Iranian Dual-Use Technology – Rocket and Missile Propulsion

Iranian Dual-Use Science and Technology Bibliography Volume IV: Propulsion Related Technologies

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*Department of Chemistry, Malak Ashtar University of Technology

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G.M.M. Sadeghi, Thesis (PhD), 2004

Study of the Effective Parameter on the Synthesis of Polybutane-diol and Related Polyurethane

Conference Papers:

 7^{th} National Iranian Chemical Engineering Conference, October 28-31, 2002, University of Tehran, G.M.M. Sadeghi, J. Morshedian and M. Barikani Study of the Effect of Physical Condition on the Properties of Polybutadiene-ol Synthesized by Radical Polymerization of Butadiene in the Presence of H_2O_2

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Study of the Effect of Solvent on the Microstructure of Polybutadiene-ol End Groups Produced by Radical Polymerization of Butadiene in the Presence of H_2O_2

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On the Effect of Initiator to Monomer Ratio on the Properties of Polybutadiene-ol Synthesized by Radical Polymerization of 1,3-Butadiene

AMPT Conference, July 8-11, 2003, Dublin, Ireland, Ali Seifolzadeh and Mohammad Edrissi Increasing Filler Acceptability of Hydroxy Terminated Polybutadiene (HTPB) by some Plasticizers

Bayreuth Polymer Symposium, September 28, 30, 2003, Bayreuth, Germany, G.M.M. Sadeghi, J. Morshedian and M. Barikani

New Aspects on the Microstructure of Polybutadiene-ol Synthesized by Radical Polymerization of 1,3-Butadiene in the Presence of H₂O₂

 8^{th} National Iranian Chemical Engineering Conference, October 21-23, 2003, Mashad University, G.M.M. Sadeghi, J. Morshedian and M. Barikani Hydroxyl End Group Study of Polybutadiene-ol Synthesized by Radical Polymerization of 1,3-Butadiene in the Presence of H_2O_2

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World Polymer Conference, MACRO2004, July 4-9, 2004, Paris, France, G.M.M. Sadeghi, J. Morshedian and M. Barikani

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The Effect of Solvent on the Microstructure and Nature of Hydroxy End Groups of Synthesized Polybutadiene-ol by Polymerization of 1,3-Butadiene

Proceedings of the 2005 International Conference on Simulation and Modeling, Raheleh Saffari, Fahimeh Abbasi, Farhang Jalili-Farahani and Navid Mostoufi

Steady-State and Dynamic Simulation of the Process of Extractive Distillation of 1,3-Butadiene from the C_4 -Cut

4rd Conference on Explosives, Pyrotechnics and Propellants, February 22-23, 2005, Malek Ashtar University of Technology

Studying the Efefcts of Various Antioxidants on HTPB Resin

ISPST-2005, September 27-29, 2005, Amirkabir University of Technology, G.M.M. Sadeghi, J. Morshedian and M. Barikani

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Journal Articles:

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TA of HTPB Mixture with Some of the Energetic Materials

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Perchlorate Research

Production Related Research

Thesis:

A.A. Jalali, Thesis (MSc), Department of Chemical Engineering, Iran University of Science and Technology, 2006

Parametric Study on Chloralkali DSA Membrane Cells

N. Shojai, Thesis (MSc), Department of Chemical Engineering, Iran University of Science and Technology, 2007

An Investigation on the Advanced Membrane Chlor-Alkali Process

A.Sattari, Thesis (MSc), Department of Chemical Engineering, Iran University of Science and Technology, 2009

The Study of Effective Process Parameters of HCl Membrane Electrolysis Utilizing an Oxygen Reducing Cathode by Artificial Neural Network

Industrial Experience

Iran University of Science and Technology/Tehran University, 1993-1996, Arman Sedghi Fabrication and Characterization of DSC Andoes (RuO₂-TiO₂-SnO₂ Coated Titanium Plates)

Conference Papers:

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Quantitative Measurement of the Impurities of Chlorate Ion in Ammonium Perchlorate with the Help of Spectroscopy

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Increase of the Output of Sodium Chlorate by Electrolysis Cells

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The Effect of Process Conditions on Electrochemical Performance of a Laboratory-Scale Chlor-Alakli Membrane Cell

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Development and Comparison of Non-Parameter Regression Methods for Prediction of Cell Voltage and Current Efficiency in a Lab Scale Chlor-Alkali Membrane Cell

216th ECS Meeting, October 4-9, 2009, Vienna, Austria, N. Shojaikaveh, S.N. Ashrafizadeh, A. Amerighasrodashti and F. Mohammadi

Optimization of Predicted Cell Voltage & Caustic Current Efficiency in a Chlor-Alkali Membrane Cell with Application of Genetic Algorithm

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Reports:

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The Effect of Microencapsulation on Thermal Properties of Ammonium Perchlorate Particles

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A.Amoli, Thesis (MSc), Department of Aerospace Engineering, AmirKabir University of Technology, 1998

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S.M. Mirsajedi, Thesis (MSC.), Aerospace Engineering Department, Amirkabir University of Technology, August 1998

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M.K. Saleh, Thesis (MSc), Department of Mechanical Engineering, Sharif University of Technology, 1998

One Dimensional Transient Solution of Gas-Particle Flow in a Solid Rocket Motor

A.Elhami-Amiri, Thesis (MSc), Department of Mechanical Engineering, Sharif University of Technology, 1999

The Development of an Accurate Time Dependent Three-Dimensional Flow Solver to Study the Effects of Geometry on Acoustic Instability in SRMs

H. Gohari, Thesis (MSc), Amirkabir University of Technology, February 2001 Experimental Investigation of Foil Embedding Effect on Solid Propellant Burning

S.M. Seif Mousavi, Thesis, Iran University of Science and Technology, 2005 Thermal Analysis of Combustion Products of Solid-Fuelled Rocket Engine

M. Mohammadian, Thesis, Iran University of Science and Technology, 2005 Numerical Analysis of Performance of Sustainer Engine in Solid Rocket Propellant Hojjat Ghassemi, Thesis (MSc), Department of Mechanical Engineering, Sharif University of Technology

Acoustic Instability of Solid Propellant Rocket Motors

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Proceedings of the SIAM Conference on Applications of Dynamical Systems, October 1992, Snowbird, Utah, M. Golafshani and M. Farshchi

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Numerical Simulation of Solid Rocket Motor Internal Ballistics

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Numerical Simulation of SRM Internal Ballistics with Internal and External Burning

35th AIAA Joint Propulsion Conference, June 20-24, 1999, Los Angeles, California, S.M.H. Karimian and A. Amoli

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Simulation of Internal Ballistics of Solid Rocket Motor on a Moving Unstructured Grid

2nd Iranian Conference on Explosives, 2000

Study and Detail of some New Events in Bonding Agents of Composite Propellants

First International and Third Iranian Aero-Space Conference, 2000, Sharif University, Tehran, S.M. Hosseinalipour and A.H. Zarbafyan The Design of a Solid Fuel Starter

First Scientific-Applied Conference of the Aerospace Organization, 2000, Tehran, O.K. Salmanian, K. Mazaherie and S.M. Hosseinalipour The Investigation and Simulation of Erosive Burning of Homogenuous Solid Propellants

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Analysis of the Internal Ballistics of Nozzleless SRMs

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Two-Dimensional Simulation of Nozzleless Soild Rocket Motor Internal Ballistics

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Nozzle Analysis of Under Water Missiles

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The Role of Acoustic Reynolds Numbers on Studying of Heat Transfer in Solid Propellant Rocket Motor

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Computer Modeling the Performance of the Misagh-1 Missile Motor

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Designing the Fuel Formulation for a Solid Composite Fuel for use in a Gas Generator System

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Numerical Study of Spin Acceleration Effect on Internal Ballistics of Solid Rocket Motors

37th AIAA Thermophysics Conference, June 28-July 1, 2004, Portland, Oregon, S. Tabe Jamaat and M. Pezeshki

Numerical Study of Expansion in a Nozzle of Rocket Considering Chemical Reaction

 4^{rd} Conference on Explosives, Pyrotechnics and Propellants, February 22-23, 2005, Malek Ashtar University of Technology

Optimization of One Type of Solid Propellant Igniter used in a Tactical Missile

4rd Conference on Explosives, Pyrotechnics and Propellants, February 22-23, 2005, Malek Ashtar University of Technology

Determining the Pressure Resulting from Propellant Combustion at Fixed Volume using BKW and H9 Equation Modes

4rd Conference on Explosives, Pyrotechnics and Propellants, February 22-23, 2005, Malek Ashtar University of Technology

Compound PVC Based Solid Fuels and an Examination of their Characteristics

 4^{rd} Conference on Explosives, Pyrotechnics and Propellants, February 22-23, 2005, Malek Ashtar University of Technology

Composite Propellants and the Method of their Development

 4^{rd} Conference on Explosives, Pyrotechnics and Propellants, February 22-23, 2005, Malek Ashtar University of Technology

Thermochemistry and Determining the Course of the Disintegration and Combustion Reaction of High Energy Materials using the Calculation Method

4rd Conference on Explosives, Pyrotechnics and Propellants, February 22-23, 2005, Malek Ashtar University of Technology

Examination of the Process of the Development of Double Base Missile Propellant and Offering the Most Suitable Propellants

4rd Conference on Explosives, Pyrotechnics and Propellants, February 22-23, 2005, Malek Ashtar University of Technology

The Synthesis of Suitable Polyester Resin Inhibition of Double Base Solid Fuels

4rd Conference on Explosives, Pyrotechnics and Propellants, February 22-23, 2005, Malek Ashtar University of Technology

New Chemical and Physical Methods for the Producing for the Uniform Production of High Energy Solid Compounds

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Energetic Considerations in the Selection of the Primary Components of the Solid Fuel of Aerial Engines

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PVC Propellants and Their Characteristics

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Bonding Agents and Their Performance Mechanisms in Composite Solid Propellants

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Theoretical Studies of Molecular Geometry Structure and Thermodynamic Properties of Urea Deriviatives, as Stabilizers for Gun Powders and Propellants

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Study of 3,6-Dinitro-s-Triazine as a High Performance Energetic Material

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Improvement of Mechanical Properties in CMDB Propellant by NPBA

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42nd AIAA/ASME/SAE/ASEE Joint Propulsion Conference, July 9-12, 2006, Sacramento, California, A.M. Tahsini and M. Ebrahimi

Increasing Isp by Injecting Water into Combustion Chamber of an Underwater SRM

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Dynamic Investigation of Solid Propellant Combustion in a Rocket Motor Chamber

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Rapid Depressurization Dynamics of Solid Propellant Rocket Motors

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Solid Propellant Application in High Speed Underwater Projectiles and Bullets

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Composite Structures, 2007, Vol. 81, p587-597, B. Farshi and R. Rabiei Optimum Design of Composite Laminates for Frequency Constraints

Iranian Journal of Polymer Science and Technology, 2008, Vol. 21, p149-155, M. Ghani Karami, M.H. Beheshti, M. Esfandeh and A.M. Reza Doust

Study of Room Temperature Curing of Phenolic Resin and its Silica Reinforced Composites

Journal of Materials Science, 2008, Vol. 43, p6676-6681, H. Golestanian Preform Permeability Variation with Porosity of Fiberglass and Carbon Mats

Materials and Design, 2009, Vol. 30, 1976-1984, M. Abadyan, V. Khademi, R. Bagheri, H. Haddadpour, M.A. Kouchakzadeh and M. Farsadi Use of Rubber Modification Technique to Improve Fracture-Resistance of Hoop Wound

Use of Rubber Modification Technique to Improve Fracture-Resistance of Hoop Wound Composites

Archive of Applied Mechanics, 2009, Vol. 79, M. Talebitooti, M. Ghayour, S. Ziaei-Rad and R. Talebittoti

Free Vibration of Rotating Composite Conical Shells with Stringer and Ring Stiffeners

Materials and Design, 2009, Vol. 30, p3048-3055, M. Abadyan, R. Bagheri, H. Haddadpour and P. Motamedi

Investigation of the Fracture Resistance in Hoop Wound Composites Modified with Two Different Reactive Oligomers

Journal of Mechanics, 2009, Vol. 25, p299-306, K. Daneshjou, R. Talebitooti and A. Nouri Acoustic Transmission through Cylindrical Shells Treated with FLD Mechanics

Carbon/Carbon Composites

Thesis:

A.Mirhabibi, Thesis (PhD), University of Leeds, UK, 1997 Graphite Flake Composites with Alumina and Carbon Matrices

Conference Papers:

 22^{nd} Biennial Conference on Carbon, 1995, UC San Diego, California, A. Mirhabibi, B. rand and D. Hind

*Work performed at University of Leeds, UK, currently at the School of Materials, Iran University of Science and Technology

**Institute for Materials Research, School of Process, Environmental and Materials Engineering, University of Leeds, Leeds, UK

Processing and Mechanical Properties of Oxide-Carbon Composites

1st International Bitumen Conference, 1387, Mohammad Mahdi Sotoudehnia, Sahebali Manafi, Amir Maghsoudipour and Fatollah Moztazadeh Selection of Best Iranian Pitch for Impregnation in the Carbon/Carbon Composite

Seventh International Conference on Composite Science and Technology (ICCST/7), January 20-22, 2009, O. Alisalehi and J. Zamani

Manufacturing of Carbon Fabric/Phenolic Composites with Autoclave Method

HT-CMC7 – International Conference on High Temperature Ceramic Matrix Composites, September 20-22, 2010, Farhad Golestanifard

Effect of Densification Parameters on the Structure and Properties of Two Dimensional Carbon-Carbon Composites

HT-CMC7 – International Conference on High Temperature Ceramic Matrix Composites, September 20-22, 2010, F. Golestanifard and A. Sedghi

Effect of Densification Parameters on the Structure and Properties of Two Dimensional Carbon-Carbon Composites

Journal Articles:

Materialwissenschaft und Werkstoffechnik, 1997, Vol. 28, p236-240, S. Sedghi and F. Golestani The Effect of Graphitization on the Mechanical Properties of Two Dimensional Carbon-Carbon Composites

Materialwissenschaft und Werkstoffechnik, 1997, Vol. 28, p451-455, A. Sedghi and F. Golestani Fard

Evaluation of Novalak Resins as a Precursor for Fabrication of Carbon-Carbon Composites. Part I: Optimization of Curing Stages

Carbon, 2003, Vol. 41, p1593-1603, *A. Mirhabibi, **B. Rand, ***S. Baghshahi, and ****R. Agha Baba Zadeh

- *School of Materials, Iran University of Science and Technology
- **Institute for Materials Research, School of Process, Environmental and Materials Engineering, University of Leeds, Leeds, UK
- ***International University of Imam Khomeini, Tehran
- ****Iran Color Research Center, Tehran

Graphite Flake Carbon Composites with a 'Sinterable' Microbead Matrix. I: Mechanical Properties

Carbon, 2007, Vol. 45, p991-997, *A.R. Mirhabibi and **B. Rand

- *School of Materials, Iran University of Science and Technology
- **Institute for Materials Research, School of Process, Environmental and Materials Engineering, University of Leeds, Leeds, UK

Graphite Flake-Carbon Composites. II: Fracture Behavior, Toughness, Notch Insensitivty and Weibull Modulus

Iranian Journal of Polymer Science and Technology, 2008, Vol. 21, p127-132, Maryam Haj Hosseini, A. Payami, Seyed Reza Ghafarian and A.M. Reza Doust Improvement in Char Formability of Phenolic Resin for Development of Carbon/Carbon Composites

Filament Winding Studies

Conference Papers:

14th Annual Conference of Mechanical Engineering, 1385, *Vafaeesefat and **Khani *Assistant professor, Department of Mechanical Engineering, Imam Hossein University **MSc student, Department of Mechanical Engineering, Imam Hossein University Head Shape Analysis of Composite Pressure Vessels

14th Annual Conference of Mechanical Engineering, 1385, Vafaeesefat and Khani Minimum Weight Optimization of Composite Isotensoid High Pressure Vessels

15th Annual Conference of Mechanical Engineering, 1386, *Vafaeefat and **Kayvani *Assistant professor, Department of Mechanical Engineering, Imam Hossein University **MSc student, Department of Mechanical Engineering Research, Islamic Azad University Optimization of Non-Stationary CNG Pressure Vessels Deflection using Genetic Algorithm

15th International Conference of Mechanical Engineering, 2007, Amirkabir University of Technology, Tehran, S. Mohammad Reza Khalili Experimental Study of Processing Parameters of Filament Winding on Physical and Mechanical Properties of Composite Pressure Vessels

Journal Articles:

Composite Structures, 2000, Vol. 49, p247-255, Mohammad Z. Kabir Finite Element Analysis of Composite Pressure Vessels with a Load Sharing Metallic Liner

Fracture of Nano and Engineering Materials and Structures, 2006, p333-334, Reza Mohammadzadeh Gheshlaghi, Mohammad Hassan Hojjati and Hamid Reza Mohammadi Daniali Analysis of Tubular Composite Cylindrical Shells

Fracture of Nano and Engineering Materials and Structures, 2006, p335-336, Reza Mohammadzadeh Gheshlaghi, Mohammad Hassan Hojjati and Hamid Reza Mohammadi Daniali Analysis of Composite Pressure Vessels

Mechanical and Aerospace Engineering Journal, 2007, Vol. 2, p41-56, A. Khani, A. Vafaeesefat and S. Rahmati

Weight Optimization of a Composite Shell in Type 4 Pressure Vessel using Genetic Algorithm

Advanced Composite Materials, 2007, Vol. 14, p379-391, *A. Vafaeesefat and **A. Khani *Mechanical Engineering Department, Imam Hossein University

**Faculty of Energy and New Technologies, Aerospace Engineering, Shahid Beheshti University

Heat Shape and Winding Angle Optimization of Composite Pressure Vessels Based on a Multi-Level Strategy Applied Composite Materials, 2007, Vol. 14, p379-391, A. Vafaeesefat and A. Khani Head Shape and Winding Angle Optimization of Composite Pressure Vessels based on a Multi-Level Strategy

World Applied Sciences Journal, 2008, Vol. 3, p833-840, M. Shariati, M.H. Keyhani and I. Shalchian

Effect of Stacking Sequence on the Temperature Distribution in a Composite Multi-Ply Laminates Vessel

Advanced Composite Materials, 2009, Vol. 16, p321-330, Abbas Vafaeesefat Dome Shape Optimization of Composite Pressure Vessels based on Rational B-Spline Curve and Genetic Algorithm

Composite Structures, 2009, Vol. 88, p532-541, H. Bakaiyan, H. Hosseini and E. Ameri Analysis of Multi-Layered Filament-Wound Composite Pipes under Combined Internal Pressure and Thermomechanical Loading with Thermal Variations

Materials and Design, 2009, Vol. 30, p1976-1984, M. Abadyan, V. Khademi, R. Bagheri, H. Haddadpour, M.A. Kouchakzadeh and M. Farsadi Use of Rubber Modification Technique to Improve Fracture-Resistance of Hoop Wound Composites

Materials and Design, 2009, Vol. 30, p3048-3055, Mohammadreza Abadyan, Reza Bagheri, Hasan Haddadpour and Pooyan Motamedi Investigation of the Fracture Resistance in Hoop-Wound Composites Modified with Two Different Reactive Oligomers

Composite Structures, 2010, Vol. 92, R. Ansari, F. Alisafaei and P. Ghaedi Dynamic Analysis of Multi-Layered Filament-Wound Composite Pipes Subjected to Cyclic Internal Pressure and Cyclic Temperature

Carbon Composites Ablation Studies

Conference Papers:

IChEC11, 1385, Ahamd Reza Bahramian, Mehrdad Kokabi, Mohammad Hossein Navid Famili and Mohammad Hossein Beheshty

Thermal Conduction Mechanism of the High Performance Layered Silicate Resol Type Phenolic Resin Nanaocomposite

5th International Conference on Chemical Engineering, 1386, Ahmad Reza Bahramian, Mehrdad Kokabi, Mohammad Hossein Navid Famili and Mohammad Hossein Beheshty Ablative Performance of Resol/Kaolinite Nanocomposite

Proceedings of the Second Conference of Aerospace Organization, 2004, A.R. Bahramian and M.H. Beheshty

Simulation of Thermal Degradation of Ablative Insulators

4th International and 7th National Seminar on Polymer Science and Technology, September 27-29, 2005, Tehran, Iran, A.R. Bahramian, M. Kokabi, M.H. Beheshti and M.H.N. Famili Comparison of Thermal Degradation of a Phenolic Matrix Composite in Air and Inert Gas

4th International and 7th National Seminar on Polymer Science and Technology, September 27-29, 2005, Tehran, Iran, A.R. Bahramian, M. Kokabi, M.H. Navid Famili and M.H. Beheshti Ablating Behavior of a Thermoset Matrix Composite: Theoretical Modeling and Experimental Testing

11th Iranian Chemical Engineering Conference, November 28-30, 2006, Tarbiat Modares University, A.R. Bahramian, M. Kokabi, M.H. Navid Famili and M.H. Beheshty Thermal Conduction Mechanism of the High Performance Layered Silicate Resole Type Phenolic Resin Nanaocomposite

1st Aerospace Structures and Separation Systems Symposium, December 20, 2006, Aerospace Industrial Organization, Tehran, A.R. Bahramiana, M. Kokabia, M.H. Navid Familia and M.H. Beheshty

Inverse Solution Analysis of Ablative Nanocomposite Heat Shield

10th UK National Heat Transfer Conference, September 2007, Edinbourgh, UK, F. Kowsary and A. Hakkaki-Fard

Estimation of Transient Heat Flux on a Moving Boundary Application: Charring Ablators

Proceedings of the 8th International Seminar on Polymer Science and Technology, October 23-25, 2007, Sharif University of Technology, Tehran, A.R. Bahramian, M. Kokabi, M.H. Navid Famili and M.H. Beheshty

Resol/Kaolinite Nanocomposites as an Ablative Heat Shield

Proceedings of the 8th International Seminar on Polymer Science and Technology, October 23-25, 2007, Sharif University of Technology, Tehran, A.R. Bahramian, M. Kokabi, M.H. Navid Famili and M.H. Beheshty

Synthesis and Characterization of Kaolinite Layered Silicate Nanocomposite

ICHE2008, 2008, Ahmad Reza Bahramian, Mehrdad Kokabi, Mohammad Hossein Navid Famili and Mohammad Hossein Beheshty

Flammability of Kaolinite Layered/Phenolic Resin/Asbestos Cloth Nanaocomposite

18th European Conference on Thermophysical Properties, 2008, Ahmad Reza Bahramian and Mehrdad Kokabi

Thermal Diffusivity Mechanism of the High Performance Polymer Layered Silicate Nanaocomposite Heat Shield

3rd Joint US-European Fluids Engineering Summer Meeting, August 1-5, 2010, Ali Kianifar and Hamid Mohammadium

Numerical Analysis of Thermal Conductivity of Non-Charring Material Ablation Carbon-Carbon and Graphite with Considering Chemical Reaction Effects, Mass Transfer and Surface Heat Transfer

Journal Articles:

Nashrieh Shimi va Mohandesi Shimi Iran, 2001, Vol. 20, p112-117, Moghadam A.A.S. Zarin Ghalam and A. Fathi

Application of Ablation on Thermal Degradation of Solids

International Journal of Engineering Science, 2002, Vol. 13, p117-131, M. Adami Transient Heat Transfer Analysis of Charring Ablative Insulation Material in Rocket Nozzles to Increase Flying Duration

Iranian Journal of Polymer Science and Technology, 2002, Vol. 15, p245-250, R. Lavi Mohseni, M. Koukabi and M.H. Beheshti

Thermal Degradation Kinetics of Phenolic Resins used in Ablative Heat Shields

Amirkabir Journal of Science and Technology, 2003, Vol. 14, p445-462, K. Mazaheri and H. Souri

Calculation of Graphite Ablation Rate near the Missiles Nosetip Stagnation Point

Journal of Applied Polymer Science, 2003, Vol. 88, p2455-2461, M.R. Firouzmanesh and A. Aref Azar

Study of Thermal Stability and Ablation Behavior of Carbon/Epoxy-Novolac Composites

Iranian Journal of Polymer Science and Technology, December 2003-January 2004, Vol. 16, p313-318, A.R. Bahramian and M. Koukabi

Modelling the Degradation Process of Ablative Composites

Iranian Journal of Polymer Science and Technology, 2004, Vol. 17, p307-313, M.H. Beheshty and Hadi Delbari

Cure Optimization of Asbestos Reinforced Phenolic Resin

International Journal of Polymeric Materials, 2004, Vol. 53, p541-552, M.R. Firouzmanesh and A. Aref Azar

Study of Thermal Stability and Ablation Behavior of Carbon Fabric/Epoxy-Novolac Ablative Composites

Polymer, 2006, Vol. 47, p3661-3673, Ahmad Reza Bahramian, Mehrdad Kokabi, Mohammad Hossein Navid Famili and Mohammad Hossein Beheshty

Ablation and Thermal Degradation Behavior of a Composite Based on Resol Type Phenolic Resin: Process Modeling and Experimental

Iranian Polymer Journal, 2007, Vol. 16, p375-387, Ahamd Reza Bahramian, Mehrdad Kokabi, Mohammad Hossein Beheshty and Mohammad Hossein Navid Famili Thermal Degradation Process of Resol Type Phenolic Matrix/Kaolinite Silicate Nanocomposite

Modares Technical and Engineering Journal, 2008, Vol. 32, p47-57, J. Zamani, A. Shokouhfar and P. Pasbakhsh

A Comparison between the Ablation, Thermal, and Micro-Structural Properties of Resole Matrix Composites Reinforced with Various Reinforcements

Journal of Hazardous Materials, 2008, Vol. 150, p136-145, A.R. Bahramian, M. Kokabi, M.H. Navid Famili and M.H. Beheshty

High Temperature Ablation of Kaolinite Layered Silicate/Phenolic Resin/Asbestos Cloth Nanocomposites

Numerical Heat Transfer, Part A: Applications, 2008, Vol. 53, p543-560, A. Hakkaki-Fard and F. Kowsary

Heat Flux Estimation in a Charring Ablator

Journal of Hazardous Materials, 2008, Vol. 150, p136-145, Ahmad Reza Bahramian, Mehrdad Kokabi, Mohammad Hossein Navid Famili and Mohammad Hossein Beheshty High Temperature Ablation of Kaolinite Layered Silicate/Phenolic Resin/Absestos Cloth Nanocomposite

Journal of Hazardous Materials, 2009, Vol. 166, p445-454, Ahmad Reza Bahramian and Mehrdad Kokabi

Ablation Mechanism of Polymer Layered Silicate Nanocomposite Heat Shield

Numerical Heat Transfer, Part B: Fundamentals, 2009, Vol. 56, p478-501, *Hosein Molavi, **Iraj Pourshaban, ***Ali Hakkaki-Fard, ****Mehdi Molavi, *****Anahita Ayasoufi and *****Ramin K. Rahmani

- *Department of Mechanical Engineering, Tarbiat Modares University
- **Department of Chemical Engineering, University of Tehran
- ***Department of Mechanical Engineering, McGill University, Montreal, Canada
- ****Department of Mechanical Engineering, Azad University of Tehran
- *****MIME Department, The University of Toledo, Toledo, Ohio

Inverse Identification of Thermal Properties of Charring Ablators

International Journal of Heat and Mass Transfer, 2011, Vol. 54, p1030-1038, *Hosein Molavi, **Ali Hakkaki-Fard, ***Mehdi Molavi, ****Ramin K. Rahman, *****Anahita Ayasoufi and ******Sahar Noori

- *Department of Mechanical Engineering, Tarbiat Modares University
- **Department of Mechanical Engineering, McGill University, Montreal, Canada
- ***Department of Mechanical Engineering, Azad University of Tehran
- ****MIME Department, The University of Toledo, Toledo, Ohio
- *****Department of Mathematics and Statistics, East Tennessee State University
- *****Department of Aerospace Engineering, AmirKabir University of Technology

Estimation of Boundary Conditions in the Presence of Unknown Moving Boundary Caused by Ablation

Appendix A – Selected Iranian Journals

Journal of Advanced Defence Science and Technology

Published Quarterly

Editor in Chief: Dr. Hossein Fakraeian Publisher: Imam Hossein University

Manager: Dr. Mahdi Mardani Shahr Babak, Engineering and Technology Facility, Imam Hossein

University

Journal of Aerospace Science and Technology (JAST)

Published Quarterly

Editor in Chief: Karim Mazaheri Publisher: Iranian Aerospace Society

Manager: M.H. Karimian, Azadi Avenue, Tehran

Journal of Energetic Materials

Published Quarterly

Editor in Chief: Dr. Gholam Hossein Liaghat

Publisher: Iranian Association of Energetic Materials

Manager: Dr. Ali Saberi-Moghaddam, Malek Ashtar University of Technology

Mechanical and Aerospace Engineering Journal

Published Quarterly

Editor in Chief: Dr. M. Taeibi-Rahni Publisher: Imam Hossein University

Manager: Dr. S.M. Mohseni Shakib, Imam Hossein University

Appendix B – Selected Iranian Energetics Conferences

3rd Conference of Explosives, Pyrotechnics and Propellants, February 25-26, 2003

Publisher: Imam Hossein University

Language: Persian

4th Conference of Explosives, Pyrotechnics and Propellants, February 22-23, 2005

Publisher: Malek Ashtar University of Technology

Language: Persian

5th Conference of Explosives, Pyrotechnics and Propellants, February 18-20, 2008

Publisher: Research Centre for Chemical Science and Technology, Defence Ministry of Iran

Language: Persian

Upcoming: International Conference of Propellants, Explosives and Pyrotechnics

(PEP2011)

Scientific Committee

Prof. Mohammad Hossein Keshavarz (Scientific Director of the Malek-ashtar University of Technology)

- 1. Mahmood Adami (Associate Professor of Malek-ashtar University of Technology)
- 2. Farima Agend (Ms. of Institute of Education and Research of Defense Industries)
- 3. Yadollah Bayat (Assistant Professor of Malek-ashtar University of Technology)
- 4. Hossein Bisadi (Associate Professor of Iran University of Science & technology)
- 5. Mohammad Ali Dehnavi (Assistant Professor of Imam Hossein University)
- 6. Reza Fareghi Alamdari (Assistant Professor of Malek-ashtar University of Technology)
- 7. Morteza Ghafuri (Associate Professor of Imam Hossein University)
- 8. Abdollah Javidan (Associate Professor of Imam Hossein University)
- 9. Hossein Khodarahmi (Associate Professor of Imam Hossein University)
- 10. Gholam Hossein Liyaghat (Prof. of Tarbiat Modares University)
- 11. Ali Mehdipur Omrani (Assistant Professor of Malek-ashtar University of Technology)
- 12. Seyed Hadi Motamedolshariati (Ms. of Malek-ashtar University of Technology)
- 13. Reza Naghd Abadi (Prof. of Sharif University of Technology)
- 14. Mostafa Najafi (Assistant Professor of Imam Hossein University)
- 15. Hamid Reza Pouretedal (Associate Professor of Malek-ashtar University of Technology)
- 16. Ali Saberimoghadam (Associate Professor of Malek-ashtar University of Technology)
- 17. Mansur Shahidzadeh (Assistant Professor of Malek-ashtar University of Technology)
- 18. Mehdi Tajdar (Associate Professor of Malek-ashtar University of Technology)
- 19. Yousefi (Associate Professor of Malek-ashtar University of Technology)
- 20. Jamal Zamani (Associate Professor of K.N.Toosi University of Technology)

Executive Committee

Dr. Reza Fareghi Alamdari (Executive Director of the Malek Ashatr University of Technology

Dr. Ali Mehdipur Omrani

Dr. Mansur Shahidzadeh

Alireza Shabani

Ms. Seyed Hadi Motamedolshariati

Seyed Aman Allah Moosavi Nadooshan

Iranian Dual-Use Technology – Rocket and Missile Propulsion