

ADVANCED EDITION

ISPROCHEM 2024

International School of Process Chemistry, 26th–29th May 2024
Centro Civico Multifunzionale "A. Castellani"
Via Del Teatro, 14, 25084, Gargnano (BS) – IT

Sunday 26th May

OPENING CEREMONY

- 16:00 Registration at Centro "A. Castellani"
17:00 Opening remarks on behalf of "Divisione di Chimica Organica" of Società Chimica Italiana

Session #1: MACHINE LEARNING

- 17:15 Application of Chemoinformatics and Machine Learning to Discover and Optimize Enantioselective Catalysts
Prof. Scott Denmark
(University of Illinois)

Session #2: AUTOMATION

- 18:15 Robotic Automation Technologies to accelerate Process Development and enhance Process Knowledge
Dr. Jacopo Roletto
(Procos)

Special seminar session #1: HISTORICAL LECTURE

- 19:15 The lab is a strange place. 101 Things you would not believe could have happened there
Prof. Giovanni Appendino
(Università del Piemonte Orientale)
20:00 *Welcome Cocktail - Ex Palazzo Municipale*

Monday 27th May

Session #3: CATALYSIS

- 09:00 Enzymatic Approaches to API
Dr. Ana Toplak
(Fresenius Kabi)
10:00 Scale-up of homogeneous catalysis. How hard can it be?
Prof. Johannes De Vries
(Leibniz Institut für Katalyse, Germany)
11:00 *Coffee Break - Ex Palazzo Municipale*

Session #4: SOLID STATE

- 11:30 Flash oral by young researchers
12:30 *Lunch break - Ex Palazzo Municipale*
14:00 CASE STUDY: The Crystallization of APIs: Croce e Delizia in Process Chemistry
Dr. Emanuele Attolino
(Newchem)
14:30 CASE STUDY: Challenging the crystallization of a small molecule
Dr. Federica Dall'Oglio
(Olon)

WORKSHOP

- 15:00 Introduction to working principles; lab vs plant
Dr. John Knight
(Jkonsult Ltd)
16:00 *Coffee Break - Ex Palazzo Municipale*
16:30 Problem sessions around topics of work-up, crystallization, designing a safe process (part A)
Dr. John Knight
(Jkonsult Ltd)
17:30 *End of lectures*

Tuesday 28th May

Session #5: FLOW CHEMISTRY

- 09:00 Continuous flow chemistry - from improving known reactions to the discovery of new reactivity
Prof. Marcus Baumann
(University of Dublin)
10:00 Technology for continuous liquid-liquid extraction and its applications to flow chemistry, multistage extraction, continuous partition chromatography
Dr. Andrea Adamo
(Zaiput)
11:00 *Coffee Break - Ex Palazzo Municipale*

Session #6: PROCESS

- 11:30 Developments in process chemistry
Dr. Gabriele Razzetti
(Dipharma)
12:15 Parallel reaction monitoring at HTE-scale with NIR spectroscopy and multivariate semi-NMF analysis
Dr. Robbert Van Putten
(J&J Innovative Medicine)
12:45 *Lunch Break - Ex Palazzo Municipale*

Session #7: PROCESS AND SOLID STATE

- 14:15 LSZ102 - From MedChem route to manufacture
Dr. Michael Parmentier
(Novartis)
15:15 CASE STUDY: Importance of solid form and crystallization in the removal of impurities
Dr. Jyoti Yadav
(Technobis)
15:45 *Coffee Break - Ex Palazzo Municipale*

PROBLEM SESSION

- 16:15 Problem sessions around topics of work-up, crystallization, designing a safe process (part B)
Dr. John Knight
(Jkonsult Ltd)
17:45 *End of lectures*

Wednesday 29th May

Session #8: API: SYNTHESIS AND TECHNOLOGY TRANSFER

- 09:00 Development of the manufacturing process of NCEs: from MedChem synthesis to the plant
Dr. Edoardo Mariani
(Chiesi)
10:00 Introduction to technology transfer
Dr. Katharine Powles
(J&J Innovative Medicine)
10:30 API source selection in a Pharmaceutical Company: how to ensure a robust supply chain
Dr. Elisa Battistini
(Fresenius Kabi)
11:00 *Coffee Break - Ex Palazzo Municipale*
11:30 CASE STUDY: Flow synthesis of Filgotinib
Dr. Giustino Di Antonio
(Evotec)

Special seminar session #2: CHEMICAL TECHNOLOGIES

- 12:00 Sustainability, Digitalization, Affordability & Speed – how is Chemical Development in Pharma adopting to the demands of society?
Dr. Ulrich Scholz
(Boehringer Ingelheim)

CLOSING CEREMONY

- 13:00 Final remarks and conclusion

The main aim of the school is to

TRANSFER

to the young generation of chemists
willing to

DEVELOP

their scientific career in the
Pharmaceutical industry the
fundamentals and the art of Process
Chemistry in a positive and friendly
environment and to

SHARE

different perspectives and experiences
among young researchers in view of their
future academy – industry relationships.

Additionally, through its

ADVANCED EDITION

Isprochem will serve as a forum for
training and discussion between more
experienced professionals on topics of
growing interest.

Organizing Committee

Prof. Walter Cabri - Dr. Gabriele Razzetti
Dr. Marcello Rasparini - Prof. Maurizio Benaglia
Dr. Valerio Fasano

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INTERNATIONAL SCHOOL OF PROCESS CHEMISTRY

- 7th edition -

New Trends in Process Chemistry



26th – 29th May
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