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Preface

A large international conference on Advances in Engineering Technologies and Physical Science was held in San Francisco, CA, USA, October 19–21, 2011, under the World Congress on Engineering and Computer Science (WCECS 2011). The WCECS 2011 is organized by the International Association of Engineers (IAENG). IAENG is a non-profit international association for the engineers and the computer scientists, which was founded originally in 1968 and has been undergoing rapid expansions in recent few years. The WCECS congress serves as good platforms for the engineering community to meet with each other and to exchange ideas. The congress has also struck a balance between theoretical and application development. The conference committees have been formed with over two hundred committee members who are mainly research center heads, faculty deans, department heads, professors, and research scientists from over 30 countries with the full committee list available at our congress web site (<http://www.iaeng.org/WCECS2011/committee.html>). The congress is truly international meeting with a high level of participation from many countries. The response that we have received for the congress is excellent. There have been more than six hundred manuscript submissions for the WCECS 2011. All submitted papers have gone through the peer review process and the overall acceptance rate is 52.68 %.

This volume contains 30 revised and extended research articles written by prominent researchers participating in the conference. Topics covered include chemical engineering, circuits, communications systems, control theory, engineering mathematics, systems engineering, manufacture engineering, and industrial applications. The book offers the state of art of tremendous advances in engineering technologies and physical science and applications, and also serves as an excellent reference work for researchers and graduate students working with/on engineering technologies and physical science and applications.

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