



# 21<sup>st</sup> INDO-US Flow Cytometry Workshops

(Building Cytometry Community Since 2002)

Organized by

Live Education Task Force (LETF),  
International Society for Advancement of Cytometry (ISAC),  
Trust for Education and Training in Cytometry (TETC)

**27<sup>th</sup> January - 7<sup>th</sup> February, 2020**

## VENUES

1.) CSIR-National Institute of Oceanography (CSIR-NIO), Goa  
“Basics of Flow Cytometry and its Applications in Oceanography”  
(27<sup>th</sup>-28<sup>th</sup> Jan, 2020)

2.) M.S. Ramaiah Medical College, Bengaluru  
“Clinical Applications of Flow cytometry”  
(29<sup>th</sup>- 30<sup>th</sup> Jan, 2020)

3.) Panjab University, Chandigarh  
“Flow Cytometry Applications in Biomedical Research”  
(2<sup>nd</sup>- 5<sup>th</sup> Feb, 2020)

4.) Eternal University, Himachal Pradesh  
“Basics of Flow Cytometry and its Applications in Plant Biology”  
(6<sup>th</sup>- 7<sup>th</sup> Feb, 2020)



**RAMAIAH**  
Medical College



**Panjab**  
University



## Contact Details

Dr. Rekha Gour  
[rekhagour@gmail.com](mailto:rekhagour@gmail.com)  
+91-9284999738

Dr. Hemant Agrawal  
[flowsols@gmail.com](mailto:flowsols@gmail.com)  
+91-7665130114

For updates, please follow us on Facebook

<https://www.facebook.com/cytoindia/>

<https://www.facebook.com/tetcindia/>



## 21<sup>st</sup> INDO-US Flow Cytometry Workshop

### “Basics of Flow Cytometry and its Applications in Oceanography”

Jointly organized by

Live Education Task Force, International Society for Advancement of Cytometry (LET-F-ISAC)

Trust for Education and Training in Cytometry (TETC)

CSIR-National Institute of Oceanography (CSIR-NIO)

at

CSIR-NIO, GOA

27<sup>th</sup>-28<sup>th</sup> January 2020

#### Workshop Highlights

Basics of Flow Cytometry  
Applications of Flow Cytometry in Oceanography  
Know Your Cytometer (KYC)  
Quality Control and Trouble Shooting  
Marine Microbial Ecology  
Phytoplankton Ecology  
Invertebrate Immunology  
Data Analysis and Presentation

#### Invited Faculty

Dr. Nicole Poulton, USA  
Dr. William Telford, USA  
Dr. Z. Maciorowski, France  
Dr. A. C. Anil, India  
Dr. H. Krishnamurthy, India  
Dr. Rekha Gour, India  
Dr. Hemant Agrawal, India  
Dr. Lidita Khandeparker, India  
Dr. Dattesh Desai, India

#### Organizing Committee

##### Patron

Prof. Awtar Krishan, USA

##### Scientific Advisory Committee

Prof. Sunil Kumar Singh  
Dr. A C Anil

##### Convener

Dr. Rekha Gour

##### Organizing Secretaries

Dr. Lidita Khandeparker  
Dr. Hemant Agrawal

##### Members

Dr. H. Krishnamurthy  
Dr. Vivek Tanvade  
Dr. Dattesh Desai  
Mr. Kaushal Mapari

#### Online Registration:

Fill the registration form and send the scanned copy together with online payment receipt to Dr. Hemant Agrawal at [indiatetc@gmail.com](mailto:indiatetc@gmail.com)

##### NEFT/RTGS Details:

Account Name: Trust for Education and Training in Cytometry  
Account Number: 3712970609  
IFSC Code: KKBK0000646  
Bank Name: Kotak Mahindra Bank, Mumbai

|                   | Students | Faculty  | Industry |
|-------------------|----------|----------|----------|
| Registration fee  | Rs. 2500 | Rs. 5000 | Rs.10000 |
| Spot Registration | Rs. 4000 | Rs. 8000 | Rs.12000 |

**Accommodation:** Limited accommodation is available on campus on paid and first come first serve basis.

#### For further information, call or email to us

Dr. Lidita Khandeparker  
[klidita@nio.org](mailto:klidita@nio.org); +91-8322450432  
Dr. Hemant Agrawal  
[flowsols@gmail.com](mailto:flowsols@gmail.com); +91-7665130114

**Last date for registration: 25<sup>th</sup> December 2019**

For updates, please follow us on Facebook

<https://www.facebook.com/cytoindia/>; <https://www.facebook.com/tetcindia/>

## 21<sup>st</sup> INDO-US Flow Cytometry Workshop “Clinical Applications of Flow cytometry”

Jointly organized by

Live Education Task Force, International Society for Advancement of  
Cytometry (LET-F-ISAC)

Trust for Education and Training in Cytometry (TETC)  
Ramaiah Medical College

at

**Ramaiah Medical College Hospital, Bengaluru**

**29<sup>th</sup>-30<sup>th</sup> January 2020**

### Workshop Highlights

Basics of Flow Cytometry  
Build your own Flow Cytometer (BYO)  
Quality Control and Trouble Shooting  
DNA Estimation and Cell Cycle Analysis  
Polychromatic Flow Cytometry and Panel Design  
Leukemia/Lymphoma Phenotyping  
Minimal Residual Disease (MRD)  
Hematopoietic Stem Cell Enumeration  
Circulating Tumor Cells (CTCs)  
Myelodysplastic Syndrome and Multiple Myeloma  
Flow cytometry in PNH and Primary  
immunodeficiency disease  
Data Analysis and Presentation

### Organizing Committee

#### Organizing Chairpersons

Awtar Krishan, USA  
Pushpati N. Razdan, India

#### Organizing Co-Chairpersons

Prasanna Shetty  
H. Krishnamurthy

#### Convener

Rekha Gour

#### Organizing Secretaries

Kalpana Kumari MK  
Hemant Agrawal

#### Coordinators

Nandakishore Alva  
Vivek Tanavde

### Invited Faculty

Brent Wood, USA  
William Telford, USA  
Z. Maciorowski, France  
H. Krishnamurthy, India  
Sumeet Gujral, India  
Paresh Jain, India  
Vivek Tanavde, India  
Rekha Gour, India  
Hemant Agrawal, India  
Manisha Madkaikar, India  
Annapoorni Rangarajan, India

### Online Registration:

Fill the registration form  
Pay the required amount by DD/NEFT/RTGS and email  
to msrmcpath@gmail.com

### Offline Registration:

Fill the registration form and send with payment details to  
Kalpana Kumari M K  
Associate professor of pathology  
Ramaiah Medical College  
MSR Nagar, MSRIT Post  
Bengaluru- 560054

Medical credit hours will be there for delegates and  
speakers

|                    |         |            |
|--------------------|---------|------------|
| Registration free: | Faculty | PG/Student |
| Early bird:        | ₹3000   | ₹2500      |
| Spot:              | ₹4000   | ₹3000      |

**Last date for registration:**  
**31<sup>st</sup> Dec 2019**

### For further information, please call or email us

Dr. Kalpana Kumari M K: 9886392301,  
kalpank@gmail.com  
Dr. Prasanna Shetty: 9880219907,  
drbadilaprasanna@rediffmail.com

### For updates, please follow us on Facebook

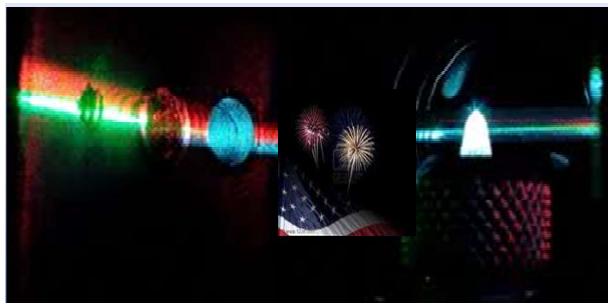
<https://www.facebook.com/cytoindia/>  
<https://www.facebook.com/tetcindia/>

## **First Announcement**

### **21<sup>st</sup> Indo-US Workshop cum Symposium on Flow Cytometry Applications in Biomedical Research 2<sup>nd</sup>-5<sup>th</sup> February 2020**

***Conducted  
by***

**The TRUST FOR EDUCATION AND TRAINING IN CYTOMETRY™ (TETC)**, a registered non-profit trust for conducting Indo-US Cytometry Workshops in collaboration with the host Institutes invites your participation in the Hands-on Workshop cum Symposium on at Panjab University, Chandigarh, India.



## **Organized by**

**Panjab University, Chandigarh  
under the aegis of Live Education  
Task Force (LETF) of the  
International Society for the  
Advancement of Cytometry  
(ISAC).**

### **Venue**

**Department of Biotechnology,  
Panjab University, Chandigarh**

## **THE CONCEPT**

Flow cytometry is based on detection and rapid analysis of cellular markers and constituents stained with a fluorochrome and excited by a laser beam. Besides large cells (e.g., algae, bacteria, yeast, plant and mammalian cells) laser flow cytometry is used for study and sorting of human chromosomes and cells labeled with nanoparticles and beads.

The important value of laser flow cytometry is its ability to make measurements on a large numbers of single cells within a short period of time (millions of cells per minute) and generating multiparametric data. The heterogeneity of populations can be revealed and different subsets of cells identified and quantified. Selected cell populations can also be electronically sorted for further study.

The wet lab workshop to be held at the Panjab University Chandigarh will include lectures, tutorials and wet labs to review and demonstrate the various flow cytometric methods for Biomedical research.

**Applications** are invited from students and researchers who wish to acquire expertise in the use of flow cytometry for their research. An application form can be downloaded from website, <http://biotechnology.puchd.ac.in/>, and should be sent along with a two page biodata to the organizing secretary at [kashmirbio@pu.ac.in](mailto:kashmirbio@pu.ac.in).

### **Workshop Highlights:**

- ✓ Principles of Flow Cytometry
- ✓ Flow Cytometry Control & Quality Assurance
- ✓ Multicolor Immunophenotyping and Panel designing
- ✓ B, T and NK cell Immunophenotyping
- ✓ Cell proliferation & Apoptosis assays
- ✓ Single Cell Sorting
- ✓ Small Particle Analysis
- ✓ Data Analysis and Presentation

### Registration Fee:

|   | Student         | Faculty/Doctor/Postdoc | Corporate        |
|---|-----------------|------------------------|------------------|
| <b>Symposium</b>  | <b>Rs. 2000</b> | <b>Rs. 3000</b>        | <b>Rs. 5000</b>  |
| <b>Workshop</b>   | <b>Rs. 4000</b> | <b>Rs. 5000</b>        | <b>Rs. 8000</b>  |
| <b>Both</b>   | <b>Rs. 5000</b> | <b>Rs. 7000</b>        | <b>Rs. 12000</b> |
| <b>On Spot registration: Rs 2000 will be added to the above price</b> |                 |                        |                  |

## *Patrons*

Prof Raj Kumar, Vice-Chancellor, Panjab University, Chandigarh

Prof. Awtar Krishan, Co-Chair, LETF, ISAC, USA

### *National Advisor cum Chairman organizing Committee*

Prof RC Sobti, India

### *Organizing Secretaries*

Dr. Kashmir Singh, PU

Dr. Sanjeev Puri, PU

Dr. Hemant Agrawal, TETC

### *Workshop Convernor*

Dr. Rekha Gour, TETC

### *Organizing Committee Members*

Dr. H. Krishnamurthy

Dr. Vivek Tanavde

## *INVITED FACULTY/SPEAKER*

### *International*

Dr. Brent Wood, USA

Dr. Zosia Maciorowski, France

Dr. Paresh Jain, Singapore

Dr. Aastha Sobti, Sweden

### *National*

Dr. H. Krishnamurthy, Bangalore

Dr. Hemant Agarwal, Jaipur

Dr. Latha Rangan, Guwahati

Dr. Rajeev Kumar, Silchar

Dr. Bipasha Bose, Mangalore

Dr. Rekha Gour, Mumbai

Dr. Vivek Tanavde, Ahmedabad

Dr. Nirupama Trehanpati, New Delhi

Dr. Deepak Sharma, Mumbai

Dr. Biman Saikia, Chandigarh

### *Local Organizing Committee (PU)*

Dr. Jagdeep Kaur, Dept. of Biotechnology.  
Dr. Neena Caplash, Dept. of Biotechnology  
Dr. Jagtar Singh, Dept. of Biotechnology  
Dr. DD Singh, Dept. of Biotechnology  
Director, UIET,  
Chairperson, Dept. of Biochemistry  
Chairperson, Dept. of Biophysics  
Chairperson, Dept. of Microbiology  
Chairperson, Dept. of Zoology  
Prof Amrik S Ahluwalia, Department of Botany  
Dr Prashant, UIHMT

Chairperson, Centre for Stem Cell Tissue Eng. &  
Biomedical Excellence, PU, Chandigarh  
Dr. Rajat Sandhir, Dept. of Biochemistry  
Dr. V.L. Sharma Dept. of Zoology  
Dr. Sukhbir Kaur, Dept. of Zoology  
Dr. Veena Puri, Centre for Systems Biology &  
Bioinformatics,  
Dr. Devinder Singh, Dept. of Laws  
Chairperson, Department of Microbial Biotechnology  
Prof Karan Vasisht, UIPS

### *Contact Information*

**Dr. Kashmir Singh**, Dept. of Biotechnology, Panjab University, Chandigarh.  
Ph: 0-9501684096, email: [kashmirbio@pu.ac.in](mailto:kashmirbio@pu.ac.in), [chairperson\\_biotech@pu.ac.in](mailto:chairperson_biotech@pu.ac.in)

**Dr. Sanjeev Puri**, Biotechnology, UIET, Panjab University, Chandigarh  
Ph: 0-987-258-0078, email; [spuri1025@gmail.com](mailto:spuri1025@gmail.com).

**Dr. Hemant Agrawal**, TETC, Jaipur, +91-7665130114, [flowsols@gmail.com](mailto:flowsols@gmail.com)

**Dr. Rekha Gour**, TETC, Mumbai, +91-9284999738, [rekha\\_gour@gmail.com](mailto:rekha_gour@gmail.com)





# 21<sup>st</sup> INDO-US Flow Cytometry Workshop “Basics of Flow Cytometry and its Applications in Plant Biology”

Jointly organized by

Live Education Task Force, International Society for Advancement of  
Cytometry (LETF-ISAC)

Trust for Education and Training in Cytometry (TETC)

Eternal University

at

Eternal University, Baru Sahib, Himachal Pradesh

6<sup>th</sup>-7<sup>th</sup> February 2020

## Workshop Highlights

Basics of Flow Cytometry  
Applications of flow cytometry in Plant Biology  
Know Your Cytometer (KYC)  
Quality Control and Trouble Shooting  
Flow Cytometry Experimental Designing  
Plant Poidy and Genome Size Estimation  
Data Analysis and Presentation

## Invited Faculty

William Telford, USA  
Z. Maciorowski, France  
Latha Rangan, India  
Arun Agarwal, India  
Rekha Gour, India  
Hemant Agrawal, India

## Organizing Committee

### Organizing Chairpersons

Awtar Krishan, USA  
H.S. Dhaliwal, India

### Convener

Rekha Gour

### Organizing Secretaries

Sapna Thakur  
Hemant Agrawal

### Coordinators

B.S. Boparai      S. K. Sharma      Pritesh Vyas

### Members

H. Krishnamurthy  
Vivek Tanavde

## Online Registration:

Fill the registration form  
Pay the required amount by NEFT/RTGS and email to  
sapna@eternaluniversity.edu.in

### NEFT/RTGS Details:

Name of the account: Eternal University  
Name of the Bank: State Bank of India  
Branch: Baru Sahib (H.P.)  
Account Number: 30957030400  
IFSC Code: SBIN0011784  
MICR Code: NON-MICR

|                   | Students | Faculty  | Industry |
|-------------------|----------|----------|----------|
| Registration fee  | Rs. 2000 | Rs. 4000 | Rs. 6000 |
| Spot Registration | Rs. 2500 | Rs. 4500 | Rs. 6500 |

### Accommodation:

Accommodation is available on campus on paid basis

Single: Rs 800/night  
Sharing basis: Rs 400/night

For further information, please call or email to us

Sapna Thakur  
sapna@eternaluniversity.edu.in  
sapnabiotech@gmail.com  
Phone No.: 9459506118

Last date for registration: 25<sup>th</sup> December 2019

For updates, please follow us on Facebook

<https://www.facebook.com/cytoindia/>

<https://www.facebook.com/tetcindia/>