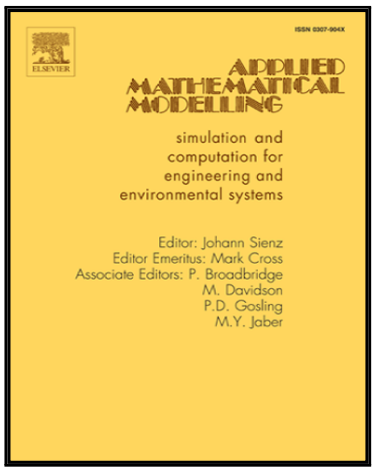
Accepted Manuscript



VERIFICATION AND VALIDATION OF NUMERICAL SOLUTIONS OF TWO-DIMENSIONAL REACTIVE FLOW IN ROCKET ENGINE NOZZLES

Luciano Kiyoshi Araki , Carlos Henrique Marchi

PII: S0307-904X(17)30487-0
DOI: 10.1016/j.apm.2017.07.049
Reference: APM 11899

To appear in: *Applied Mathematical Modelling*

Received date: 10 September 2015
Revised date: 15 July 2017
Accepted date: 24 July 2017

Please cite this article as: Luciano Kiyoshi Araki , Carlos Henrique Marchi , VERIFICATION AND VALIDATION OF NUMERICAL SOLUTIONS OF TWO-DIMENSIONAL REACTIVE FLOW IN ROCKET ENGINE NOZZLES, *Applied Mathematical Modelling* (2017), doi: 10.1016/j.apm.2017.07.049

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- Benchmark results for reactive and non-reactive compressible flows.
- Comparison of different physical models (one-species and multi-species) for compressible reactive flows.
- Numerical error evaluation for compressible reactive flows.
- Effects of physical models on global (thrust, specific impulse) and local (temperature, pressure) variables of interest.
- Validation and verification procedures for compressible reactive flows.

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/5470744

Download Persian Version:

https://daneshyari.com/article/5470744

Daneshyari.com