David Greatrix**, Department of Aerospace Engineering, Ryerson University, Toronto, ON, Canada;  
[ggreatrix@ryerson.ca](mailto:ggreatrix@ryerson.ca)

#### Guest Editors

**Ivett Leyva**, Aerophysics Branch, Air Force Research Laboratory, Edwards AFB, CA 93524, USA;  
[ivett.leyva@edwards.af.mil](mailto:ivett.leyva@edwards.af.mil)

**Valsalayam Sanal Kumar**, Department of Aeronautical Engineering, Kumaraguru College of Technology, Tamil Nadu, Coimbatore, India; [rsanal@hotmail.com](mailto:rsanal@hotmail.com)

**Dario Pastrone**, Dipartimento di Energetica, Politecnico di Torino, 10129 Torino, Italy; [dario.pastrone@polito.it](mailto:dario.pastrone@polito.it)

**Michael Smart**, School of Mechanical and Mining Engineering, The University of Queensland, Brisbane, QLD, Australia; [m.smart@uq.edu.au](mailto:m.smart@uq.edu.au)