

Springer Proceedings in Physics 135

Springer Proceedings in Physics

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EKC 2009 Proceedings of EU-Korea Conference on Science and Technology



Springer

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ISSN 0930-8989

e-ISSN 1867-4941

ISBN: 978-3-642-13623-8

e-ISBN: 978-3-642-13624-5

DOI 10.1007/978-3-642-13624-5

Springer Heidelberg Dordrecht London New York

Library of Congress Control Number: 2010928127

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Cover Design: SPi Publisher Services

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

It gives us great pleasure to welcome you to this issue of the *Springer Book Series*. This issue is dedicated to the publication of selected papers written by researchers in Europe and Korea from the *EU- Korea Conference on Science and Technology* (<http://www.ekc2009.org>, 2009).

The year of 2009 bears a special significance to us, the Korean Scientists' and Engineers' Association in the UK (KSEAUK), as we reach this year, the 35th anniversary of the association's establishment in the UK, 35, the age of no skepticism but self-reliance. The KSEAUK laid its foundation for the last 35 years through a mountain of trials and errors and, also we have been significantly improved in terms of quality and quantity for the last 7 years. We now dare to have the confidence to say that we have contributed to the development of science and technology for our homeland.

Following the successful hosting of last year's EU-Korea Conference (EKC2008) in Heidelberg, Germany, the KSEAUK is very pleased to continue this tradition in 2009 in Reading, UK, with the hosting of EKC2009 at Wokefield Park near London. We are truly excited to be able to provide the opportunity and the venue where Europe's Korean scientists and engineers and also those scientists and engineers in Korea can meet in one place so as to exchange information and network with one another.

The KSEAUK, has prepared this year's EKC conference, under the title of "Science and Technology Closer to Humanity-Greenness" with the focus on "Green Science and Technology". Currently, it appears that the world is debilitated from the global economic downturn and in efforts to overcome this crisis, new technologies are constantly sought after. However, many of these efforts seem have reached the end of their line regarding new technologies in mono-disciplinary researches alone and the solution to this issues seems to spring out of interdisciplinary research approaches. Amongst these, the key Issue appears to be the interdisciplinary technologies combining both the issues of environment and energy solutions which involve a vast number of projects carried out by various groups of scholars from all over the world. I believe that South Korea is no exception here.

In line with this trend, we prepared an opportunity where those of you who work in the areas of advanced sciences and technologies in Europe and those of

you who work in the same areas in Korea and those interested in the related environmental and energy policies in Korea, can exchange ideas.

During the event, parallel with this theme of EKC2009, the Korean Federation of Science and Technology Societies (KOFST) hosted a symposium entitled “Ultra-Programme”, focussing on the area of environmentally friendly technology and energy in depth. Moreover a variety of expert presentations ranging from nanotechnology to aerospace engineering delivered at EKC2009, giving you a plenty of opportunities to information exchange and awareness of the issues.

We would like to thank the EKC2009 organising committee members, especially, Ki-Jun Lee, President of KOFST and Soo-Sam Kim, Vice-president of KOFST, Man-Wook Han, President of KOSEAA, Chang-Hoon Jun, President of ASCoF, Joon-Weon Seok, President of VeKNI, volunteers and sponsors who have made this conference possible.

Finally, the EKC2009 would not have been successful without the huge amount of efforts from the local organising committee members including Soo Hwan Kim, Namshik Han, Sung Eun Bae, Sung Joo Lee, Sungwook Park, Minsoo Kim, Ja-won Song, Seongjin Baek, Young Duck Kang, Joseph Lee, Chang-Ho Choi, Anne Kim, Rira Kim, Ik Soo Kim and last but not least Jaeyoun Oh who helped a lot for preparing this book.

Thank you very much and please enjoy reading.

March 2010

Joung Hwan Lee
(EKC2009 Chair, President of KSEAUK)
Habin Lee
(Program Chair, SIG-T Leader of KSEAUK)
Jung-Sik Kim
(Vice President, KSEAUK)
Volume Editors

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