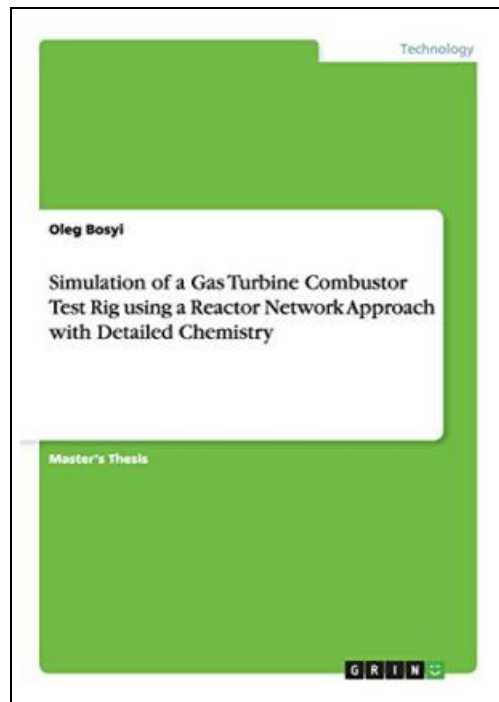


Simulation of a Gas Turbine Combustor Test Rig using a Reactor Network Approach with Detailed Chemistry



Filesize: 5.18 MB

Reviews



The book is simple in read through safer to understand. I could comprehended everything out of this published e pdf. I discovered this book from my i and dad advised this pdf to learn.

(Maud Kulas 1)

SIMULATION OF A GAS TURBINE COMBUSTOR TEST RIG USING A REACTOR NETWORK APPROACH WITH DETAILED CHEMISTRY



GRIN Verlag GmbH Sep 2014, 2014. Taschenbuch. Book Condition: Neu. 211x139x5 mm. Neuware - Master's Thesis from the year 2014 in the subject Engineering - Power Engineering, grade: 1.0, Brandenburg Technical University Cottbus, language: English, comment: Simulation eines Prüfstands einer Gasturbinenbrennkammer mit einem Reaktor Netzwerk und detaillierter Chemie, abstract: Use of gas turbines as one of the most effective power generation technologies has ecological concerns caused by polluting combustion products. To reduce emissions different fuel compositions are being constantly investigated and gas turbines are developed by means of experiments or less expensive numerical simulations. Combustion processes can be modeled in computational fluid dynamics (CFD) with a good accuracy but it is time consuming and rather complicated in case of detailed chemistry. To overcome this issue a processing of CFD solution can be applied for a further building of equivalent chemical reactor networks (CRN) that allow to reduce calculation times and take minor species into account. The aim of this work is to choose a proper technique of CRN set-up and apply it for engineering tasks with the software tool 'LOGEsoft ReactorNetwork'. The first part of the thesis is devoted to investigation of existing CRN approaches, CFD processing instruments and testing and improvement of the 'LOGEsoft ReactorNetwork'. That software is successfully examined on the Sandia Flame D and a parameter study of the reactor network is carried out. The second part involves mechanism validation for methane/hydrogen mixtures and development of an equivalent reactor network for the Siemens atmospheric combustion test rig that serves as an experimental facility for enhancement of the 3rd generation dry low emission burner. The obtained CRN is validated against experimental data of NO_x measurements and it showed reasonable results with deviations. A parameter study and mechanism sensitivity of the model is also conducted and some ways for...

-  [Read Simulation of a Gas Turbine Combustor Test Rig using a Reactor Network Approach with Detailed Chemistry Online](#)
-  [Download PDF Simulation of a Gas Turbine Combustor Test Rig using a Reactor Network Approach with Detailed Chemistry](#)

Other eBooks



Pastorale D Ete: Study Score

Petrucci Library Press, United States, 2013. Paperback. Book Condition: New. 335 x 188 mm. Language: English . Brand New Book ***** Print on Demand *****.Composed in August of 1920 while vacationing in his native Switzerland,...

[Read PDF »](#)



Six Steps to Inclusive Preschool Curriculum: A UDL-Based Framework for Children's School Success

Brookes Publishing Co. Paperback. Book Condition: new. BRAND NEW, Six Steps to Inclusive Preschool Curriculum: A UDL-Based Framework for Children's School Success, Eva M. Horn, Susan B. Palmer, Gretchen D. Butera, Joan A. Lieber, How...

[Read PDF »](#)



Unplug Your Kids: A Parent's Guide to Raising Happy, Active and Well-Adjusted Children in the Digital Age

Adams Media Corporation. Paperback. Book Condition: new. BRAND NEW, Unplug Your Kids: A Parent's Guide to Raising Happy, Active and Well-Adjusted Children in the Digital Age, David Dutwin, TV. Web Surfing. IMing. Text Messaging. Video...

[Read PDF »](#)



A Dog of Flanders: Unabridged; In Easy-to-Read Type (Dover Children's Thrift Classics)

Dover Publications, 2011. Paperback. Book Condition: New. No Jacket. New paperback book copy of A Dog of Flanders by Ouida (Marie Louise de la Ramee). Unabridged in easy to read type. Dover Children's Thrift Classic....

[Read PDF »](#)



It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em

HarperCollins Publishers. Paperback. Book Condition: new. BRAND NEW, It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em, Greg Behrendt, Amiira Ruotola-Behrendt, A fabulous new guide to dating...

[Read PDF »](#)