## REGISTRATION

#### Who should participate?

- MPhil/PhD students
- Faculty Members

#### **Registration Fee**

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

#### Accommodation Charges

For students: Rs. 1000/-

For faculty: 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/PhD students) and head of department (for employees) along with a

- a) Duly filled registration form
- b) A short CV (1-2 pages)
- c) A passport size photograph

#### Where to send?

Please send complete application by post to Mr. M. Irfan, School of Biological Sciences, University of the Punjab, Quaid-e-Azam Campus, Lahore or e-mail at info.sbs@pu.edu.pk by Wednesday, 31<sup>st</sup> October, 2018.

#### Note

The workshop is limited to 15 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. Niaz Ahmad Akhtar *Vice Chancellor PU* 

#### Patrons

Prof. Dr. M. Akhtar FRS Founding Director General SBS

Prof. Dr. Naeem Rashid Acting Director General SBS

#### **Advisory Committee**

Prof. Dr. Javed Iqbal Prof. Dr. M. Waheed Akhtar Prof. Dr. A. R. Shakoori Prof. Dr. Sadaf Naz

#### **Organizing Committee**

Dr. Q. A. Gardner Dr. Naveed Shahzad Dr. Uzma Qaisar Dr. Asima Bibi Dr. Soumble Zulfiqar Dr. Nasir Ahmad Dr. Mehwish Aslam Dr. Saima Iftikhar Dr. Munir Ahmad Dr. Naseema Azim Dr. Muhammad Ali

#### For correspondence and information

Dr. Nasir Ahmad E-mail: mna.pk1@gmail.com Cell: 03314408881

Dr. Munir Ahmad E-mail: munir\_pu@yahoo.com Cell: 03334973275





## National Workshop on Production & Purification of Recombinant Proteins

(November 12-17, 2018)



School of Biological Sciences University of the Punjab Quaid-e-Azam Campus, 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 which include production of biopharmaceuticals, food, leather, textile industries etc.

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 REGISTRATION FORM Recombinant protein production and analysis by denaturing gel electrophoresis<br/>Culture harvesting, lysis, separation of Photograph

- 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
- Protein purification by column chromatography
- Activity assay of the recombinant protein and final gel analysis of the purified protein

#### Note

Participants accommodated in hostels will be picked daily in the morning.

All the participants will be served tea and lunch.

A recreational tour will also be organized for the participants.

### **VENUE AND TIMINGS**

School of Biological Sciences, University of the Punjab, Quaid-e-Azam Campus, Lahore, 54590 November 12-17, 2018 9:00 am to 5:00 pm daily

	Photograph	
Name:		
Instituition:		
Designation:		
Qualification:		
E-mail:		
Phone:		

State how the workshop will benefit you in your work (please attach a separate sheet)

Accommodation required: YES / NO (Please ✓ one of the options)

#### Recommendation from the Head of the institution

\*Registration form can also be downloaded from www.pu.edu.pk