

2005

Journals and Chapters

- Y. T. Chen, H. Chen, J. Zhang, H. T. Hsieh, "Modeling Corrosion and Precipitation in Non-isothermal LBE Pipe/Loop Systems," JOURNAL OF NUCLEAR SCIENCE AND TECHNOLOGY, 2005, 42 (11): 970-978.
- H. Chen, Y. Chen, J. Zhang, H. T. Hsieh, "Improved Applications of a Kinetic Corrosion Model in Non-isothermal Loop/pipe Systems," TRANSACTIONS OF THE AMERICAN NUCLEAR SOCIETY, 2005, 92, 137-138.
- J. Zheng, N. Li, and Y. T. Chen, "Dynamics of High Temperature Oxidation Accompanied by Scale Removal and Implications for Technological Applications," JOURNAL OF NUCLEAR MATERIALS, 342 (2005), pp.1-7.
- D. Pepper and Y. T. Chen, "Heat Transfer Analysis of Nuclear Waste Casks Stored in the Yucca Mountain Repository," NUM. HEAT TRANSFER, Part A, 47:671-690, 2005.
- J. Zheng, N. Li, Y. Chen, and A.E. Rusanov, "Corrosion Behaviors of US Steels in Flowing Lead-bismuth Eutectic (LBE)," JOURNAL OF NUCLEAR MATERIALS, 336 (2005), pp.1-10.

Refereed Conference Papers

- H. Chen, Y. T. Chen, H. T. Hsieh, and J. Zhang, "Numerical Analysis of Corrosion Behavior and Oxygen Transport in the Nature Convective Lead-bismuth Flow," Proceedings of IMECE2005 ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS, November 5-11, 2005, Orlando, FL, USA.
- T. Tan, H. Chen, Y. T. Chen, S. Hsieh, and J. Zhang, "Theoretical Modeling and Numerical Simulation of the Corrosion/Precipitation Process in Non-isothermal Pipe Systems," Proceedings of IMECE2005 ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS, November 5-11, 2005, Orlando, FL, USA.
- K. Kwan, M. Hodges, S. Hsieh, and Y. T. Chen, "An Object-Oriented Systems Engineering Model Design for Integrating Spent Fuel Extraction and System Process," Proceedings of IMECE2005 ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS, November 5-11, 2005, Orlando, FL, USA.
- K. K. Muramalla, Y. T. Chen, and A. Hechanova, "Simulation and Optimization of Homogeneous Decomposition of Sulfur-trioxide Gas on a Coated Platinum Surface," Proceedings of IMECE2005 ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS, November 5-11, 2005, Orlando, FL, USA.
- V. Ponyavin, Y. T. Chen, A. Hechanova, and P. Peterson, "Stress Analysis of High Temperature Heat Exchanger," Proceedings of IMECE2005 ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS, November 5-11, 2005, Orlando, FL, USA.

2005

- S. Subramanian, V. Ponyavin, C. De Losier, Y. T. Chen, Anthony Hechanova, and Per Peterson, "The Effect of Fin Geometry on Design of Compact Off-set Strip Fin High Temperature Heat Exchanger," Proceedings of IMECE2005 ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS, November 5-11, 2005, Orlando, FL, USA.
- K. K. Muramalla, Y. T. Chen, and A. Hechanova, "Simulation of Decomposition of Sulfur Trioxide Gas on Self-Catalytic Metallic Material," AIChE Annual Conference, October 30-November 4, 2005, Cincinnati Convention Center, Cincinnati, OH.
- T. Gemci, V. Ponyavin, Y. T. Chen, and Richard Collins, "Oscillatory Flow in an Anatomically Realistic 17-generation Human Bronchial Airway Model," 10th Jubilee National Congress on Theoretical and Applied Mechanics, September 13-16, 2005, Varna, Bulgaria.
- S. Subramanian, V. Ponyavin, C. R. DeLosier, Y. T. Chen, and Anthony E. Hechanova, 2005, "Design Considerations for Compact Ceramic Offset Strip-fin High Temperature Heat Exchangers," Fifth International Conference on Enhanced, Compact and Ultra-Compact Heat Exchangers: Science, Engineering and Technology, September 11-16, 2005, Whistler, British Columbia, Canada
- E. Wilkinson, R. Boehm, Zero energy house for the southern Nevada area, Proceeding of ISEC2005, Solar Energy Conference, Orlando, August 6-12, 2005.
- Sahm, A. Gray, R. Boehm, K. Stone, Cleanliness maintenance for an Amonix lens system, Proceeding of ISEC2005, Solar Energy Conference, Orlando, August 6-12, 2005.
- H. Chen, Y. T. Chen, H. T. Hsieh, and T. Tan, "Theoretical Analysis of High Prandtl Number Heat Transfer in Non-isothermal Pipe Flow," ASME National Summer Heat Transfer Conference, July 17-22, 2005, San Francisco, CA, USA.
- V. Ponyavin, S. Subramanian, C. R. DeLosier, Y. T. Chen, Anthony E. Hechanova, and Per Peterson, "The Flow Calculations in the High Temperature Heat Exchanger with the Manufacturing Geometrical Effects," ASME National Summer Heat Transfer Conference, July 17-22, 2005, San Francisco, CA, USA
- S. Subramanian, R. Akberov, C. R. DeLosier, Y. T. Chen, Anthony E. Hechanova, and Per Peterson, "Design Considerations for Compact Off-set Strip Fin High Temperature Heat Exchangers," ASME Turbo Expo 2005: Power for Land, Sea and Air, June 6-9, 2005, Reno-Tahoe, NV, USA
- V. Ponyavin, Y. T. Chen, and D. Pepper, "Numerical Modeling of Unsteady Gas Flow Around the Projectile in the Second Stage of the Light Gas Gun," 17th Computational Fluid Dynamics Conference, June 6-9, 2005, Toronto, Canada
- H. Chen, Y. T. Chen, J. Zhang, and H. T. Hsieh, "Improved Applications of a Kinetic Corrosion Model in Non-isothermal Loop/Pipe Systems," ANS Conference, June 5-9, 2005, San Diego, CA, USA

2005

- V. Ponyavin, Y. T. Chen, and D. Pepper, “Numerical Calculation of the Unsteady Gas Flow Around a Projectile Moving Through a Gun Barrel,” Computational Ballistics, May 18-20, 2005, Cordoba, Spain
- L. Sun, L. Kwan, H. T. Hsieh, Y. T. Chen, and R. Clarksean, “An Object-oriented Systems Engineering Model Development for Improving Design Factors of the Spent Fuel Extraction Process,” Waste Management Conference, February 27 – March 3, 2005, Tucson, AZ, USA
- P. Chinnasamy and Y. T. Chen, “Application of Computational Fluid Dynamics on Smart Wing Design,” 43rd AIAA Aerospace Sciences Meeting and Exhibit, January 10-13, 2005, Reno, NV, USA
- X. Wang, D. W. Pepper, Y. T. Chen, and H. T. Hsieh, “A Three Dimensional Finite Element Model for Emergency Response,” 43rd AIAA Aerospace Sciences Meeting and Exhibit, January 10-13, 2005, Reno, NV, USA