

Call for Papers

WSEAS TRANSACTIONS on HEAT AND MASS TRANSFER

Special Issue on Heat Transfer and Thermo-mechanical Wear in High Temperature Systems and Industry

Editor:

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Aim: Heat exchange is an important part of many recent industrial processes. In the event when working temperature is high, thermal wear of industrial equipment can take place. Mathematical modeling and calculations are the most fast and cheap ways of heating conditions choice or forecast of emergency, while temperature changes in industrial equipment. Recently, due to computer technique progress, such complicated calculation methods as FEM and CFD could be used for modeling. This approach develops very fast, so, gathering articles for a special edition, illustrating tyhe morden progress of this field of knowledge, is very topical now.

Topics:

1. Heat transfer in metallurgy and high-temperature systems
2. Thermo-mechanical calculations for industrial equipment
3. Thermo-mechanical destruction of industrial equipment
4. Thermal shock in industry
5. Thermal treatment of refractories at metallurgical plants (including refractory concrete drying)
6. CFD modeling for industrial equipment
7. FEM usage for industrial applications
8. Thermal crack growth in brittle and composite materials
9. Hot and viscous liquids flow modeling
10. Theoretic approach for brittle materials destruction
11. High temperature heat exchange in solid-solid and liquid (gas) -solid systems

Submission Deadline: December 31, 2016

Submission Rules: Manuscripts should be prepared according to the formatting instructions. Manuscripts submitted to the Special Issue on Heat Transfer and Thermo-mechanical Wear in High Temperature Systems and Industry are to be submitted following the standard submission process. All submitted manuscripts will be reviewed using the standard procedure that is followed for regular submissions.