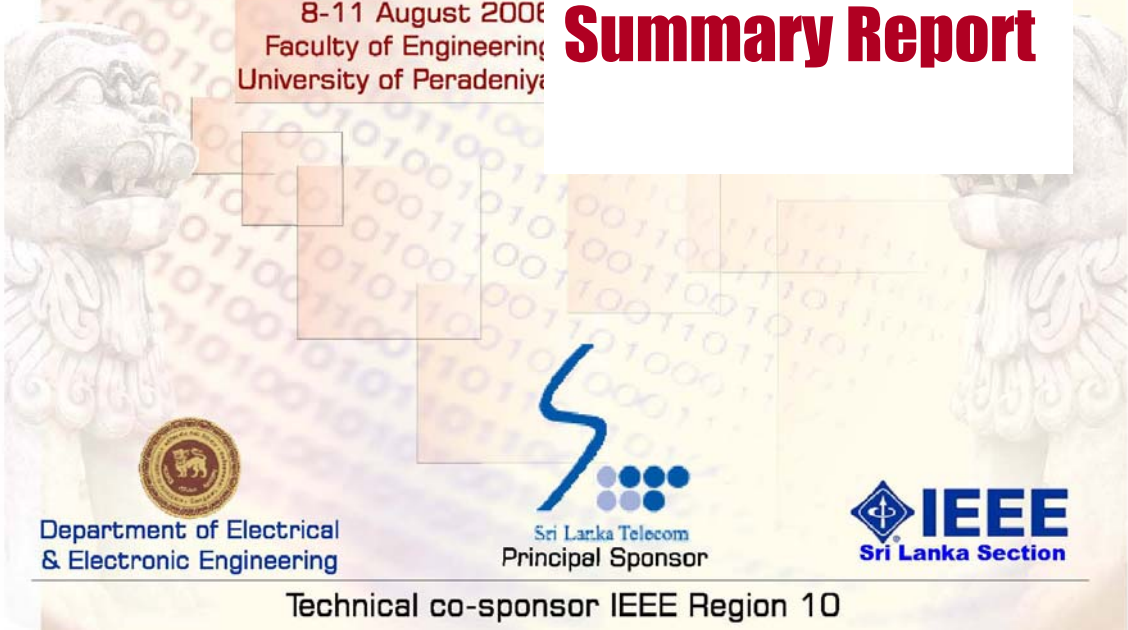




# First International Conference on Industrial and Information Systems

8-11 August 2006  
Faculty of Engineering  
University of Peradeniya

## Summary Report



Department of Electrical  
& Electronic Engineering



Sri Lanka Telecom  
Principal Sponsor



Technical co-sponsor IEEE Region 10



# Summary Report of ICIIS 2006

The First International Conference on Industrial and Information Systems (ICIIS) and Exhibition was held in the Faculty of Engineering, University of Peradeniya, Sri Lanka from 8 -11 August, 2006. It was organized under the theme “**Innovative technologies for tomorrow’s Industry**” and vision “**To sink today’s innovative international research and source the development of tomorrow’s industry**”. The

Conference brought together innovative academics and industrial experts in the field of electrical and information engineering to a common forum. It provided an inspiring atmosphere for the local and foreign researchers to share their experience and have constructive dialogs in their fields. The event was technically cosponsored by **IEEE R10** and **IEEE Sri Lanka Sections**.

## 1. Keynote Presentations

The following Keynote presentations were made in the conference.

1. “Engineering for Mobilizing the Disables – Bridging the Gap”,  
Prof. Örjan Ekeberg, Computational Biology and Neurocomputing (CBN), Department of Numerical Analysis and Computer Science (NADA), Royal Institute of Technology, Sweden.
2. “Smart-Intelligent World Through State-of-the-Art Electronics”,  
Dr. Li-Rong Zheng, Laboratory of Electronics and Computer Systems, Dept. of Microelectronics & Information Technology, Royal Institute of Technology (KTH), Sweden.
3. “Automation – Gateway To a Productive Nation”,  
Prof. Yoshihiko Nakamura, Department of Mechano-Informatics, Graduate School of Information Science and Technology, University of Tokyo, Japan.
4. "Soft actuators based on conducting polymers -future technology for artificial muscles",  
Prof. Keiichi Kaneto, Graduate School of life science, Kyushu Institute of Technology, Japan.

## 2. Invited Paper Presenters:

The conference invited several prominent researchers from abroad and local to present invited papers.

1. Prof. W. Dayawansa, Texas Technical University, USA
2. Prof. Anu A. Gokhale, Department of Technology, Illinois State University, USA
3. Dr. Mahesh Sooriyabandara, Toshiba Telecom Research Europe Ltd, UK.
4. Prof. Roland Ericsson, School of Electrical Engineering, Royal Institute of Technology, Sweden
5. Prof. Stanislaw Gubanski, School of Electrical Engineering, Chalmers Institute of Technology, Sweden.
6. Prof. Örjan Ekberg, NADA, Royal Institute of Technology, Sweden.

7. Prof. Chandur Sandarangani, School of Electrical Engineering, Royal Institute of Technology, Sweden.
8. Dr. Li-Rong Zheng, LECS/IMIT, Royal Institute of Technology, Sweden.
9. Dr Malin Premaratne, Center for Telecommunications and Information Engineering, Monash University, Victoria, Australia.
10. Dr Tyrone Fernando, School of Electrical, Electronic and Computer Engineering, University of Western Australia, Australia
11. Prof. Shibam Koul, Centre for Applied Research in Electronics, Indian Institute of Technology, Delhi, India.
12. Prof. Janaka Ekanayake, Department of Electrical and electronic Engineering, University of Peradeniya, Sri Lanka.
13. Dr. D.G.M. Preethichandra, Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology (KIT), Kitakyushu, Japan.

### **3. Areas covered in the conference:**

Papers have been invited in English, under four major topics:

- I. Communication and Information Engineering
- II. Electronics and Computer Systems
- III. Robotics and Motion Control
- IV. Power Systems and High Voltage Engineering.

### **4. Conference Statistics**

#### **4.1 Details of Paper Acceptance:**

Number of Abstracts Received:	318
Number accepted	163
Number Rejected:	155

#### **4.2 Country wise breakdown of paper submission:**

Country	Number of papers	Country	Number of papers
Australia	7	Malaysia	8
Bangladesh	2	Norway	1
Canada	6	New Zealand	4
China	6	Pakistan	2
India	98	Portugal	1
Iran	5	Saudi Arabia	5
Italy	1	Sweden	7
Japan	5	Thailand	2
Sri Lanka	42	England	4
Mauritius	1	America	3

### **4.3 Number of participants:**

1. Foreign researchers	= 74
2. Local researchers	= 186
3. Local undergraduates	= 180
<b>Total</b>	= <b><u>440</u></b>

### **5. Pre-Conference Workshops**

Four parallel pre-conference workshops were organized on 8<sup>th</sup> August 2006. The key resource persons involved in each workshop is given below.

#### **Workshop 1: High Speed Circuit Board Design**

1. Dr. Li-Rong Zheng, Electronics and Computer Systems Laboratory, Department of Microelectronics and Information Technology, Royal Institute of Technology (KTH), Stockholm, Sweden

#### **Workshop 2: Insulation Diagnostics of Power Systems**

1. Prof. Roland Eriksson, Dept. of electromagnetic theory and construction, Royal Institute of Technology (KTH), Stockholm, Sweden
2. Prof. Stanislaw Gubanski, Chalmers university of Technology, Göteborg, Sweden

#### **Workshop 3: DSL\*, RF and Microwave Circuit Design\*\***

1. Mr. Priyanka Undugodage\*, Head of IP & Broadband, Sri Lanka Telecom
2. Prof. Shibani Koul\*\*, Indian Institute of Technology, Delhi

#### **Workshop 4: Robotics and Automation**

1. Prof. Yoshihiko Nakamura, Department of Mechano-Informatics, University of Tokyo, Japan.
2. Mohan Weihrauch, ABB AG, Power Technology Systems, Germany

#### **WORKSHOP REGISTRATION AND PARTICIPATION STATISTICS**

Workshop		Registered			Participated		
		Local	Foreign	Total	Local	Foreign	Total
1	High Speed Circuit Board Design	7	14	21	3	7	10
2	Insulation Diagnostics of Power Systems	28	20	48	5	29	34
3	DSL, RF and Microwave Circuit Design	15	26	41	7	6	13
4	Robotics and Automation	53	54	107	43	15	58

## **6. Co-Sponsors, Donors, Financial Sponsors and well wishers:**

Organizations which sponsored the conference are listed below.

1. IEEE R10 - Asia Pacific Region of the Institute of Electrical and Electronic Engineers technically co-sponsored the conference
2. IEEE Sri Lanka Section - IEEE Sri Lanka Section assisted the organization of the conference by providing necessary publicity and human resources for organizational activities.
3. Swedish International development Cooperation Agency - SIDA is involved indirectly, by providing travel and accommodation expenses for the senior researchers attending the conference through the ongoing research collaboration.
4. Toshiba Research Europe Limited - Toshiba Research Europe Limited has provided the sponsorship of one keynote speaker and a financial contribution to be a main sponsor.
5. National Science Foundation of Sri Lanka - Registration fees of 10 senior researchers from state sector organizations
6. Sri Lanka Inventors Commission - Registration fee for undergraduates
7. Sri Lanka Telecom Limited - Principal sponsor
8. ABB International Marketing Limited
9. Lanka Transformers Limited
10. Sri Lankan Airlines Limited
11. Orient Electric Systems Pvt., Limited
12. Ansoft Pvt., Limited, Singapore
13. Kelani Cables Limited
14. Electroserve Pvt., Limited
15. Virtusa Pvt., Limited
16. Technosolutions Pvt., Limited
17. DMS Electronics Limited

## **7. Exhibition and Trade Fair:**

An Exhibition and a Trade Fair was organized in parallel with the conference activities. Most of the companies listed under item 6 represented in the Trade fair in addition to many other organizations that represented at the Exhibition.