

High-performance liquid chromatography (HPLC), is a technique in analytical chemistry used to separate, identify, and quantify each component in a mixture. It relies on pumps to pass a pressurized liquid solvent containing the sample mixture through a column filled with a solid adsorbent material. Each component in the sample interacts slightly differently with the adsorbent material, causing different flow rates for the different components and leading to the separation of the components as they flow out of the column. Because of this versatility, HPLC is used in a variety of industrial and scientific applications, such as pharmaceutical, environmental, forensics, and chemicals. This two-day online certificate course comprised of lectures followed by training sessions on “Basic concepts and techniques in HPLC”. The course is designed to teach the basic skills of HPLC to participants from all scientific disciplines those have little or no previous experience in HPLC hands on work. It is also an ideal course for those who would like to consolidate their current, basic skill level and to further polish their handling skills.

WHO SHOULD ATTEND?

The course is designed for the large group of audience including graduate students, scientists, research scholars, and medical doctors those have interest to work on HPLC in related fields. People from variety of disciplines and academic backgrounds including chemistry, pharmacy, pesticide science, environmental science, forensics, archeology, etc., can get benefit from this workshop.

WORKSHOP CONTENT

The program includes a series of online lectures and hands-on sessions on the following topics;

Introduction of HPLC (online lectures)

Working examples of analytical HPLCs (online lectures)

Optimum use of analytical HPLCs (hands-on sessions)

Optimum use of preparative HPLCs (hands-on sessions)

VENUE

Zoom Meeting

Topic: Online Certificate Course on Optimum use of Analytical and Preparative HPLCs

Time: Mar 11, 2021, 12:00 PM Islamabad, Karachi, Tashkent

Join Zoom Meeting

<https://us02web.zoom.us/j/86978868280?pwd=dUwyTWdtbUNKSgH1a0VESm1zaGJidz09>

Meeting ID: 869 7886 8280

Passcode: 232033

Topic: Online Certificate Course on Optimum use of Analytical and Preparative HPLCs

Time: Mar 12, 2021, 12:00 PM Islamabad, Karachi, Tashkent

Join Zoom Meeting

<https://us02web.zoom.us/j/89966919454?pwd=QUQ1VnlQeWd6R2ljdkxGSnpubEzUT09>

Meeting ID: 899 6691 9454

Passcode: 498511

RESOURCE PERSONS



Dr. Shakil Ahmed, Senior Research Officer, In charge Industry Analytical Center, H. E. J. Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi, Pakistan. Dr. Shakil has years of experience in the field of analytical chemistry. His current interests includes 1) Petrochemical industrial troubleshooting; 2) Pharmaceutical industrial troubleshooting; 3) Forensic support to law enforcement agencies; 3) Environmental protection agencies; 4) Residual pesticide analysis on the latest in the shortest time; 5) Narcotic analysis with regularity aspect; etc.



Dr. Jian-hua Huang, Assistant Professor, Hunan academy of Chinese Medicine, Changsha, Hunan province, China. Dr. Huang was elected as Excellent Young Innovators of Changsha City in 2018. His Supervisor is Prof. Yi-zeng Liang, a famous Chemometrics professor, who obtained "Lifetime Achievement Award in Chemometrics" in 2016, Barcelona. His major research focus on three parts: (1) Machine learning algorithm development and application in Metabolomics, bioinformatics and pattern recognition; (2) Quality control and new quality estimation methods development for Traditional Chinese Medicine; (3) Comprehensive application of herb resources.



Dr. Yan Wang, Assistant Professor, H. E. J. Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi, Pakistan. She got Ph. D. in Pharmaceutical Chemistry from Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College, China in 2014. She has over 40 research publications in reputed international journals with total scientific impact factor of 125, with citations 509, and h-index 14 (google scholar). Dr. Wang also has 21 publications in Chinese journals, 6 books and 8 patents. Her current research interest includes natural product chemistry, biotransformation and metabolomics.

WORKSHOP PROGRAM (Pakistan Standard Time)

Day One

12:00-12:05 **Inauguration Ceremony**

12:05-12:10 Recitation of the Holy Quran

12:10-12:20 Welcome Address by Prof. Dr. M. Iqbal Choudhary

12:20-13:30 Lecture 1 entitled, "**Introduction of Analytical HPLC**" (Dr. Shakil)

13:30-14:30 Lecture 2 entitled, "**Working examples of Analytical HPLC**" (Dr. Huang)

Day Two

12:00-12:50 Practical Session, "**Optimum use of Analytical HPLC**" (Dr. Shakil)

12:50-14:15 Lecture 2 entitled "**Introduction of Preparative HPLC**" followed by Practical Session "**Optimum use of Preparative HPLC**" (Dr. Wang)

14:15-14:30 Closing Address by Prof. Dr. M. Iqbal Choudhary

REGISTRATION PROCESS

Pl. register at https://docs.google.com/forms/d/e/1FAIpQLS6xs1iNrRyuaGpn-KWavnpDKVwPFAMcziZiRZB2i59RjX-c_Q/viewform. Kindly fill the form and submit it to the undersigned before 09 March, 2021. Registered participants will receive e-certificates.

CONTACT PERSON

Khazima Muazim

Programme Manager

COMSTECH Secretariat, Islamabad

Tel: +92-51-9220681-3

Fax: +92-51-9205264, +92-51-9220265

Email: khazima@comstech.org