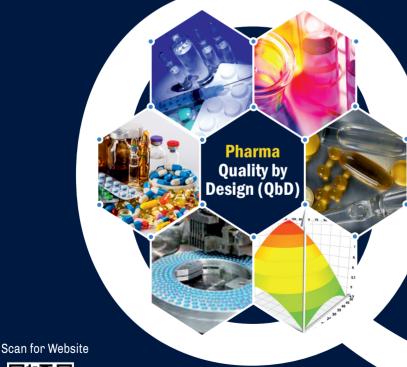




University Institute of Pharmaceutical Sciences PANJAB UNIVERSITY

National Symposium-cum-Workshop Contemporary Trends, Tools and Techniques in Pharma Quality by Design (QbD): From Conceptualization to Implementation

# 20-21 April 2023





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Bhupinder Singh Bhoop CCP, Chitkara University, Punjab

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#### About Symposium

The Indian pharma sector is poised towards an unrivalled technological transformation of the century, most sought-after and most talked-about. Globally ranking third in drug product manufacture, especially of generic medicines and vaccines, this "Pharmacy Capital of World" continues to grow at a phenomenal rate, amid inimitable opportunities and formidable challenges. The current pharma upsurge calls to update ourselves on the evolving technological paradigms and newer regulatory requirements for ensuring leading-edge patient-centric quality drug products. Holistic and systematic development of drug products and analytical methods using modern QbD models, has accordingly become an ardent need of the hour, not merely to comply with regulatory requirements, but to attain pharma quality excellence too. Adoption of ICH (Q8 to Q14) guidelines have further reinforced the inevitability and vitality of implementing such QbD-associated principles today. With the advent of newer disruptive approaches like non-invasive tools for process analytical technology (PAT), generative AI/ML, big data analytics, IoT, organ-on-a-chip and precision medicine, the domain of such paradigms is lately getting far more widened and diversified, including in continuous manufacturing, API production processes and herbal drug extraction technology. Scientists, therefore, have to acquire abilities to understand such innovative and productive practices, and their pragmatic utility towards optimal benefit to all the patients, researchers and regulators.

This Symposium-cum-Workshop is strategically designed to provide the multifaceted knowledge and know-how in interdisciplinary science through deliberations, discussions and hands-on training sessions with the designated experts. Besides familiarizing the participants on the ongoing trends and techniques of QbD fundamentals over the entire product development cycle, *viz.* product and process optimization using Design of Experiments (DoE) and Quality Risk Management (QRM), the sessions will also touch upon advanced QbD applications, including PAT and chemometric tools. It would offer an ideal opportunity for the novice scientists to gain familiarity with diverse conceptual and practical aspects of these contemporary realms, especially on resolving the relevant computational issues.

# **Objectives**

The prime objective of the program is to apprise and update the young participants among faculty, researchers and industry on diverse scientific and professional vistas pertaining to Pharma QbD and related paradigms. Besides the fundamental principles, implications and applications, this Symposium would also embark upon pertinent precepts and practices employed for systematic development of wideranging drug delivery technologies and analytical processes, and relevant computational tools for their requisite implementation. The proposed Symposium would provide a conducive milieu for the aspiring scientists to explore and exploit the potential role of various approaches and appliances necessary to attain proficiency in the updated QbD-related domains, while interacting face-toface with the deft professionals, duly trained and experienced in the area.

# **Symposium Structure**

The Symposium-cum-Workshop would comprise of a gamut of well-conceived offline lectures by a galaxy of eminent experts in the field, from India or beyond, who would demonstrate vanguard tools and techniques for inclusive development of QbD-enabled pharmaceutical products and processes, to result in effectual and cost-effectual outcomes. Hands-on training workshop sessions will be provided by an adroit company expert from JMP Statistical Discovery (Subsidiary of SAS Inc., USA), on one of the most globally popular, versatile, interactive, comprehensive, intuitive and powerful statistical software platforms, 'JMP'. Participants must download the trial version of JMP software from https://www.jmp.com/try on their laptops for the purpose. Selected faculty members and research students may also be provided with annual complimentary JMP licenses as part of their academic collaboration.

# **Eligibility Criteria**

Faculty members, Ph. D. scholars, postgraduate students (from any specialization), regulators and industrial scientists from Pharma industry, are eligible to apply for the Symposium. Undergraduate students in their final-year can also be considered, depending upon the available slots.

# **About UIPS**

University Institute of Pharmaceutical Sciences (UIPS) of Panjab University is one of the oldest, most prestigious and premier pharmaceutical institutes of India, established in 1944. Known for its excellence in pharmaceutical education and research, and committed to serve the society by adopting global quality standards and ethical values to generate innovative medicinal products, breakthrough research outcomes, and superior professional services using entrepreneurial approach, the UIPS has been ranked among the top public pharmacy institutes in the MHRD-NIRF rankings by Govt. of India. Owing to its accomplishments galore in research publications, patents, landmark discoveries, tech-transfers of nanotech-enabled drug delivery products, onsite industrial training programs, numerous awards and accolades earned by its globally renowned faculty, the Institute is seen with marked degree of esteem in the entire techno-scientific world. Over a dozen of its faculty and researchers adorn the Top 2% list of most widely-cited scientists promulgated by Stanford University, USA. The productivity of its trained and skilled human resources and placement of its alumni has been ranked par-excellence in India and beyond.

# **About CCP**

Established in 2005, Chitkara College of Pharmacy (CCP), in Chitkara University, Rajpura, Punjab, is a front-runner institute across the country in pharmaceutical education and research. Well-groomed through innovative teaching technologies and hands-on training on contemporary practices and future challenges, the students of CCP in Bachelors, Masters or Doctoral research programs are considered as highly employable, locally as well as globally. With its courses customized to meet the ever-evolving requirements of the pharma profession. one can find its alumni in frontline positions among pharma industry, hospitals, communities, academia, drug control and research institutes, the world over. Supported by highly qualified and diversified faculty, well-equipped laboratories and a well-resourced library, while collaborating with industry partners and research centres, CCP has developed comprehensive research portfolios with over 185 patents and 1450 Scopus-indexed publications. Marked with 20th rank as per MHRD-NIRF and several other notable accomplishments, the institute is all set to be a torch-bearing Centre of Excellence for higher education in Pharmaceutical Sciences across the Nation.

# **Selection Procedure**

Around 150 participants shall be selected amongst the applicants for the program on a first-come-first-served basis. Due consideration will be imparted to merit and of the participants and inclusivity of the institutes or industrial houses too.

# Call for Papers

We invite original and novel contributions from researchers, scientists, and students on any of the following topics pertaining to Pharma QbD for poster presentation during the Symposium. Abstracts should be submitted online on our website <u>PHARMAQbD</u> by April 10, 2023. The abstract, without any graphs and images, should contain 150-200 words, with all the fields completed prior to submission. A registered delegate is permitted to present one paper only. Promising presentations will be conferred with apt "Best Paper Awards" too.

- Formulation by Design (FbD)
- QbD Tools, Techniques & Trends
- QbD in Herbal Drug Extraction
- Novel Drug Delivery

- Analytical QbD
- QbD in API Productivity
- Drug Regulatory Aspects
- Analytical Method Development

#### Registration

The prospective candidates must fill-in their complete particulars at the time of payment of the requisite Registration fee on the web-link <u>PHARMAQbD</u>. Registration fee should be paid before the stipulated deadline, i.e., Friday, April 10, 2023, online only through the Symposium website by their Credit/Debit card. Option for payment by RTGS/NEFT/Bank draft/Cash is, however, not available. All the contact details must be correctly validated before registering on the website. For details, please visit the web-link, <u>PHARMAQbD</u>.

Registration Fee	Early Bird Upto April 10, 2023	Upto April 18, 2023	On the Spot
Students	INR 1200	INR 1400	INR 1500
Delegates from Academia and Research Institutions	INR 1500	INR 1800	INR 2000
Delegates from Industry	INR 2500	INR 3000	INR 3200

**Note:** The website uses a secure payment gateway for receipt of payment. The payment gateway does not save the card details of the participant. Admin fee @5% is applicable on the above mentioned rates and will be added to the above charges at the time of checkout.

#### Accommodation

Limited accommodation on Panjab University and Chitkara University is available at nominal tariffs on first-come-first-served basis. For other accommodation, a variety of hotels and guest houses are available in the Chandigarh city or nearby.

# **Symposium Venue**

**Professor Indu Pal Kaur** 

Phone: 0172 2541142, 2534101

Email: profindupalkaur@gmail.com

Chairperson, UIPS

Organizing Secretary, PharmQbD-2023

Golden Jubliee Hall, Panjab University, Sector 14, Chandigarh 160014

DEADLINES			
Receipt of Abstract	April 10, 2023		
Notification of Abstract	April 10, 2023		
Early Bird Registration	April 10, 2023		

# **CONTACTS**

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