



MOBILITY IN PADOVA



Project CHEMTRY 4
9.4.2023 – 22.4.2023



Project CHEMTRY 4

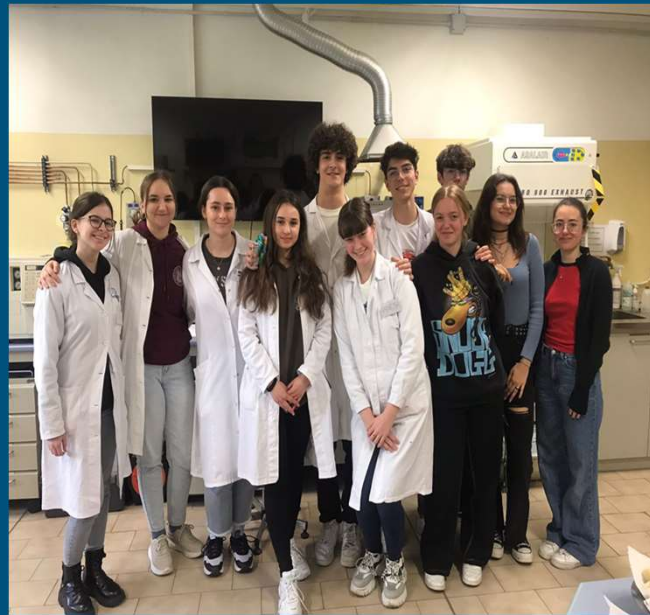
- **Programme** Erasmus+
- **Key Action** KA1 - Learning Mobility of Individuals
- **Action Type** KA121-VET - Accredited projects for mobility of learners and staff in vocational education and training
- **Start of Project** 1.9.202
- **End of Project** 30.8.2023
- **Project Duration (months)** 24
- **Grant Agreement No.** 2021-1-SK01-KA121-VET-000012152
- **Project Title** Zručnosti pre chemický priemysel IV
- **Project Acronym** CHEMTRY IV



Our team

- Participants: Vanesa Hesková, Viktória Jakabová, Ela Martauzová, Miroslava Šoucová, Veronika Udvariová
- Accompanying persons: Tatiana Filipová, Zuzana Petrželová

OUR TEAM



TRAVELING

We travelled from Bratislava - Mlynské Nivy by Flixbus at 8:40pm.

About 7:20 in the morning we were in Padova at Flixbus station, from where we walked half an hour to our hotel with the suitcases.

After two weeks of Erasmus we travelled from Padova's Flixbus station at 9:10 am.

We travelled



ACCOMODATION

We lived in a hotel called - Hotel Al Fagiano (Albergo Al Fagiano) on the street - Via Antonio Locatelli, 45

Because of the hotel's location we had a view at The Basilica of St. Anthony.



IIS P. Scalcerle

- full name: Istituto di Istruzione Superiore Pietro Scalcerle
- linguistic and technical high school for chemistry, materials and biotechnology
- 1550 students
- address: Via Cave, 174, 35136 Padova PD, Italy
- web: www.istituto-scalcerle.it

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PROFESSIONAL PROGRAM



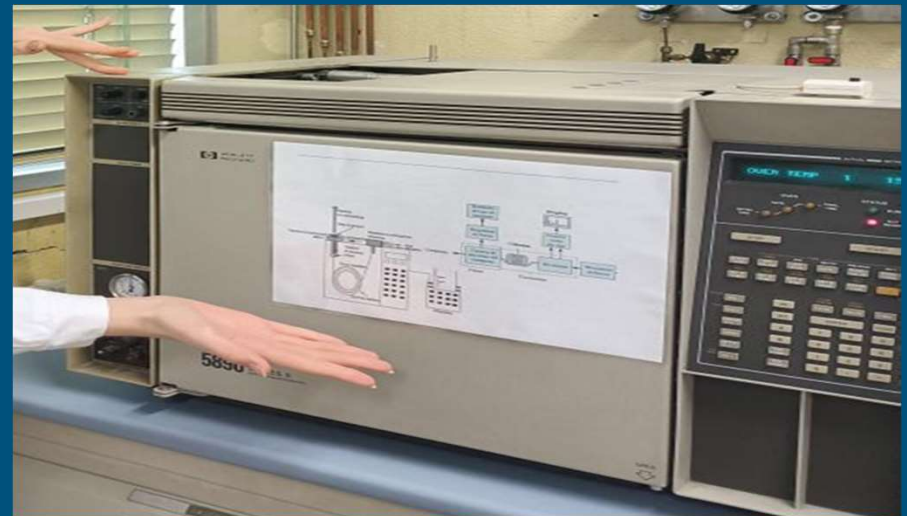
DETERMINATION OF NITRATE IN WATER SAMPLE USING UV-SPECTROSCOPY

- nitrite ion in aqueous solution gives an UV spectrum which is characterised by a weak absorption band
- UV spectrophotometry is used in the measurement of nitrate in both fresh and marine waters



GAS CHROMATOGRAPHY - JAMES MARTIN LAW

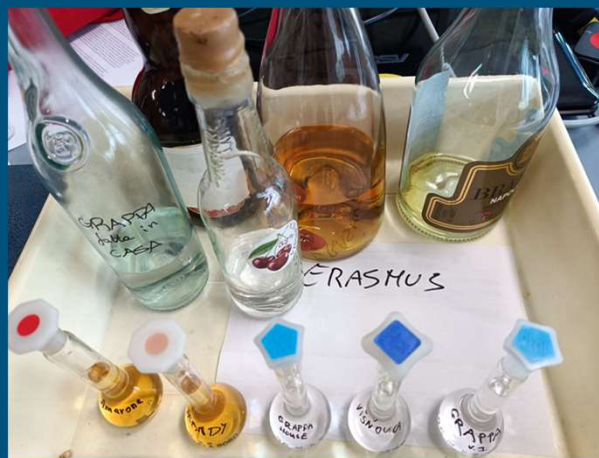
- Gas chromatography-GC is an analytical technique used to **separate and detect the chemical components** of a sample mixture to determine their presence or absence or quantities
- We prepared 5 samples of mixed alcohol and then with thin injection which was sterile, we put each of samples to the gas chromatograph
- GC gave us the peak area and then we found out how much alcohol is in the sample



GC - QUANTITATIVE DETERMINATION OF ETHYL AND METHYL ALCOHOL IN LIQUOR SAMPLE

we were determining ethyl and methyl alcohol in alcoholic beverages with gas chromatography

we had 6 samples



HPLC DETERMINATION OF LACTOSE IN MILK

- We determined the concentration of lactose in milk sample by HPLC.
- Lactose is sometimes referred to as “milk sugar” because it is only found naturally in the milk of mammals—including cows, goats and humans.
- Chromatographic separations are based on a forced transport of the liquid (mobile phase) carrying the analyte mixture through the porous media and the differences in the interactions at analytes with the surface of this porous media resulting in different migration times for a mixture component.

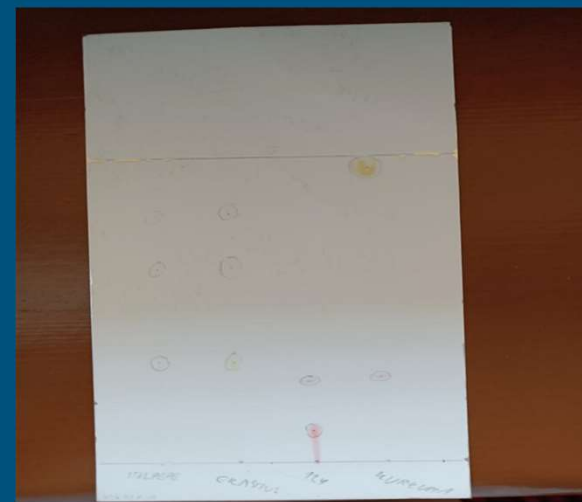


CONTROL OF SAFFRON PURITY AND POSSIBLE SOPHISTICATION BY TLC

Saffron is a food spice and it is obtained from the dried stigmas of *Crocus sativus* L.

Saffron is a very expensive spice and that is the reason why there are many fake products in the shops

The different pigments of saffron can be separated by TLC



AAS - DETERMINATION OF COPPER CONCENTRATION IN WINE SOLUTIONS

- atomic absorption spectrometry is an analytical procedure for the qualitative detection and quantitative determination of elements through the absorption of optical radiation by free atoms in the gas phase
- stock solution and copper standard solutions (0,0/0,1/0,2/0,3 μL)
- sample: Biollicine, San Crispino Rosso, Prosecco
- results



AAS - DETERMINATION OF ZINC CONCENTRATION IN HAIR

We were determining the concentration of zinc in hair samples

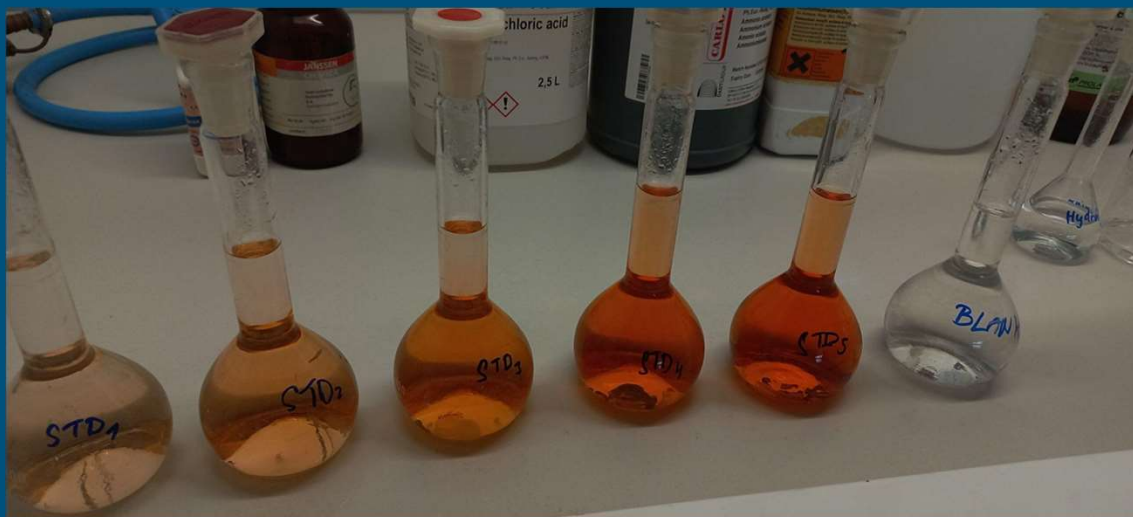
We had to donate 2 grams hair

We used the atomic absorption spectrometer



UV-VIS SPECTROSCOPY DETERMINATION OF IRON IN WATER SAMPLES

- UV - VIS Spectrometer
- water from water machine
- water from the laboratory (highest absorbance of iron per mg/l)
- San Benedetto water bottle





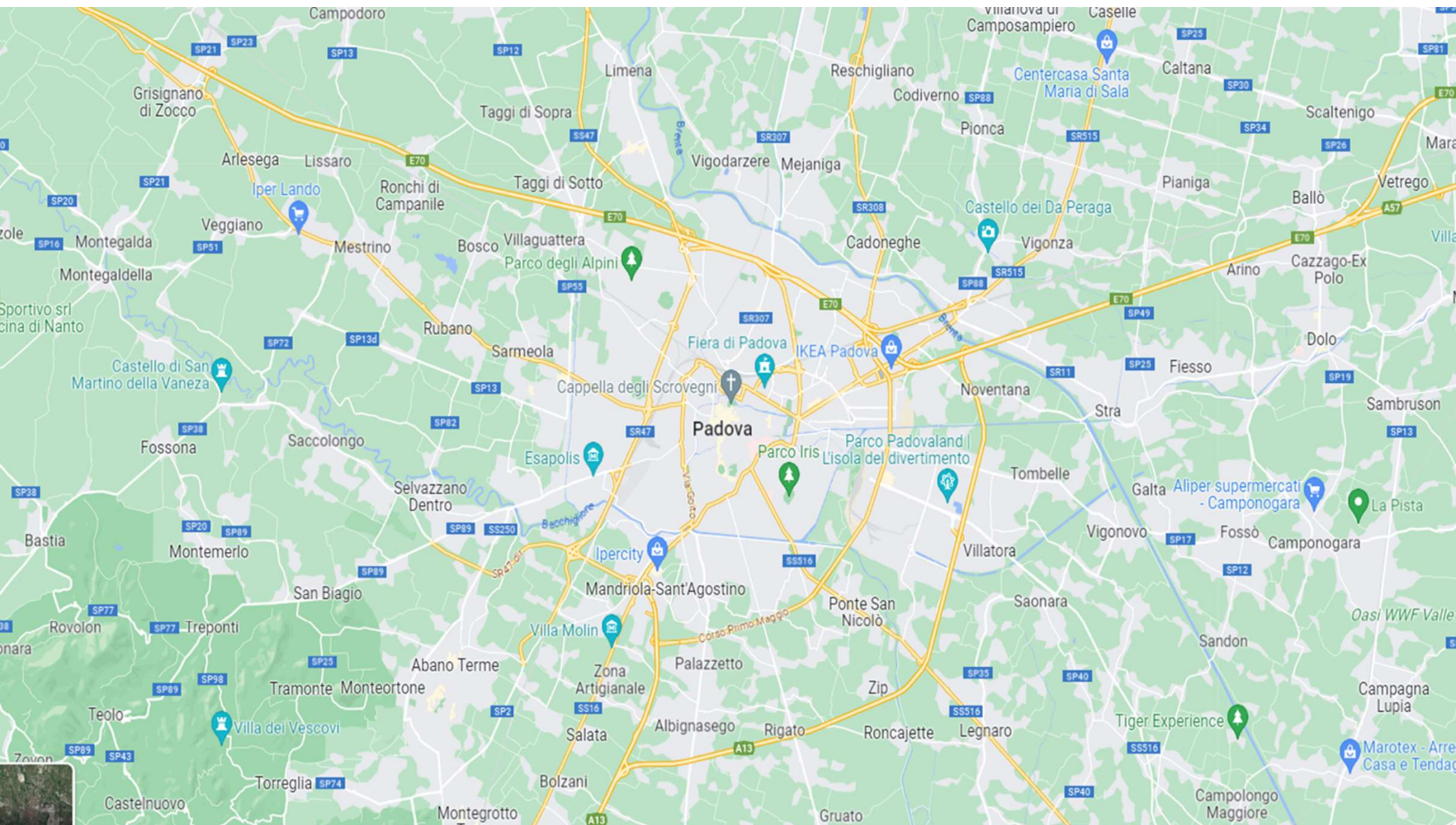
FREE TIME PROGRAM



PADOVA

- ❑ a city in northern Italy
- ❑ the capital of the province of Padua
- ❑ Padua appears twice in the **UNESCO World Heritage List**: for it's **Botanical Garden**, the most ancient of the world, and the 14th-century Frescoes

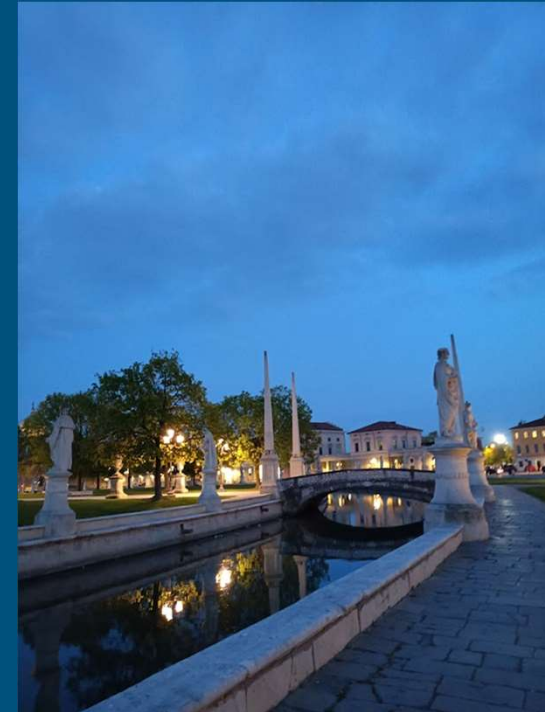




WHAT IS WORTH TO SEE IN PADOVA?

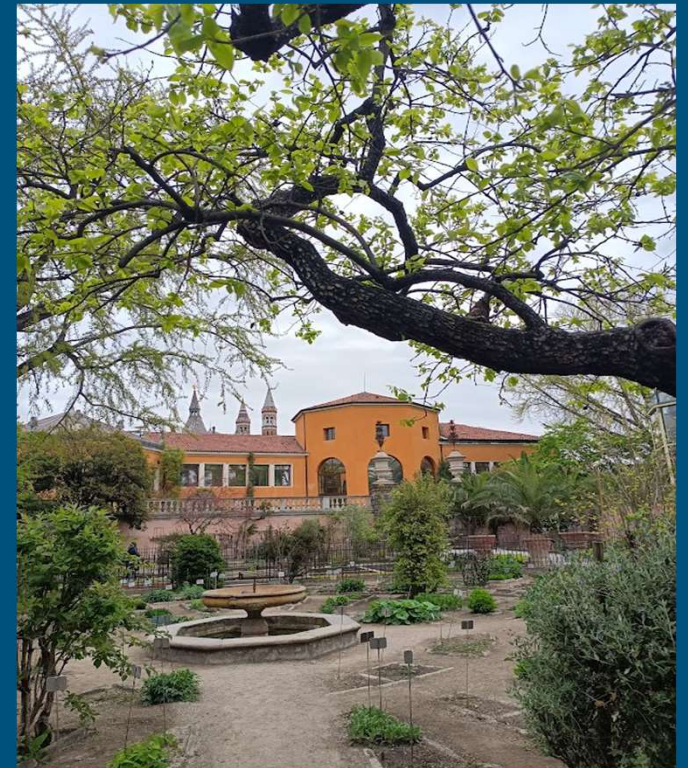
1. Prato Della Valle

- largest piazza in the city
- the current square dates back to the 17th century



2. The Botanical garden

- founded in the 16th century and are the oldest botanical gardens in the world



3. Basilica of St. Anthony

- Saint Anthony tomb
- relics, which include a fragment of the cross that belonged to Jesus Christ





TRIP TO VENEZIA





TRIP TO VERONA

- train (around 1,5 hour from Padova)
- pretty and historical city
- very expensive and not that good restaurants
- Verona Arena
- Adiža
- Romeo and Julia





GROUP PHOTOS TIME





EVALUATION OF THE TRAINERSHIP



WHAT DID THE INTERNSHIP GIVE US?

Thanks to the internship we didn't just improve our english, but we also learned a lot of italian words and phrases. We tried new food and saw historical monuments. We learned about the country and about the school system. I am happy for internship because I found new friends and learned how to be more independent.





TOP 3 OF MOBILITY

1. Food





2. Beautiful places



3. New skills





GRAZIE PER
L'ATTENZIONE

