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Venue   Auditorium, NERTU
Osmania University
Hyderabad.

Time   9.30 AM – 5.15 PM
Registration starts at 9AM on
first Day of the Workshop

Registration Fee   **:** Rs.3500/-

        For students   : Rs.2500/-

The fee includes kit, lunch, tea/snacks. The number of participants is limited and the selection is on a first-cum-first served basis.

**The last date for registration is
10th December 2014.**

Participants have to make their own arrangements for their travel and accommodation

The advertisement along with Registration form proforma is available on our University website: http://www.osmania.ac.in

**For further details please contact
Coordinator
Prof. K.Deergha Rao**
Director
R & T Unit for Navigational Electronics
Osmania University, Hyderabad : 500 007
Tel : 27098066, 27682362; Fax: 27091762
E-mail: korraidrao@yahoo.com

**To
The Coordinator
Workshop code:
NERTU/SC/58
Research and Training Unit
for Navigational Electronics
Osmania University
Hyderabad – 500 007
Telangana, INDIA**

**A Two Day Workshop
on
Sparse Signal Processing
and
Compressive Sensing**

19-20 DECEMBER 2014

Coordinator

Prof. K. Deergha Rao
Director

**Research and Training
Unit for Navigational Electronics
Osmania University
Hyderabad: 500 007
Tel: 27098066, 27682362
Fax: 27091762
e-mail:korraidrao@yahoo.com**

About the Workshop

Sparsity is an inherent characteristic of many natural signals. The sparse representation demands a design of an efficient and flexible representation matrix, which is referred to as dictionary in the sparse theory.

The sparse representation from redundant dictionaries may provide better ways to capture the structures and also offers better performance in signal modeling. Therefore, sparse representation has become an invaluable tool for signal processing. Compressive sensing (CS) is a novel sampling paradigm that samples signals in a much more efficient way than the established Nyquist Sampling Theorem. CS has recently gained a lot of attention due to its exploitation of signal sparsity. CS provides a promising solution when there are limitations on the number of data capturing devices, measurements are very expensive or slow to capture such as in radiology and imaging techniques via neutron scattering.

Recently, the theory of sparse representation of signals and compressive sensing is widely applied in a variety of application areas such as image processing, medical imaging, compressive RADAR, Sparse Channel Estimation, sensor networks, cognitive radios, data acquisition etc, **The workshop is aimed** to create awareness among engineers, scientists, academicians and students. The workshop is useful not only to the researchers in this field but also to those who want to refresh their knowledge in this area.

It is hoped that the workshop will enable the participants to:
- ➢ Enrich their knowledge of sparse signal processing and compressive sensing.
- ➢ Familiarize themselves with latest trends in sparse signal recovery methods.

About NERTU

The Research and Training Unit for Navigational Electronics (NERTU for short), is the focal point for research and training in the area of Electronic Navigation in India. Since 1982, NERTU has been actively engaged in research and training in this strategic area of electronics. It has executed 47 sponsored/consultancy projects. It has also conducted 57 short term courses/workshops on various facets of electronic navigation and the present one is the 58th one.

Workshop Faculty:

Dr. K.V.S.Hari, Professor, IISc, Bangalore
Dr. Chandra Murthy, Associate Professor,
                          IISc, Bangalore
Dr. C.Sastry, Assistant Professor, IIT,Hyderabad
Dr. K.Deergha Rao, Professor, NERTU, O.U.

The main topics to be covered

- ❖ Introduction to Sparse Signal Processing and Compressive Sensing
- ❖ Dictionaries for sparse representations: Theory and applications
- ❖ Bayesian-Inspired Non-convex Methods for Sparse Signal Recovery
- ❖ Fusion framework for sparse signal recovery
- ❖ Sparse Image Processing

**A Two Day Workshop on
Sparse Signal Processing
&
Compressive Sensing**

Registration Form
Workshop code: NERTU/SC/58)

1. *Name*

2. *Designation*

3. *Address for correspondence*

4. *Email*

   Phone   *Fax*

5. *Educational Qualifications*

6. *Nature and Duration of Experience*

7. *Field of specialization*

8. *Bank Draft[1]/ cash receipt.*

   No.   *Date*

9. *Signature of the Candidate*

10. *Recommendation of the Sponsorer with Signature*

    Date

    Place

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[1] Drafts should be drawn in favour of "Director, NERTU, Osmania University, Hyderabad".