



The Department of Chemistry of Ioannina University and the European Training Network AQUALity are pleased to invite you to the International Summer School on

“Introduction to Basic Statistical Tools and Data Analysis in Research”

Ioannina, 8-9 April 2020

Aim and participation

The target audience for the school is Master and PhD students, mainly in Chemistry, Material Sciences, Engineering, Environmental Sciences and Medical Sciences, planning to employ statistical methods to process data and to extract valuable information. Other students interested in this topic are also welcome. The objective of the school is to provide detailed knowledge on chemometric tools, covering topics from introductory statistics to advanced data analysis methods.

Registration

The 15 AQUALity Fellows will have to pay 75 € to cover lunches and coffee breaks. Instead, the tuition fee for the 15 AQUALity Fellows will be covered by Ioannina University.

Fee for externals to AQUALity: 200 €.

Programme and General Information

Timetable:

9.00 – 9.30 Registration of participants (only Wednesday 8/4)

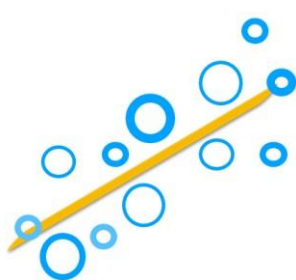
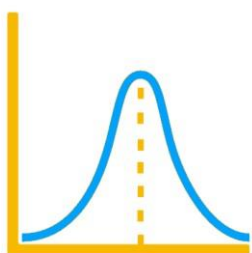
9.30/11.00 – 11.30/13.00 Morning sessions
(Wednesday/Thursday)

14.30/16.00 – 16.20/17.50 Afternoon sessions
(Wednesday/Thursday)

Site: Lectures will be held at the Department of Chemistry (Room X2-090), University of Ioannina, Panepistimioupolis, 45110, Ioannina (Greece).

Topics:

- Distribution and types of data
- Descriptive statistics
- Significance testing
- Choosing the right statistical procedures
- Non parametric methods
- Experimental Design: Introduction, basic terminology
- Full factorial designs
- Fractional factorial designs
- Response surface methods (RSM)
- Python Crash Course
- Data Analysis – Pandas
- Data Visualization
- Machine learning and statistical pattern recognition



University of Ioannina, Chemistry Dept.

