



ICEE-2007 & PEC-5



PSU-UNS International Conference on Engineering and Environment

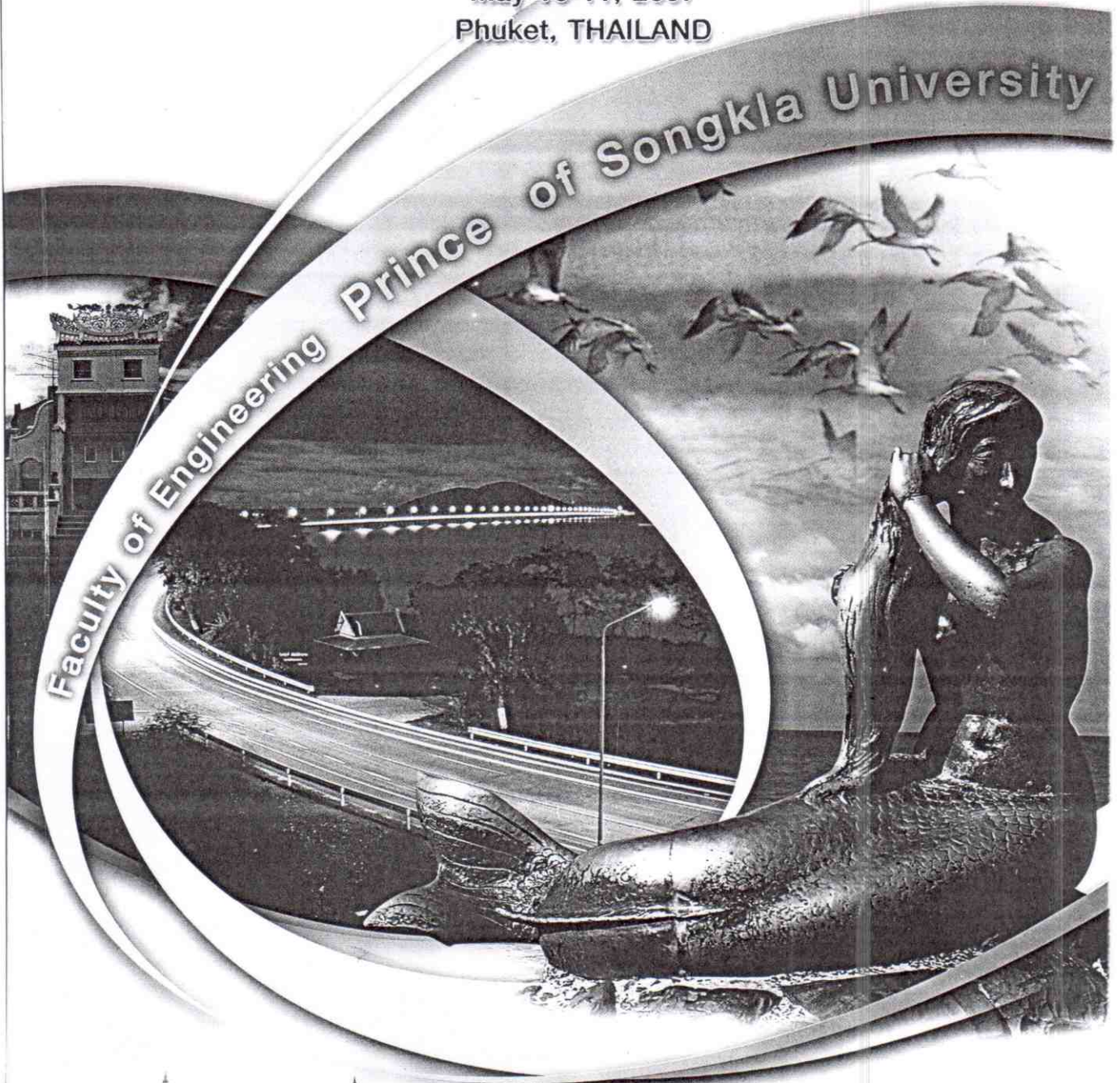
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The 5th PSU Engineering Conference

May 10-11, 2007

Phuket, THAILAND

Faculty of Engineering Prince of Songkla University

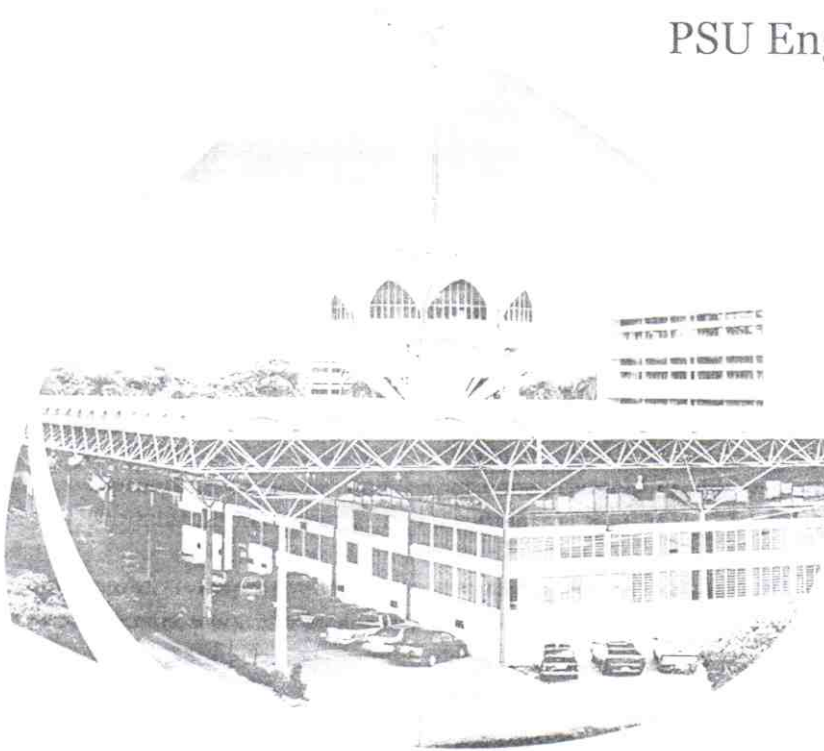




ICEE-2007
International Conference on Engineering and Environment

PEC-5
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Faculty of Engineering, Prince of Songkla University
<http://www.eng.psu.ac.th>



Faculty of Technical Sciences, University of Novi Sad
<http://www.ftn.ns.ac.yu>



A MESSAGE FROM THE PRESIDENT OF THE PRINCE OF SONGKLA UNIVERSITY

As the oldest Faculty of the Prince of Songkla University, Hat Yai Campus, The Faculty of Engineering is jubilantly enjoying its 40th year celebration. Throughout its existence the Faculty has been exemplarily in its development and achievement as it has grown to national prominence and has been continuously striving toward international recognition. I would like to congratulate the Faculty, its administrators, its staffs, its students, and its alumni on their success and praise their tireless efforts in contributing to the progress of the region and the development of the country. With this in mind, it is of great privilege The Prince of Songkla University, through the Faculty of Engineering, to have the opportunity to host The 3rd PSU-UNS International Conference on Engineering and Environment (ICEE-2007) from May 10-12th, 2007. In addition, the Faculty of Engineering is also remarkably hosting the International Conference on Mining, Materials, and Petroleum Engineering: The Frontiers of Technology (ICFT-2007) and the 5th Annual PSU Engineering Conference (PEC-5) at the same event.

With so many researchers and participants from varying fields of engineering and sciences present, these conferences should provide a wonderful environment for the gathering of ideas and experiences which could essentially lead to future research collaborations and the development of new technology and innovations. Not only will these academic exchanges support the critical national and global agenda on energy and the environment, they will also help to promote the development of applicable technology that can serve from regional communities to small and large industries alike.

At this time, I would like to once again congratulate Faculty of Engineering here at PSU and the Faculty of Technical Sciences from the University of Novi Sad for working together in putting forth the ICEE-2007, as well as all of the other valuable organizers who have made the ICFT-2007 and the PEC-5 possible. On behalf of the Prince of Songkla University, I would like to wish all participants an enjoyable experience at this event and we look forward to being a part of such a commendable activity that will lead to the development of a better tomorrow for everyone. Thank you.

B. Siribumrungsuka

Assoc. Prof. Dr. Boonsom Siribumrungsuka
(President, Prince of Songkla University)



A MESSAGE FROM THE DEAN OF THE FACULTY OF ENGINEERING, PRINCE OF SONGKLA UNIVERSITY

It is without a doubt, a great honor, for the Faculty of Engineering at Prince of Songkla University, in conjunction with the Faculty of Technical Sciences at the University of Novi Sad, to have the opportunity to host the 3rd biennial PSU-UNS International Conference on Engineering and Environment (ICEE-2007). This conference is certainly one of the major highlight of the Faculty's 40th Anniversary year-long celebration. In honor to make note of this auspicious celebration, the Faculty decided to hold the ICEE-2007 concurrently with 2 other conferences: (1) The International Conference on Mining, Materials, and Petroleum Engineering: The Frontiers of Technology (ICFT-2007) and (2) The 5th PSU Engineering Conference (PEC-5) from May 10-12th, 2007. Moreover, to truly provide all honorary participants with an enjoyable and relaxing atmosphere, the beautiful Phuket Graceland Resort and Spa at Patong Beach was selected as the site for the grand event.

As our main initiative, we hope to offer these conferences as a forum for researchers from the field of engineering, sciences, and technology from around the world to come together, share their valuable findings and take part in stimulating discussions. We anticipate that our participants learn from one another and perhaps have a chance to develop fruitful collaborations that will enhance the development of the society as a whole. From the preservation of the environment, to the development of new and sustainable energy alternatives, key issues that have lasting impact on the future world will be brought to light here. More than 300 participants are expected at the three conferences while the number of papers in each of the conferences is as followed:

- A total of 167 papers from 41 universities and institutions from 10 countries will be presented at the ICEE-2007.
- A total of 87 papers from 9 countries will be presented at the ICFT-2007.
- A total of 54 papers from 16 universities and institutions in Thailand will be presented at the PEC-5.

Furthermore, the conference will have the honor of presenting Prof. Wiwat Thantapanitchkul, the Director of Thailand's National Nanotechnology Center (NANOTEC) and Prof. Dusan Gvozdenac from the Faculty of Technical Sciences, University of Novi Sad as our keynote speakers. Prof. Wiwat will give a talk on "Present and Future Researches on Nanotechnology in Thailand", while Prof. Dusan will discuss the "Efficiency Improvement of Renewable Energy Resources in the Province of Vojvodina".

Last but not least, in the name of the conferencing organizing committee, I would like to thank PSU and Thailand's Commission on Higher Education for their valuable support. Notwithstanding, a special thanks must also go out to member of Advisory Committee, and Organizing Committee, as well as everyone from the Faculty of Engineering at PSU and our correspondences from the Faculty of Technical Sciences at UNS who has contributed their valuable time and efforts in putting these conferences together. Without their kind assistance, the Faculty would not have the opportunity to welcome all of you today. Thank you and have a great conference.



Ch. Limsakul

Assoc. Prof. Dr. Chusak Limsakul
Dean of the Faculty of Engineering
Prince of Songkla University

**Welcome Speech on Behalf of the Faculty of Technical Sciences,
University of Novi Sad, Novi Sad, Serbia
Professor Dušan Gvozdenac, D. Sc.
The Member of the Council of the Faculty of Technical Sciences**

Dear colleagues,

I have great pleasure and honor to address you on behalf of the Faculty of Technical Sciences and to communicate best wishes of the Dean of the Faculty of Technical Sciences, professor Ilija Čosić, D.Sc., and his associates.

The first Prince of Songkla University and University of Novi Sad (PSU-UNS) International Conference on Engineering and Environment ICEE-2003 was organized very successfully in December 2003 at the PSU, Hat Yai, Thailand. The second PSU - UNS International Conference on Engineering and Environment ICEE-2005 was held at the University of Novi Sad in Novi Sad in May 2005 and today, here we are, at the third Conference - ICEE-2007. This conference has become a very important international conference in the field of engineering and environment and I would like briefly to summarize our successful collaboration and remind you of how everything started.

In period from 2001 to 2002, our professor Miodrag Zlokolica, D.Sc., spent a few months as visiting professor at the Prince of Songkla University (PSU), the Faculty of Engineering, Department of Mechanical Engineering and at the beginning, the cooperation was meant to be only at the level of faculties. However, it has been extended to the level of universities.

The first Memorandum of Understanding and Addendum were signed on 22nd December 2002 by the President Prasert Chitapong on behalf of the Prince of Songkla University and by the Dean Ilija Čosić on behalf of the Faculty of Technical Sciences and the Rector Fuada Stanković from the University of Novi Sad.

Intensive and successful cooperation was continued in the years 2003 and 2004 mainly in the field of academic personnel and students' exchange.

The new Memorandum of Understanding and Addendum with expanded contents between PSU and UNS were signed on 17th May 2004 by the President Professor Prasert Chitapong D.Sc., (PSU) and the Rector Professor Fuada Stanković, D.Sc., (UNS) for the period 2004 - 2006. Then, the cooperation was extended in the field of Basic Natural Sciences, Natural Resources (PSU) and the Faculty of Agricultural - Institute of Field and Vegetable Crops - National Laboratory for Seeds Testing.

Since 2006, the cooperation has involved other faculties at both PSU and UNS. On 19th October, 2006, the next Memorandum of Understanding and Addendum were signed covering the period 2006 - 2009. Today, cooperation is established with seven faculties and three institutes on both sides. These new documents were signed by the President professor Boonsom Siribumrungsukha, D.Sc., (PSU) and by the Rector professor Radmila Marinković-Nedučin, D.Sc. (UNS).

I have spent a few years in Thailand myself and I have had an excellent opportunity to get to know Thai people and culture. My personal experience gives me hope that cooperation will be continued in the future and that it will be to the mutual benefits of both sides.

Thank you very much for your attention and I would like to repeat that the Faculty of Technical Sciences send their greetings and wishes for successful work at the Conference.

Hat Yai,
10th May 2007.

Professor Dušan Gvozdenac, D.Sc.

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