

The Oxford College of Engineering, Bangalore organized for the first time in history of VTU , IEEE International conference on “Emerging Trends in Communication, Control, Signal Processing and Computing Applications” (C<sup>2</sup>SPCA 2013) in collaboration with The Oklahoma State University, USA on 10th and 11th of October 2013.



C<sup>2</sup>SPCA-2013, consisting of a two-day program, brought together international and national experts, academicians, industrialists and researchers in one single platform. C<sup>2</sup>SPCA-2013 portrayed the current state of the technology and the outcome of the ongoing research in the area of advanced communication including Optical, Control, Signal Processing and Computing Applications. It was a leading forum for academicians, researchers, practitioners, developers, and students to explore cutting-edge ideas and to exchange techniques, tools, and experiences. The conference was fostered through keynotes and invited talks. Both the days were marked by various eminent personalities in the field of Education and Research. Around 450 researchers, industrialists etc. from all over India and abroad gathered in the premises.

On bright Thursday morning, C<sup>2</sup>SPCA-2013 started with the ceremonious inaugural function. The dignitaries present on the dais were **Dr. Surendra Pal** , Distinguished Scientist, Former Associate Director, ISRO Satellite Center, Bangalore, Vice Chair, Professional Activities IEEE India Council ; **Commander Vijay Singh** Dy. Director, Naval research Board, DRDO, New Delhi; **Sri. S.N.V.L. Narasimha Raju**, Executive Director, The Oxford Educational Institutions; **Dr. S. Rajashekaraiiah**, Founder vice Chancellor, VTU Belgaum, Chief Mentor The Oxford College of Engineering; **Dr Ramakumar R** , Regents Professor, International Coordinator – c2spca, Oklahoma State University, USA ;**Dr. Daniel Grischkowsky**, Oklahoma State University, USA. **Dr. Keith A. Teague**, Oklahoma State University, USA; **Dr. Narasimhan Sundararajan**, Senior fellow IEEE, Professor – EEE, NTU, Singapore; **Dr.R.Nagaraj**, Chief Advisor-c2spca 2013,Principal, The Oxford College of Engineering; along with **Dr. M. S Shashidhara**, General Chair and organizing secretary c2spca-2013, HOD MCA , The Oxford College of Engineering .

The function began by the invocation of the Divine by Mr. Santosh Haridas , TOCE. The welcome speech was given by **Dr. R Nagaraj**, Chief Advisor and Principal, TOCE, Bangalore who welcomed the gathering with warm wishes to all. This was followed by the Lighting of the Lamp which officially declared c2spca 2013 open. **Dr. M S Shashidhara**, General Chair, c2spca 2013 briefed the bird eye view of the events that would be held over the 2 days.

Our beloved Executive Director **Sri. S.N.V.L.Narasimha Raju** enchanted us by his elaborate talk about history of Children's Education Society, Bangalore and Karnataka. He gave us the message that an investment in knowledge is the best thing to do in life.

**Our chief guest Dr Surendra Pal** , praised about organizing conference on such apt topic. He educated us about communication, information technology, signal processing and computing applications. He also mentioned how time and distance have lost their conventional meaning, how technology has impacted and transformed our lives. India is advanced country on terms of communication, space education and information technology. He also released the conference Proceedings.

**Our Guest of Honor Commander Vijay Singh** in his speech informed about Naval Research Board and other funding agencies for funding research and conferences.

**Our Guest of Honor Dr. N Sundarajan** from NTU, Singapore shared his experiences with Oxford College. He gave insights on the conference, how maximum work happens in a coffee break, we get opportunity to interact with so many people. He also inspired us to let our work say that we are great.

**Dr. Keith A. Teague** addressed the gathering and said that three years ago, the seed of this conference were laid. He also gave a token of appreciation to the Executive Director Sri. **S.N.V.L.Narasimha Raju** ; Principal **Dr. R Nagaraj** and **Dr. M.S. Sashidhara**.

The curtains were drawn on the Inauguration Ceremony by Vote of Thanks delivered by **Dr. Anil Kumar**, General Co- Chair c2spca-2013, HOD ECE Department, The Oxford College of Engineering and all dignitaries were felicitated

The MC's role for the inauguration was done by Ms. Suma , Asst. professor, Dept of EEE.

Keynote session opened with a Plenary talk by **Dr. Keith A. Teague**, Professor and Head, School of Electrical and Computer Engineering, Oklahoma State University, USA on “The School of Electrical and Computer Engineering at Oklahoma State University: Education, Research, and international Outreach”, followed by the keynote of **Dr. Daniel Grischkowsky**, Regents Professor, School of Electrical and Computer Engineering, Oklahoma State University, USA on “THz Photonics Research leads to Applications”.

The conference was then conducted in four different tracks as follows: **Communication, Control, Signal Processing and Computing Applications**. Tracks are organized in 3 different sessions. A total of **113 authors presented their paper** under various tracks. C<sup>2</sup>SPCA 2013 also offered a poster session which provided a platform for advertising research work. A total of **15** poster presentations were there for the conference.

### **Briefing about each track...**

#### **Track 1: Emerging Trends in Communication**

The program chair for Emerging Trends in **Communication** was Ms. **Reema Sharma**, Asst. Professor, dept of ECE. The session chairs for session 1 and 2 were **Dr. Keith A Teague**, Professor and Head, School of Electrical and Computer Engineering, Oklahoma State University, USA, **Dr. Sheshachalam** , BMS Bangalore and **Dr. K N Rajarao** . For session3, the session chairs were **Dr. Preeta Sharan**, Professor, Dept. of ECE, TOCE and **Dr. H V Kumaraswamy**

### **Track 2: Emerging Trends in Control**

The program chair for Emerging Trends in Control Engineering was **Dr. Vivek** , Professor , E.C. Dept. The session chairs for session 1 and 2 were **Dr. N . Sundarajan**, Professor – EEE, NTU, Singapore **and Dr. Ramakumar**, Regents Professor, International Coordinator – c2spca, Oklahoma State University, USA and for session3 were **Dr. Padmaja K.V.**, Prof. E.C.E., R.V. C.E., Bangalore and **Dr. N . Sundarajan**, Professor – EEE, NTU, Singapore

### **Track 3: Emerging Trends in Signal Processing**

The program chair for Emerging Trends in Signal Processing was **Ms. Sheeba** , Asst. Professor , E.C. Dept. The session chairs for session 1 were, **Dr. Daniel Grischkowsky**, Oklahoma State University, USA. and **Dr. T. V. Ramamurthy**, RITM , Bangalore and for session 2 **Dr. Daniel Grischkowsky**, Oklahoma State University, USA. and **Dr. Sheshachalam**, BMS Bangalore were present. **DR. K.V. S. Anandababu**, CMRIT, Banagalore and **Dr. K.S. Geetha**, RVCE , Bangalore chaired the session 3.

### **Track 4: Emerging Trends in Computing Applications**

The program chair for Emerging Trends in Computing Applications was **Ms. Sheerin Zadoo**, Asst. Professor, MCA dept. The session chairs for session 1 and 2 were **Dr. Damon M Chandler**, Associate Professor, School of Electrical and Computer Engineering, Oklahoma State University, USA and **Dr. Doreswamy**, Prof. Dept. of Computer Science, Mangalore University, and for session3 were **Mrs. Pamela Kumar**, **Chairman, Cloud Computing Innovation , Council of India** and **Dr. Pandurangan**, Professor, VEC, SRM university, Chennai.

### **Day-2**

The second day of C2SPCA-2013 opened with the Keynote session of **Dr. Damon M. Chandler**, Associate Professor, School of Electrical and Computer Engineering, Oklahoma State University, USA He impressed us by his keynote on “**Advanced Human Vision Models for Image and Video Quality Assessment**”. He showed his work on several images and videos.

**Dr. Narasimhan Sundararajan**, Sr. Fellow IEEE, Professor-EEE, NTU Singapore gave a very informative talk on the topic “**Meta-Cognitive Neural networks** “. He told that student control their learning not the teacher. He also informed that “How to learn, what to learn and when to learn ‘are key things in learning. In Meta-cognition, we should follow these steps for effective learning: Plan, Monitor, Manage and Evaluate.

**Dr. Ramakumar R.**, International Coordinator c2spca-2013, Regents Professor, School of Electrical and Computer Engineering, Oklahoma State

University, USA enlightened the session with his keynote on “**Sustainability and Smart Grid**”. He educated about how to build the smart networks apart from the traditional LAN, WAN etc.

This was followed by the third session of paper presentation in four different parallel tracks: **Communication, Control, Signal Processing and Computing Applications**.

### **Panel Discussions Experts**

#### **Panel coordinator:**

• **Dr. Narasimhan Sundararajan, Sr. Fellow IEEE, Professor-EEE, NTU Singapore**

#### **Panel Members:**

- **Dr. Kincha, Former VC, VTU, Belgaum;**
- **Dr. Keith A. Teague, Oklahoma State University, USA;**
- **Dr. Daniel Grischkowsky, Oklahoma State University, USA ;**
- **Dr. Damon M. Chandler Oklahoma State University, USA**
- **Dr. Ramarajan, Regent officer, Oklahoma state university.**

The Chief Guest, **Dr. H.P Khincha**, Former Vice-Chancellor, VTU Belgaum, addressed the gathering about the importance of the convergence of knowledge gathered in the conference, which was the big take away from the conference

**Dr. Narasimhan Sundararajan** gave a motivation tag line “When you know what you are working towards is not called as research but when you walk and explore new things is then called research”.

**Dr. R. Nagaraj**, the Principal of the Oxford college of engineering spoke about the importance of every faculty being involved into current trends of research as how it would not just enhance personal growth but as well improve the quality of teaching in the present

In gist the panel motivated everybody to concentrate on research. Dr. Narasimhan Sundararajan quoted Albert Einstien "When you know where to go is not research but when you dont knowwhat your doing is research. Dr Teague told that how a student inspired him to continue teaching. A researcher can be a good teacher, but not necessarily a teacher can be a good researcher. Then lot of questions from the audience was aptly answered by the esteemed panel. The panel discussion was followed by valedictory function and high tea



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