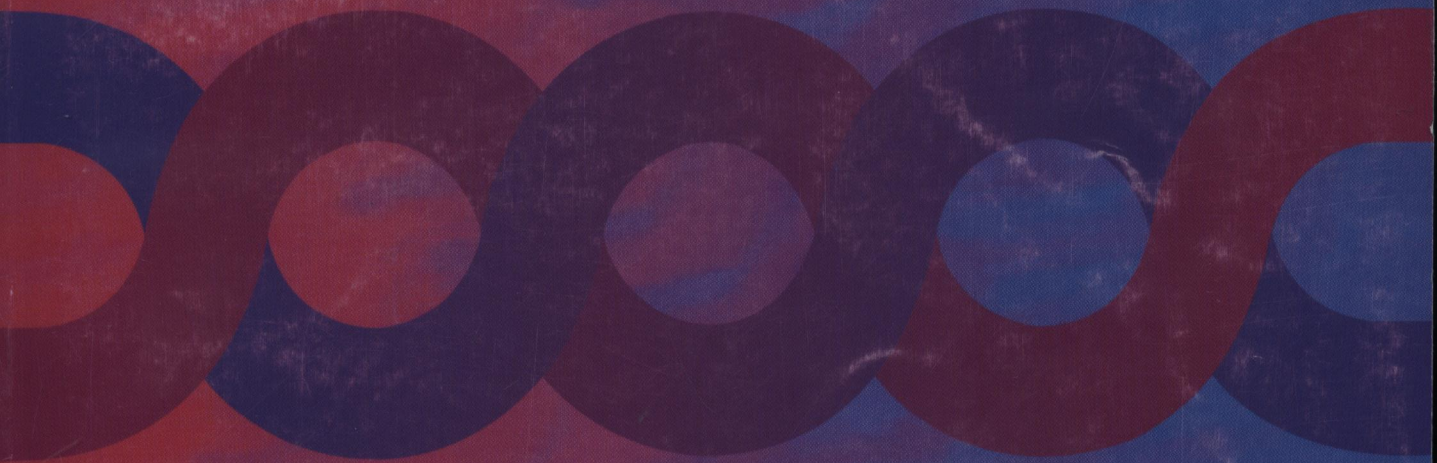
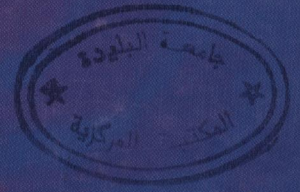


# APPLIED THERMAL ENGINEERING



Editor-in-Chief: *David A. Reay*

DESIGN . PROCESSES . EQUIPMENT . ECONOMICS

Also available on

SCIENCE @ DIRECT®

[www.sciencedirect.com](http://www.sciencedirect.com)

# APPLIED THERMAL ENGINEERING

DESIGN · PROCESSES · EQUIPMENT · ECONOMICS

Volume 27, Numbers 14-15

October 2007

## CONTENTS

---

### Review

- R. MIKALSEN and A. P. ROSKILLY 2339 A review of free-piston engine history and applications
- M.-Y. WEN, C.-Y. HO and J.-K. JANG 2353 Boiling heat transfer of refrigerant R-600a/R-290-oil mixtures in the serpentine small-diameter U-tubes
- E. AGGELOGIANNAKI, H. SARIMVEIS and D. KOUBOGIANNIS 2363 Model predictive temperature control in long ducts by means of a neural network approximation tool
- M. LE and I. HASSAN 2370 DSMC simulation of gas mixing in T-shape micromixer
- F. S. MAGNANI and R. N. T. DA SILVA 2378 Infrared thermography applied to the quantitative determination of spatial and thermophysical parameters of hidden included objects
- L. O. DE OLIVEIRA FILHO, E. M. QUEIROZ and A. L. H. COSTA 2385 A matrix approach for steady-state simulation of heat exchanger networks
- A. CAMPOS-AMEZCUA, A. GALLEGOS-MUÑOZ, C. ALEJANDRO ROMERO, Z. MAZUR-CZERWIEC and R. CAMPOS-AMEZCUA 2394 Numerical investigation of the solid particle erosion rate in a steam turbine nozzle
- V. PANJKOVIC 2404 Model for prediction of strip temperature in hot strip steel mill
- F. GORI, I. PETRACCI and V. TEDESCO 2415 Cooling of two smooth cylinders in row by a slot jet of air with low turbulence
- H. HAGENS, F. L. A. GANZEVLES, C. W. M. VAN DER GELD and M. H. M. GROOTEN 2426 Air heat exchangers with long heat pipes: Experiments and predictions
- E. C. NSOFOR, S. CELIK and X. WANG 2435 Experimental study on the heat transfer at the heat exchanger of the thermoacoustic refrigerating system
- R. MASTRULLO, A. W. MAURO, S. TINO and G. P. VANOLI 2443 A chart for predicting the possible advantage of adopting a suction/liquid heat exchanger in refrigerating system

*[continued on inside back cover]*



ELSEVIER



1359-4311(200710)27:14-15;1-6

Indexed/Abstracted in: *Appl. Mech. Rev., Res. Alert, Cam. Sci. Abstr., Chemical Abstracts Service, Curr. Cont./Eng. Tech. & Appl. Sci., Curr. Tech. Ind., EIC Intell., Eng. Ind., Metals Abstr., Curr. Cont. SCISEARCH Data., TCEA*

Printed by Krips BV, Meppel, The Netherlands