## May 4 - 5, 2022

Instituto Superior de Engenharia do Porto room G2O3

# MALTING & BREWING IN THEORY AND TASTE

### **SCOPE**

Malting is the preparation of a brewing raw material. It involves the sprouting (germination) of grain, mostly barley. The malt is then dried to produce a shelf-stable product. Beer is made of a few basic ingredients: water, malt, hops and yeast; but the beer production involves a lot of different steps, making it a long and intensive. Sensory analysis plays an important role in brewery operations. Decisions concerning product development, quality assurance, quality control, product improvement, and process troubleshooting depend on the availability of reliable information arising from wellplanned and executed taste tests.

During this workshop, the main objective of malting, namely the modification of the grain structure and composition, will be linked to the process steps steeping, germination and kilning. The brewing process is explained step-by-step, starting with the gently grinding of the malt and ending with the point where the beer is ready to be served and enjoyed. Various tasting techniques will be discussed. The influence of the various raw materials and the brewing process is also linked to the sensory properties of the beer.

### PROGRAM

### Wednesday - May 4, 2022 (2 - 6 pm)

Opening session | Cristina Delerue-Matos (REQUIMTE/LAQV-ISEP, Portugal)

Malting and brewing (lecture) | Annick Boeykens (Odisee University, Belgium)

#### Thursday - May 5, 2022 (2 - 6 pm)

Sensorial analysis of beer (training) | Jannes Van Houcke & Hannes Withouck (Odisee University, Belgium)

Closing session | Elsa Vieira & Manuela Moreira (REQUIMTE/LAQV-ISEP, Portugal)

#### PUBLIC

Bachelor & Master students with basic knowledge of biochemistry.

#### REGISTRATION

https://forms.gle/MyMuyi5aUdbcQXiTA Deadline: April 29 (limited to 20 people)

#### Organization

Cristina Delerue-Matos | Elsa Vieira Hendrikus Nouws | Manuela Moreira



