

ABOUT THE INSTITUTE

“Sinhgad Technical Education Society”, is the prominent name in the field of Education. The society was established by Honorable Founder President Prof.M.N.Navale in year 1993. The aim of the Society is to impart quality education from KG to PhD in every stream of education. The Sincere & rigid efforts of Honorable Founder President, the Society is running more than 85 Educational Institutes in Pune and other areas of Maharashtra. **The total students learning under the wings of Sinhgad are more than 55,000**

Sinhgad Institute of Technology and Science, Narhe was established in year 2008. The Institute is approved by AICTE, DTE, Mumbai & affiliated to University of Pune. In the first year of establishment, **the Institute was ranked at 11th position in University of Pune First Year Engineering Results.** We have state-of-art laboratories, highly qualified & well experienced faculties. We offer five under graduate and three Post graduate courses.

ABOUT THE DEPARTMENT

The Department of Electronics & Telecommunication Engineering was established in Year 2008. It has state-of-the-art of laboratories and highly experienced faculties. The Department is having licensed copy soft-wares like Lab VABVIEW, MATLAB, XILINIX, MULTISIM & many more.

OBJECTIVE OF THE WORKSHOP

Wavelets are mathematical functions that cut up data into different frequency components, and then study each component with a resolution matched to its scale. They have advantages over traditional Fourier methods in analyzing physical

situations where the signal contains discontinuities and sharp spikes. Wavelets were developed independently in the fields of Mathematics, Quantum Physics, Electrical Engineering, and many more. Interchanges between these fields during the last ten years have led to many new wavelet applications such as image compression, turbulence, human vision, radar, and earthquake prediction. Wavelets are the result of collective efforts that recognized common threads between ideas and concepts that had been independently developed and investigated by distinct research communities. They provide a unifying framework for decomposing images, volumes, and time series data into their elementary constituents across scale. Although a relatively recent construct, wavelets have become a tool of choice for engineers, physicists and mathematicians, leading to efficient solutions in time and space frequency analysis problems, as well as a multitude of other applications. One of the consequences is that wavelet methods of analysis and representation are presently having a significant impact on the science of medical imaging and the diagnosis of disease and screening protocols. Because of a powerful underlying mathematical theory, they offer exciting opportunities for the design of new multi-resolution image processing algorithms, and novel acquisition methods such as wavelet-encoded MRI.

To cater these needs, Department of Electronics & Telecommunication Engineering of Sinhgad Institute of Technology & Science, Narhe, Pune has taken initiative to conduct a Workshop for

the Engineers, Teachers of Electronics, Instrumentation, Electrical, Computer, Information Technology, and allied branches. This workshop is proposed in association with renowned Professionals from industries and academicians who will be sharing their experiences with the participants.

The participants of this program will be benefited in terms of knowledge, hands on training on Wavelet Tool, which will provide help for laboratory developments using state-of-the-art Technology to cultivate research ideas.

CONTENTS OF WORKSHOP

- ✓ Introduction to Wavelets.
- ✓ Wavelet Fundamentals
- ✓ Hands on experience on Wavelet toolbox and implementation of 1-D and 2-D wavelet
- ✓ Multi-resolution Analysis
- ✓ Tree structured Wavelet and Wavelet Packets
- ✓ Multichannel/ M-Band Wavelet
- ✓ Rotated Wavelet
- ✓ Implementation of M-Band and Rotated Wavelet
- ✓ Gabor Wavelet
- ✓ Complex Wavelet Transform
- ✓ Dual Tree Complex Wavelet Transform
- ✓ Rotated Dual Tree Complex Wavelet Filter
- ✓ Implementation of Gabor, DT-CWT and DT-RCWF
- ✓ Curvelet and Ridglet
- ✓ Applications of Wavelet to CBIR, IRIS Recognition, Digital Image Watermarking, Document Image retrieval, and Fingerprint recognition
- ✓ Application of wavelet in Medical Image Analysis

REGISTRATION FORM
(One Week STTP on Wavelets)
(13th to 18th December 2012)

1. Name: _____

2. Organization: _____

3. Address: _____

4. Phone: _____

5. Fax: _____

6. E-mail ID: _____

7. Details of Registration Fees:

Amount: _____ D. D. No. _____

Bank: _____

Date: _____ Place: _____

Seal & Sign of Sponsoring Authority

(Photo copy can be used for more than one participants)

CONVENER

Dr. S.M. Deokar
Chief Executive Officer, Narhe Technical Campus
Head E & TC Engg .Dept. SITS, Narhe, Pune.

COORDINATORS

Prof. Upasani D.E.
Prof. Mrs. S.S. Patil

STEERING COMMITTEE

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Prof. A.B. Deshmukh Prof.Mrs. Yogi

IMPORTANT DATES

Duration of Program: 13 – 18 December 2012

Last Date of Registration: 10 December 2012

REGISTRATION FEES

Registration Fees is Rs. 3000/- per participants.
The registration fees should be paid in advance
through a DD drawn of any Nationalized Bank in
favor of "The Principal, SITS, Narhe ",payable at
Pune.

CONTACT PERSONS

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IETE APPROVED

**National Level
One Week STTP
On**

WAVELETS

December 13 – 18, 2012

Organized by

**Department of
Electronics & Telecommunication
Engineering**

In Association with

CAMPUS COMPONENT, PVT. LTD. PUNE

**SINHGAD TECHNICAL EDUCATION SOCIETY'S
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