



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

Pharm BioTech



Dipartimento di Scienze del  
Farmaco

## Short course

# Advanced approaches of chromatography and spectroscopy for proteins and other bioactive compounds characterization

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**6 May h 11.30-13.30**

**7 May h 9.30-11.30**

**8 May h 10.30-11.30**

**9 May h 12.30-13.30**

**Aula 0F**

**Complesso Didattico di Biomedicina 'Fiore Di Botta'**

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## **Lecture 1: New methodologies for large scale purification of proteins**

- a. A comparison between conventional and new methodologies.
- b. The use of expanded bed adsorption chromatography for large scale protein purification and scale-up of the process for industrial applications.

## **Lecture 2: Using spectroscopy for compounds characterization**

- a. Absorbance spectroscopy
- b. Fluorescence spectroscopy
- c. Colorimetry

## **Lectures 3-4: Applications to biomolecules with biotechnological and pharmaceutical interest**

- a. Magnetic-fluorescent nanoparticles using proteins for biomedicine
- b. Proteins as natural colorants in foods and drinks
- c. New antioxidants for preventing human diseases
- d. Evaluation test (30 min)