### Introduction

'Omics' technologies provide a holistic view of molecules that form the cell, tissue, and organism. Omics technologies include detection of gene (genomics), mRNA (transcriptomics), proteins (proteomics), and metabolites (metabolomics) in the biological systems. Different *omics* data lead to a more complete understanding of biological systems at a molecular level.

Proteomics is a large scale comprehensive study of proteins present in an organism. It aims to characterize information flow within the cell and organism, through the protein pathways and networks. The proteome is a dynamic reflection of both genes and the environment and is thought to hold special promise for biomarker discovery because proteins are most likely to be ubiquitously affected in stress and stress response. Proteomics is used to investigate the protein expression, production, storage, post-translational modifications, subcellular proteins, structural proteomics, proteinprotein interaction in order to understand the biological pathways and mechanisms. Several high-throughput technologies have been developed to investigate proteomes in depth. The most commonly applied are mass spectrometry (MS)-based techniques.

With increasing demands of food and visible effects of changing climatic conditions on agriculture, improvement in the agriculture sector is essential to withstand the food supply. Proteomics has been utilized to understand the plant response to unfavorable conditions and also to improve the agriculture sector. In order to improve the crop productivity, the proteins that control the plant architecture along with the stress resistance and tolerance in response to environmental stressors needs to be identified.

Aim of the conference is to highlight the recent trends and innovations in the field of plant proteomics and emphasizing the need of developments in the field among the Pakistani researchers.

### **Main Topics**

Proteomics of plants under stressed conditions

- Protein profiling for species diversity
- Plant Proteins and Pharmaceuticals
- Subcellular proteomics unraveling the molecular mechanisms
- Proteomics in Plant Biotechnology and secondary metabolism
- Bioinformatics use for proteomic study
- Current status and future of Proteomics in Pakistan

### **Abstract Submission**

Oral presentation-10<sup>th</sup> September, 2017

Poster presentation--15th September, 2017

Acceptance notification--20th September, 2017

### **Guidelines for Abstract Submission**

The abstract body should be less than 1,700 letters (not words) in English indicting the name and contact details of presenting author. Poster size should not exceed A0 format (841mm x 1189 mm/ 33" x 47" in.) in portrait (vertical) set-up. Abstracts for the scientific sessions and registration form should be sent to: <a href="mailto:ippc2017@yahoo.com">ippc2017@yahoo.com</a>

### Registration Fee

Registration deadline 20th September, 2017

- Student fee-----1000
- Researchers/Academicians fee----2000 Rs

(Note: students have to attach the student ID card along with the registration form)

### **Conference Secretariat**

Department of Plant Sciences, Quaid-i-Azam University
Islamabad
Tel.: +92-51-90643187
Conference Email: <a href="mailto:ippc2017@yahoo.com">ippc2017@yahoo.com</a>

### Venue

Department of Plant Sciences, Quaid-i-Azam University, 45320, Islamabad, Pakistan

### **Chief Patron**

Prof. Dr. Javed Ashraf

Vice Chancellor Quaid-i-Azam University, Islamabad

### Patron

Prof. Dr. Zabta Khan Shinwari

Dean, Faculty of Biological Sciences Quaid-i-Azam University, Islamabad

### Principal Organizers Dr. Ghazala Mustafa

Department of Plant Sciences, Quaid-i-Azam University Islamabad

Tel.: +92-51-90643187

Dr. Tariq Mahmood

Chairman, Department of Plant Sciences, Quaid-i-Azam University Islamabad

Tel.: +92-51-90643050

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### Foreign Invited Speakers

### Dr. Jingkui Tian

College of Biomedical Engineering & Instrument Science,

Zhejiang University, China

### Dr. Ramesh Katam

Department of Biology
Florida Agriculture and Mechanical
University, USA

### Dr. Juan Antonio Vizcaino

European Bioinformatics Institute, European Molecular Biology Laboratory, Cambridge, UK

### Dr. Peter Roepstorff

Department of Biochemistry and Molecular Biology

University of Southern Denmark, Denmark

### **National Invited Speakers**

Dr. Shamshad Zarina

Director, National Center of Proteomics, University of Karachi, Karachi Dr. Shahid Mansoor Director, NIBGE,

Faisalabad

Dr. S. M. Saglan Nagvi

Bacha Khan University, Charsadda KPK

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### INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN PLANT PROTEOMICS

(2-4th October, 2017)



Organized by
Department of Plant Sciences,
Faculty of Biological Sciences,
Quaid-i-Azam University,
Islamabad, Pakistan



