# REGISTRATION

#### Who should participate?

- MPhil/PhD students
- Faculty Members

#### **Registration Fee**

- For students: Rs. 3000/-
- For employees: Rs. 5000/-

### Accommodation for five nights

For students: Rs. 1000/

For employees: Rs. 2000/-

Accommodation fee will be charged only if residence is required.

### How to Apply?

The interested candidates are required to forward their nominations through their supervisors (for MPhil/Ph.D. students) and head of department (for employees) along with a

- a) Duly filled registration form
- b) A short CV
- c) A passport size photograph

### Where to send?

Please send complete application by post to Mr. M. Irfan, School of Biological Sciences, New Campus, University of the Punjab, Lahore or e-mail at <u>info.sbs@pu.edu.pk</u> by Friday, 20<sup>th</sup> October, 2017.

#### Note

The workshop is limited to 20 participants only. After intimation of successful selection from SBS, a bank draft of mentioned registration fee in favour of Director General SBS will be required.

# **ORGANIZERS**

#### Patron in chief

Prof. Dr. Zaffar Mueen Nasar Vice Chancellor

#### Patron

Prof. Dr. M. Akhtar FRS Director General SBS

#### Advisory Committee

Prof. Dr. Naeem Rashid Prof. Dr. Javed Iqbal Prof. Dr. A. R. Shakoori Prof. Dr. Waheed Akhtar Dr. Sadaf Naz Dr. Asima Bibi

#### **Organizing Committee**

Dr. Muhammad Qamar Bashir Dr. Q. A. Gardner Dr. Naveed Shahzad Dr. Uzma Qaisar Dr. Saima Iftikhar Dr. Soumble Zulfiqar Dr. Munir Ahmad Dr. Muhammad Ali Dr. Fatima Ahsan Dr. Naseema Azim Mr. M. Abid Mr. M. Irfan

Mr. Qadeer Ahmad

#### For correspondence and more information:

Dr. Muhammad Qamar Bashir E-mail: <u>qbashir@gmail.com</u> Cell: 03367934267





# National Workshop On Recombinant Protein Production & Purification

(6<sup>th</sup> – 11<sup>th</sup> November, 2017)



School of Biological Sciences, University of the Punjab, Lahore

# PREFACE

Production of recombinant proteins in microbial systems is one of the most powerful techniques used in the life sciences, that exploits phenomenon of central dogma of life that how genetic information flows from DNA to RNA, to produce functional protein.



The main advantage of recombinant proteins over the isolation from naturally occurring sources is that, these can be prepared in bulk quantity in short time. The applications of recombinant proteins have revolutionized the industrial processes involved in the production of biopharmaceuticals, food, leather and textile products.

This workshop aims to provide basic hands-on training in recombinant protein production, analysis, localization of protein as a soluble or insoluble fraction, purification, and activity assay.

The young researchers and faculty members who are presently involved in teaching and research in the departments of life sciences are encouraged to participate in the workshop.

## Highlights of the workshop

- Recombinant protein production and analysis by denaturing gel electrophoresis
- Culture harvesting, lysis, separation of soluble and insoluble proteins
- Use of heat treatment for protein fractionation
- Recombinant protein quantification by calorimetric and UV spectroscopic methods
- Demonstration of AKTA purification system
- purification by Protein column chromatography
- Activity assay of the recombinant protein • and final gel analysis of the purified protein

FACILITIES

**VENUE AND TIMINGS** 

School of Biological Sciences, University of the

Punjab, Quaid-e-Azam Campus, Lahore, 54590

9:00 am to 5:00 pm daily

06<sup>th</sup> November to 11<sup>th</sup> November, 2017

participants.

# Photograph Name:.... Affiliation: Position: Oualification: Participants will be served breakfast and lunch. Address: Pick and drop service will be provided for out station participants from university hostel to SBS. A recreational tour will also be organized for the ..... F-mail: ..... Phone: ..... Accommodation required: YES NO *Please* ✓ *one of the options* \*Registration form can also be downloaded from

**REGISTRATION FORM** 

http://pu.edu.pk/home/section/workshops/7545