

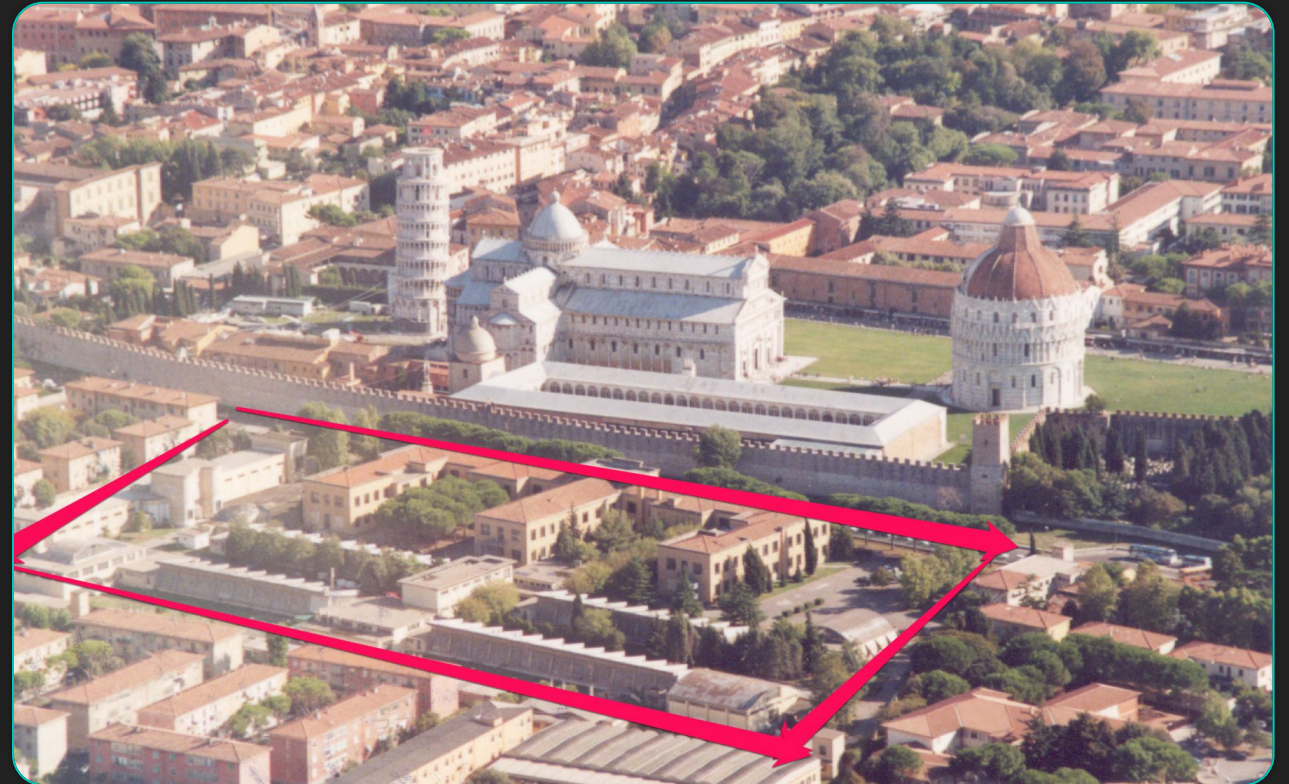


# I.I.S. Da Vinci-Fascetti

PISA (ITALY)

# WHERE ARE WE?

Our school is located in "Contessa Matilde" street, behind the famous Miracles Square of Pisa, the Cathedral, the Baptistery and famous Leaning Tower.



# A BIT OF HISTORY

The origins of our Institute date back to 1871 when the "technical-industrial school" was founded. After various transformation, the school was reorganized under the Ministry of Education (1915) and in 1926 assumed the structure that still maintains.



Presentation brochure of the Institute printed in 1931

# What specializations are there in our school?

- Electrical engineering
- Mechanical
- Telecommunications
- Aeronautics
- Environmental biotechnology



# About Environmental Biotechnology...

## What do we do?

### WHAT IS IT?

Environmental biotechnology is an innovative and rapidly growing specialization that is particularly involved in pollution problems.



### OUR GOALS

Specific skills are acquired for the analysis and control of environmental matrices (air, water and soil) in relation to territorial realities and in compliance with specific legislation.

This course aims to strengthen a specific preparation for what concerns the control and protection of the environmental heritage.

# Our study program

- 4 hours Organic chemistry (2h. Laboratory)
- 4 hours Analytical chemistry (2h. Laboratory)
- 6 hours Biology and Microbiology (3h. Laboratory)
- 2 hours Environmental physics (1h. Laboratory)
- Other subjects like: Mathematics, Italian, History, English and PE

# To promote this active participation in our school

- We implement separate waste collection
- Our PE teacher collects the plastic caps from all classes of the Institute
- We also have some photovoltaic panels on the top of the laboratory, so we can use solar energy and not fossil fuels
- We have separate containers for the collection of organic solvents, acids and chromium .



# Our experiences

Thanks to Environmental biotechnology we have been involved into projects and initiatives related to our curriculum:

- Peer safety education
- Plastic and microplastic collection
- Water analysis





# Peer safety education



- The peer safety education project saw us as real formative figures; educators with primary school children on the risks and dangers of the home environment; we worked with the National Institute for Security



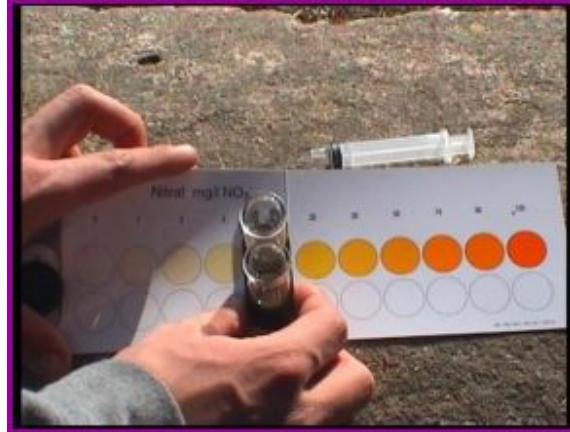
## Plastic and microplastic collection

- During our off site classes we often go along the beach, we define an area and we pick up all plastics and microplastics and classify them by size.

# Water analysis

□ During these years we have performed analyzes on the waters of our city, in particular those of the river “Fiume Morto” (dead river) and “Fiume Morto vecchio” (dead old river).

□ The analyses performed included: determination of dissolved oxygen, phosphates, nitrites and nitrates, pH, electrical conductivity, turbidity, and microfauna (usually composed of micro-invertebrates).



# School-work Alternation

## WHAT IS IT?

Thanks to the period of School-work Alternation we were able to cooperate with many companies and associations. The School-work alternation is a formative period that allows students of the upper secondary school to carry on a training period in a company or local authority.



## Our collaborations with:

- Legambiente
- WWF
- CNR
- ARCHA LABORATORY
- CERTOSA MUSEUM

# Legambiente projects



Legambiente is a national Association whose mission is to protect the environment.

We took part in two projects:

- The first operating on the Pisan coast: we went on the beach in search of turtle nests .
- The second was dedicated to the “grove” of Pisa, a green area in the heart of our city .



# Other collaborations



## WWF

WWF in Italy is the largest Italian environmental association, and it is part of the WWF (World Wildlife Fund), the largest world organization dedicated to nature conservation.

## CNR

The National Research Council (CNR) is the largest Italian public research Institution and has the task of carrying out, promoting, disseminating, transferring and enhancing scientific and technological research activities.

## ARCHA LABORATORY

ARCHA is laboratory for the Analysis and Research in Environmental Chemistry.

## CERTOSA MUSEUM

It is the Natural History Museum of the University of Pisa , it is one of the oldest museums in the world.

# THE END!

Battini Sara  
Bibbiani Luca  
Lombardi Elia  
Destri Elena  
Filippi Francesco

