



**COST ACTION CM1407**  
**2<sup>nd</sup> Training School Announcement**  
**Lisbon, 18-20 September 2017**



***Synthesis, isolation and structural elucidation of bioactive compounds***

Universidade Lusófona de Humanidades e Tecnologias  
Lisbon, Portugal



**Location:** Lisbon, Portugal 18-20 September 2017

**Venue:** CBIOS, Universidade Lusófona de Humanidades e Tecnologias, Campo Grande 376, 1749-024 Lisboa

**Participants:**

The Training School is addressed to ECIs and PhD students.

**How to apply:**

Send a CV highlighting the expertise to [natchemdrugs@gmail.com](mailto:natchemdrugs@gmail.com) by **July 1<sup>st</sup>**

After collecting all the applications, the Scientific Committee will select the Trainees according to the following criteria:

- ✚ geographical distribution (no more than one participant from a laboratory)
- ✚ multi-disciplinarily
- ✚ gender

A **Grant** will be afforded to each selected Trainee.

**Deadline** for abstract submission **July 1<sup>st</sup>**

**Scientific Committee:**

Bruno Botta – Action Chair of CM1407 (Italy)  
Sandra Liekens – Vice Chair (Belgium)  
Markus Kalesse – Leader WG-1 (Germany)  
Juana Díez – Leader WG-2 (Spain)  
Milica Pešić – Leader WG-3 (Serbia)  
Gunter Schneider – Leader WG-4 (Sweden)  
Mark Brönstrup – Library responsible (Germany)  
Daniele Passarella – STSM Coordinator (Italy)  
Mattia Mori (Italy)  
Michael S. Christodoulou (Italy)

**Local Organizing Committee:**

CBIOS (Research Center for Biosciences and Health Technologies)  
Universidade Lusófona de Humanidades e Tecnologias (ULHT)  
Patrícia Rijo  
Maria M. M. Santos  
Filipa Marcelo  
Maria José U. Ferreira  
Carlos M. Monteiro

Sponsored by Buchi



## **Description:**

The main purpose of the Training School is to introduce and apply procedures commonly used in chemistry research (students and early career researchers), namely on the flow synthesis, extraction and isolation of natural products and structural elucidation of bioactive compounds.

The use of flow chemistry synthesis, extraction and isolation techniques namely based on Buchi equipments and the structural characterization (mainly 1D- and 2D-NMR spectrum analysis, using MestreNova software) of natural products will be employed.

The results will be immediately analyzed under the trainers' supervision.

The first day will cover flow chemistry synthesis works, the extraction and isolation of natural products will be the focus of the second day works namely, about Buchi equipments and the third day will cover the structural characterization works using the MestreNova software.



## PROGRAMME

### Synthesis, isolation and structural elucidation of bioactive compounds

**18<sup>th</sup> September 2017**

#### **Flow chemistry synthesis**

**Coordinator: Maria M. M. Santos and Rafael Antunes**

8:30 – 9:15 Registration of participants / Poster setting

9:15 – 9:30 Opening: L. Monteiro Rodrigues - CBIOS Director

Patrícia Rijo – Local organizer

Bruno Botta – Chair of the Action

9:30 -10:30 Lecture I, Flow Chemistry (Rafael Antunes, Hovione  
FarmaCiência SA, Portugal)

10:30 – 11:00 Coffee break / Poster Session

11:00 – 12:00 Lecture II Flow Chemistry (to be announced, FFUL, Portugal)

12:00 – 12:30 Lecture III Flow Chemistry-case study (to be announced,  
Hovione FarmaCiência SA, Portugal)

12:30 – 14:00 Lunch break

14:00 – 16:00 Flow chemistry synthesis – laboratory work

16:00 – 16:30 Coffee break / Poster Session

16:30 – 18:00 Flow chemistry synthesis – laboratory work

**OPTIONAL: Get together Dinner 20:00 - 22:00**



## **19<sup>th</sup> September 2017**

### **Extraction and isolation of natural products**

**Coordinator: Patrícia Rijo and Mattia Mori**

9:00 -9:30 Lecture III (Daniele Passarella, Università degli Studi di Milano, Italy)

9:30 -10:00 Lecture IV (M. Kalesse, Leibniz University Hannover, Germany)

10:00 -10:15 Lecture V (Mattia Mori, Italy)

10:15 -10:30 Lecture VI (Patrícia Rijo, Universidade Lusófona de Humanidades e Tecnologias, Portugal)

10:30 – 11:00 Coffee break / Poster Session

11:00 – 13:00 Extraction/isolation of natural products using a Buchi equipment (laboratory)

13:00 – 14:30 Lunch break

14:30 – 16:00 Extraction/Isolation of natural products (laboratory)

16:00 – 16:30 Coffee break / Poster Session

16:30 – 18:00 Extraction/Isolation of natural products using a Buchi equipment (laboratory)

**OPTIONAL: Cupcakes party 18:00-19:00**

## **20<sup>th</sup> September 2017**

### **Natural products structural characterization works using the MestreNova software**

**Coordinator: Maria José U. Ferreira and Patrícia Rijo**

9:00 – 10:30 Combining spectroscopic technics in natural products characterization (Practical exercises; laboratory work)

10:30 – 11:00 Coffee break / Poster session

11:00 – 12:30 Combining spectroscopic technics in natural products characterization (Practical exercises; laboratory work)

12:30 – 14:00 Lunch break

14:00 – 14:30 Lecture VII about Pd-catalysed synthesis (Antonella Goggiamani Sapienza University of Roma, Italy)

14:30 – 14:40 Selected Talk I (Best Poster Prize competition)

14:40 – 14:50 Selected Talk II (Best Poster Prize competition)

14:50 – 15:00 Selected Talk III (Best Poster Prize competition)

15:00 – 15:30 Coffee break

15:30 – 16:00 Lecture VIII "NMR guide to unravel molecular recognition events" (F. Marcelo, FCT-UNL, Portugal)

16:00 – 17:00 Final Conclusions and Best Poster Prize/Farewell Party