#### **Tentative Programme**

Day1: Venue: AMC Seminar Hall, SCTIMST (For Medical and Engineering Delegates)

8:30 am- Registration

8:45 am- Inauguration : Dr.M. Balaraman Nair Felicitation : Dr.S. Sankar

9:30-10:30 am- Principles & Optics of Light Microscopy

10:30-10:40 am- Tea break

10:40-11:40 am- Types of Microscopes and their Medical Applications

11: 45- 1:00 pm

Demo: Brightfield, Polarizing, Fluorescence Microscopes and Image Processing Software 1:00-2:00 pm- Lunch Break

2:00 pm- reassemble, transportation to BMT Wing 2:30-4:30 pm

Demo: Inverted, Confocal, SEM, TEM, AFM 4:30 pm -Valedictory Function and Tea

## Day2: Venue: Hospital Wing, SCTIMST (For registered Engineering Delegates)

9.00 am – 12 noon Hands on experience on biomedical engineering aspects of Microscopes

Those who are interested in the hands on experience on day 2, please inform us at; microscopy2013@sctimst.ac.in, on or before 25.11.2013.



### **Confirmed speakers**

#### Dr. Amit Kumar Bhattacharya MSc, PhD.

Application Scientist for the Life Science Research Division of Leica Microsystems India

- Basics of brightfield, phase contrast, polarizing, and fluorescence microscopy.
- Basics of digital cameras, along with digital image processing and analysis.

#### Dr. K.N Ganesh MSc, PhD.

Applications Manager (Microscopy) at M/s. Olympus Medical Systems India Ltd. Bangalore.

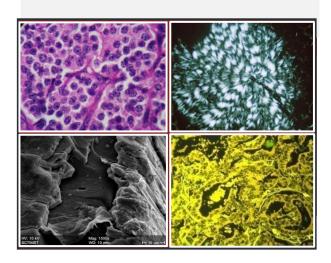
• Basics and medical applications of Inverted, Confocal.

Dr. Prabha D. Nair (Scientist G, Polymer Analysis Laboratory, BMT Wing, SCTIMST)- Atomic Force Microscopy

**Dr. Annie John (Scientist F, BMT Wing, SCTIMST)** – Transmission Electron Microscopy

Dr. Harikrishna Verma P.R (Engineer F, BMT Wing, SCTIMST)- Scanning Electron Microscopy

Dr. Anil Kumar P.R (Scientist C, BMT Wing, SCTIMST)- Inverted and Confocal microscopy



# Workshop on Microscopy



# **Basic to Advanced Microscopy** in Medical Sciences

20th and 21st December 2013

Hospital Equipment Awareness Training Series (HEATS-2013)

#### Organized by:

Department of Pathology
Department of Clinical Engineering
Biomedical Technology Wing

Sree Chitra Tirunal Institute for Medical Sciences & Technology

Thiruvananthapuram, Kerala

"Despite all the advances in molecular biology and other disciplines, the basic diagnosis is still based in the overwhelming majority of the cases on what we see under the microscope"

Prof. Juan Rosai

No doubt microscope is the key equipment in a Pathology department. That is why we thought it would be worthwhile to spend some time learning the inside of a microscope which we are so used to handling everyday.

SCTIMST proudly welcomes all participants to a two days' workshop on microscopy.

There will be an exhaustive talk on the light microscope, optics behind it, lighting systems, how to choose a microscope that best suits our work etc. In the second part, we move on to the other types of microscopes we may come across like polarizer, inverted, and fluorescence microscopes. We also briefly touch upon advanced microscopes such as confocal, SEM, TEM and atomic force microscopes.

Afternoon hours will be spent on directly seeing, learning and understanding the applications of these microscopes.

The second day will be exclusively for the registered engineering participants who will be given a handson demonstration of the technical aspects of the microscopes.

The resource persons for the workshop are experts in the field of microscopy from Leica, Olympus and SCTIMST.

We once again welcome you to attend and experience the world of microscopes.

Kindly note: Registration will be limited to the first twenty participants, with preference given to postgraduates in Pathology, besides the M. Tech students of SCTIMST.

Dr. S. Sandhyamani Organizing Chairperson

#### ORGANIZING COMMITTEE

#### **Patrons:**

Dr J M Tharakan, (Director, SCTIMST)

Dr. R Sankar Kumar,

(Medical Superintendent, SCTIMST)

Dr. C.P Sharma

(Head, BMT Wing, SCTIMST)

#### **Organizing Chairperson:**

Dr. S. Sandhyamani

#### **Organizing Secretary:**

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#### **Jt Organizing Secretary cum Treasurer:**

Dr. Santhosh Kumar. B

#### Scientific committee:

Mr. Koruthu. P Varghese

(Engineer G, SCTIMST)

Dr. Prabha D. Nair

(Scientist G, Polymer Analysis Laboratory, BMT Wing)

Dr. Annie John

(Scientist F, TEM, BMT Wing, SCTIMST)

Dr.Harikrishna Verma P.R

(Engineer F BMT Wing, SCTIMST)

Dr. Niranjan D. Khambete

Scientist F, BMT Wing, SCTIMST'

Dr. Anil Kumar P.R

(Scientist C, BMT Wing, SCTIMST)

#### For Details, Contact:

Dr. S. Sandhyamani,

Organizing Chairperson,

Workshop on Microscopy,

Department of Pathology, SCTIMST

Thiruvananthapuram-695 011, Kerala.

Ph: 0471- 2524605, 2524594

Email: ssm@sctimst.ac.in

### **Registration Format**

(Kindly take photocopy, if necessary)

Name:

**Designation:** 

**Official Address:** 

Mob:

**Email:** 

#### **Details of Payment:**

(Kindly write your name on the reverse side of DD)

DD No.

Bank

Dated:

Registration Fee: Rs 750/-

Demand draft to be taken in favour of "The Director, SCTIMST" payable at Trivandrum.

## Send with the completed form to: Dr. S. Sandhyamani

Organizing Chairperson, Workshop on Microscopy, Department of Pathology, SCTIMST, Thiruvananthapuram, Kerala 695011.