

## SIWAR ABOUDA

**Date of birth:** ... | **Nationality:** Tunisian | **Phone number:**  
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### ● EDUCATION AND TRAINING

24/11/2021 – CURRENT Messina, Italy

**PHD STUDENT** University of Monastir (Tunisia) & University of Messina (Italy)

The objective of my thesis is to assess the impact of environmental microplastics and benzo[a]pyrene on the marine polychaete *Hediste diversicolor* using environmental exposure scenarios. This is achieved via the chemical analysis of the used contaminants and a set of multiple approaches including histology, cytotoxicity, biochemistry, metabolomics, transcriptomics, and genotoxicity.

**Website** <https://www.um.rnu.tn> [www.unime.it](http://www.unime.it) | **Field of study** Ecotoxicology

**Thesis** Contribution to the characterization of the toxicity of plastic microparticles / nanoparticles (MP / NP) and benzo[a]pyrene in the seaworm *Hediste diversicolor*

**Supervisor at UNIME:** Prof Maria MAISANO

**Supervisor at UM:** Prof Mohamed BANNI

15/05/2022 – CURRENT Messina, Italy

**PHD RESEARCH TRAINEE** CHEMICAL, BIOLOGICAL, PHARMACEUTICAL AND ENVIRONMENTAL SCIENCES DEPARTMENT, UNIVERSITY OF MESSINA

- Alcian Blue histochemical reaction
- Immunofluorescence
- Metabolomics
- Transcriptomics

24/11/2021 – 14/05/2022 Sousse, Tunisia

**PHD RESEARCH TRAINEE** AGROBIODIVERSITY AND ECOTOXICOLOGY RESEARCH LABORATORY, HIGHER INSTITUTE OF AGRONOMY

- Biochemistry
- Cytotoxicity
- Genotoxicity

15/09/2019 – 30/07/2021 Monastir, Tunisia

**MASTER IN BIOLOGY AND CELLULAR PHYSIOLOGY** Higher institute of biotechnology of Monastir

Merit: Good

**Website** <https://www.isbm.rnu.tn>

01/02/2021 – 30/07/2021 Sousse, Tunisia

**MASTER FINAL PROJECT TRAINEE** AGROBIODIVERSITY AND ECOTOXICOLOGY RESEARCH  
LABORATORY, HIGHER INSTITUTE OF AGRONOMY

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**Thesis:** Toxicological impacts of environmental microplastics and benzo[a]pyrene in the seaworm *Hediste diversicolor*

- Experimental work using seaworms as biological model
- Histological analysis on seaworms samples
- Biochemical assays (quantification of oxidative stress biomarkers)
- Cytotoxic and genotoxic assays on coelomic fluid (Lysosomal membrane stability and micronucleus frequency)

15/09/2016 – 30/07/2019 Monastir, Tunisia

**BACHELOR IN BIOLOGICAL ANALYSIS AND DIAGNOSIS** Higher institute of biotechnology of Monastir

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Merit: Very Good

**Website** <https://www.isbm.rnu.tn>

01/02/2019 – 09/05/2019 Monastir, Tunisia

**BACHELOR FINAL PROJECT TRAINEE** RESEARCH UNIT UR17ES30 VIROLOGY & ANTIVIRAL STRATEGIES, HIGHER INSTITUTE OF BIOTECHNOLOGY

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**Thesis:** Clinical and virological study of Rotavirus gastroenteritis

- RNA Extraction
- Retro transcription
- PCR
- Electrophoresis

01/07/2018 – 30/07/2018 Sousse, Tunisia

**LABORATORY TRAINEE** LABORATORY OF MICROBIOLOGY, HOSPITAL SAHLOUL

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Bacteriology: Bacterial plating, antibiogram

01/07/2017 – 30/07/2017 Sousse, Tunisia

**LABORATORY TRAINEE** LABORATORY OF BIOCHEMISTRY AND HEMATOLOGY, MEDICAL CENTER ELWASSIT

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Biochemistry: Spectroscopy

15/09/2012 – 30/05/2016 Sousse, Tunisia

**BACCALAUREATE** Ali Bourguiba High School

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**Field of study** Mathematics

**LANGUAGE SKILLS**

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Mother tongue(s): **ARABIC**

Other language(s):

	<b>UNDERSTANDING</b>		<b>SPEAKING</b>		<b>WRITING</b>
	Listening	Reading	Spoken production	Spoken interaction	
<b>FRENCH</b>	C2	C2	C2	C2	C2
<b>ENGLISH</b>	C2	C2	C2	C2	C2
<b>ITALIAN</b>	B2	B2	B1	B1	A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

## ● DIGITAL SKILLS

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Microsoft Office package: Microsoft Word, Excel, PowerPoint, Access | Zotero Citations Software | GraphPad Prism, GraphPad Software Inc. | Video Conferencing (Zoom, Teams, Skype, Webex) - Advanced | Good Communication and Writing Skills | Google Drive | Team-work oriented | Image J (Laboratory Image Analysis)

## ● ADDITIONAL INFORMATION

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### CONFERENCES AND SEMINARS

02/11/2023 – 04/11/2023 – Climate Change and Environmental Pollutants: Main Drivers of Biodiversity Decline  
**Cytotoxicity of environmental microplastics and benzo[a]pyrene in the seaworms Hediste diversicolor**

28/10/2023 – 30/10/2023 – 10th International Scientific Days, Tunisian Association of Toxicology  
**Single and combined effects of environmental microplastics and benzo[a]pyrene in the seaworm Hediste diversicolor**

05/06/2023 – 08/06/2023 – 68° Convegno GEI-SIBS Messina  
**Impact of environmental microplastics and benzo[a]pyrene in the marine polychaeta hediste diversicolor**

02/11/2021 – 04/11/2021 – First international forum: Microplastics: From the environment to the human health  
**Toxicological impacts of environmental microplastics and benzo[a]pyrene in hediste diversicolor**

### VOLUNTEERING

2021 – CURRENT Higher Institute of Agronomy, Chott Mariem, Sousse  
**ATEE : Tunisian Association of Ecotoxicology and Ecophysiology** Vice President

### PUBLICATIONS

2022  
**Toxicological impact of environmental microplastics and benzo[a]pyrene in the seaworm Hediste diversicolor under environmentally relevant exposure conditions**

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This article is based on a pioneering study that explores how environmental microplastics and benzo[a]pyrene harm the bioindicator seaworm Hediste diversicolor. It delves into the intricate damage caused, encompassing oxidative stress and neurotransmission impairment, along with cytotoxic and genotoxic repercussions that extend to the coelomic fluid cells.

**Link** <https://doi.org/10.1016/j.envpol.2022.119856>

### WORKSHOPS & CERTIFICATIONS

11/01/2022 – 12/01/2022

**Workshop: Data analysis with SPSS**

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02/02/2023

**Certificate of Italian language level (A1-A2)**

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