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ENGINEERING EDUCATION

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Agios Nikolaos, Crete Island, Greece, July 24-26, 2007

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Preface

This book includes the proceedings of the the 4th WSEAS / IASME International Conference on Engineering Education (EE'07) held in July 24-26, 2007 in Agios Nikolaos, Crete, Greece. The EE conference is organized annually by the World Scientific and Engineering Academy and Society (WSEAS) in cooperation with the International Association of Mechanical Engineers (IASME), Universities and Research Centers. Several other university laboratories contributed with special sessions and plenary lectures as one can see below.

The papers submitted focused on a variety of topics. In regular sessions papers addressed topics such as basic science in Engineering Education, continuing education, new technologies in education, globalization, management of education, organization of studies, laboratories, resources and funds, psychological and social aspects and many others.

Prominent lectures provided key-note speeches for the conference. Moreover, special sessions were organized, and invited lectures were given by well-known researchers.

For this EE conference, Prof. Nikos E. Mastorakis (Hellenic Naval Academy, Greece) and Dr. Philippe Dondon (ENSEIRB, France) were the Chairmen.

The Plenary Speeches of EE'07 were:

- *Statistics and Statistical Results after the WSEAS Survey on Current Problems of Higher Education*

by Prof. Dr. Nikos E. Mastorakis, Military Insitutes of University Education (ASEI), Hellenic Naval Academy, Piraeus, Greece.

- *Training of Engineers-Metallurgists of the Higher Qualification on Ural*

by Prof. Andrey Dmitriev, Institute of Metallurgy of the Ural Branch of RUS, Ekaterinburg, Russia.

- *An Overview of Psychological Aspects and Human Factors in Scientific Engineering Education*

by Prof. Philippe Dondon, ENSEIRB, Talence, France.

- *How to Teach the Analysis of Electrical Circuits at Technical Universities*

by Professor Dalibor Biolek, Brno University of Technology, Czech Republic.

- *Personalized Feedback in Computer Adaptive Testing*

by Prof. Anastasios A. Economides, University of Macedonia, Economic and Social Sciences, Greece.

- *Distance learning and Mechanical Engineering Education*

by Prof. Michail Gr. Vrachopoulos, Chalkis Institute of Technology, Greece.

We would like to thank all members of the organizing laboratories for their contribution to the organization of the conference.

The contents of this Book is also published in the CD-ROM Proceedings of the Conference. Both will be sent to the WSEAS collaborating indices after the conference: www.worldses.org/indexes .

In addition, the papers of this book are permanently available to all the scientific community via the WSEAS E-Library. Another additional feature of EE'07 was that the WSEAS society provided the participants with a username and password without an expiry date for on-line access in the WSEAS Conference proceedings (1996 -…). WSEAS also distributed to all the participants the CD-ROM Proceedings of the Engineering Education conference in 2006 (Vouliagmeni, Athens, Greece, July 2006).

Expanded and enhanced versions of papers published in these conference proceedings will also be considered for possible publication in one of the WSEAS journals that participate in the major International Scientific Indices (Elsevier, Scopus, EI, Compendex, INSPEC, CSA .... see: www.worldses.org/indexes). These papers must be of high-quality (break-through work) and a new round of a very strict review will follow. No additional fee will be required for the publication of the extended version in a journal.

We cordially thank all the people of WSEAS for their efforts to maintain the high scientific level of conferences, proceedings and journals.

The Editors

4th IASME/WSEAS International Conference on ENGINEERING EDUCATION (EE'07)

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