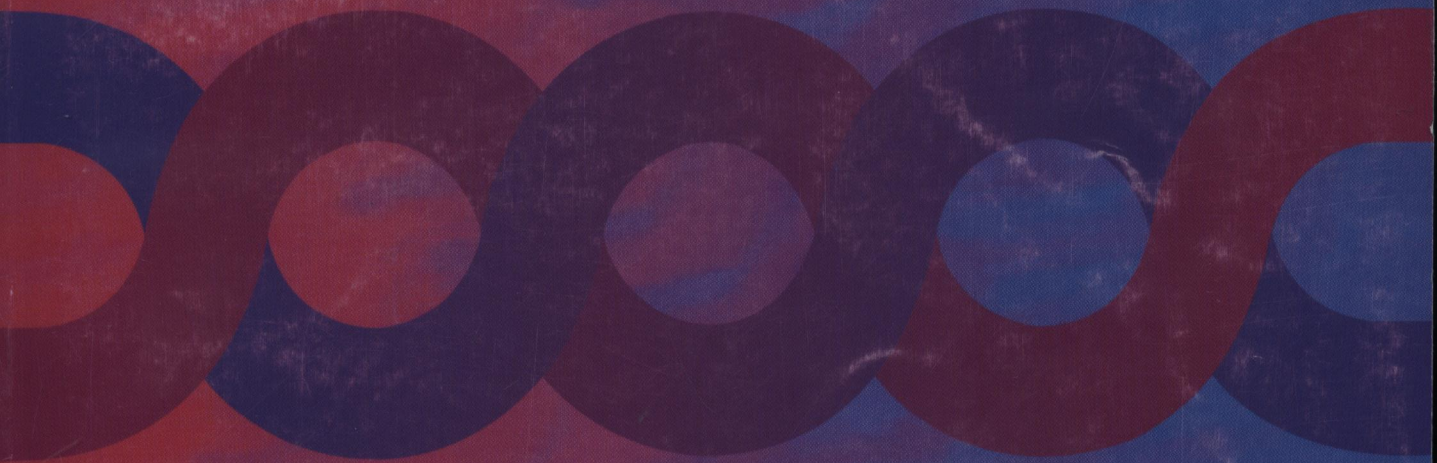
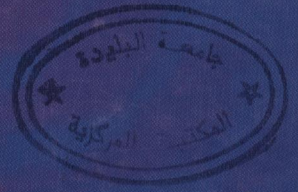


APPLIED THERMAL ENGINEERING



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

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Special Issue: 8th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction – PRES'05

Editorial

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The 8th conference on "Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction" have been selected and peer-reviewed. These have been supplemented with abstracts. The International Scientific Committee selected 12 for Key-note presentations. The Italian organisers, lead by Dr. Raffaele D'Amico contributed enormously to the success of the PRES'05 conference.

The special issue of the *Applied Thermal Engineering* is the sixth in a series developed from selected papers of the PRES conferences [1–6]. The PRES conference also collaborating with other known journals (see e.g. [7–10]) although the collaboration with ATE has the longest tradition and has been mutually greatly appreciated.

The most recent conference, PRES'05, returned to Italy for the second time. The PRES organisers were very pleased to accept the invitation from The Italian Association of Chemical Engineering – AIDIC. PRES'05 was held jointly with the 7th Italian Conference on Chemical & Process Engineering – ICheP-7 in Giardini Naxos, Sicily, Italy. After charming Florence in 2001, this time the southern beauty – an ancient Greek settlement of Naxos and nearby Taormina with Mount Etna in the background pro-

twelve papers representing various aspects of thermal engineering-related topics are included. The internationality of PRES is reflected partly by the fact that the authors of the selected papers are from eleven countries and four continents, i.e. Argentina, Austria, Canada, Chile, the Czech Republic, Italy, Latvia, Mexico, the Netherlands, Poland and Turkey.

These papers are partitioned into four thematic groups. The first group deals with recent advances in combustion. The second group focuses on issues related to cooling and refrigeration, the third on heat integrated separation while the last group is dedicated to interesting applications including manufacturing of activated carbon and measurements of the heat transfer of wall construction.

3. Advanced combustion, waste gas heat treatment and fouling

The first group is the most substantial and contains five papers. The paper developed at the Institute of Chemical