

Special Issue of ASME *Journal of Heat Transfer* on **Recent Advances in Porous Media Transport**

Synopsis: A special upcoming issue of *Journal of Heat Transfer* will be dedicated to Recent Advances in Porous Media Transport, with and without phase change. This field has gained considerable attention in recent decades. This is due to the wide range of applicability of these research areas in contemporary technology, for example, biological, electronics cooling, thermal insulation engineering, geothermal and environmental engineering, heat pipes, underground spreading of chemical waste, nuclear waste repository, grain storage and enhanced recovery of petroleum reservoirs.

Topics for this special issue may include Natural and Forced Convection; Evaporation, Condensation, Capillary Effects and Reactive Flow; Phase Change Flow; Radiation Heat Transfer; Conduction; Combined Heat and Mass Transfer; Biological and Electronic Cooling Applications, Particle Transport and Deformable Porous Bodies; Particle Transport and Deformable Porous Bodies; Advanced Mathematical Approaches to the Modeling of Porous Media; Industrial and Environmental Heat Transfer and Flow; Advances in Numerical Techniques; Experimental and Measuring Techniques; Turbulence; Particle Migration and Deposition; Material Processing Applications; Chemical Processes; Characterization of Porous Materials and Transport in Unsaturated Media.

Submission Process: Draft manuscripts (prepared as per the ASME and *JHT* guidelines) should be submitted electronically to **Dr. Yogesh Jaluria, Editor** – *Journal of Heat Transfer*, on the journal web page at <https://journaltool.asme.org/Content/index.cfm>. Please include a statement with your submission that the manuscript is intended for the Special Issue of *JHT* on Recent Advances in Porous Media Transport in the authors' comments box. The review process will be coordinated by the Guest Editor Prof. Kambiz Vafai, Department of Mechanical Engineering, University of California, Riverside, Riverside, CA 92521 (vafai@engr.ucr.edu). It would help if an e-mail is also sent to the Guest Editor at the time of manuscript submission indicating the title and authors of the paper along with a single PDF attachment (text and figures) of the paper.

There will be a citation of Prof. Adrian Bejan's accomplishments in this issue. Adrian Bejan's contributions are best summarized by his original methods of fundamental research on transport in porous media (e.g., scale analysis, constructal design of porous media, heatlines and masslines, intersection of asymptotes), and his books, "Convection in Porous Media" which is one of the most cited books in the field, and "Porous and Complex Flow Structures in Modern Technologies", both published by Springer.

All articles submitted will be peer-reviewed as per ASME requirements, and must be consistent with the publication standards of ASME *Journal of Heat Transfer*. The special issue is likely to be published in January/February 2009. A tentative anticipated schedule (or a timeline guide) of the publication process is as follows:

Draft manuscripts to be received by September 30, 2008

Reviews Completed by December 2008

Final Manuscripts Submitted by February 2008

Journal of Heat Transfer Special Issue by March/April 2009