



CONTACT



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Via Ingegnere 92, Catania (95128)

EDUCATION

- **International PhD in Chemical Sciences**
Università degli Studi di Catania [2021 - 2024]
- **Master Degree in Chemical Sciences- Organic and Bio-Organic Chemistry**
Università degli Studi di Catania [2020 - 2021]
Grade: 110/110 cum laude
- **Bachelor Degree in Industrial Chemistry**
Università degli Studi di Catania [2016 - 2020]
Grade: 110/110 cum laude

SOFT-SKILLS

- Team Work
- Time Management
- Problem solving
- Adaptability

LANGUAGE

- Italian (Mother tongue)
- English (C1)
- French (B2)

PERSONAL QUALIFICATION

- Abilitazione alla professione di chimico

I hereby authorize the use of my personal data in accordance to the GDPR 679/16 – “European regulation on the protection of personal data”.

ESTER BUTERA

INDUSTRIAL CHEMIST
ORGANIC AND BIOORGANIC CHEMIST
PHD IN CHEMICAL SCIENCES

WORK EXPERIENCE

- **Post-DOC fellowship - Development and testing of innovative nanostructured systems for Liquid Biopsy applications**
Università degli Studi di Catania
[September 2024 - present]
- **PhD student in Chemical Sciences- XXXVII cycle**
Università degli Studi di Catania
[October 2021 - October 2024]
- **Visiting PhD student**
ISCR-CNRs , Rennes (France)
[January 2023 - March 2024]

PERSONAL EXPERIENCE

- **First International School of Environmental Science- Oral Communication**
Peking University [19/09/2019 -01/10/2019]
- **International summer school in drug delivery and micro and nano sensors- Poster Communication**
DTU University [15/08/2022 -26/08/2022]
- **European chemistry congress (EuChems 2022)- Poster Communication**
Lisbon [28/08/2022 -01/09/2022]
- **MRS Fall Meeting and Exhibit- Oral Presentation and Symposium assistant**
Boston [26/11/2023- 01/12/2023]
- **E-MRS Fall- Oral presentation**
Wasaw [16/09/2024- 21/09/2024]
- **CNANO-Paris 2025- Oral presentation**
Paris [18/03/2025- 21/03/2025]
- **E-MRS Spring- Oral presentation**
Strasbourg [25/05/2025- 31/05/2025]

PUBLICATIONS

- Supramolecular Sensing of Chemical Warfare Agents. ChemPlusChem. 86 (2021), 681-695. <https://doi.org/10.1002/cplu.202100071>
- Er:Y₂O₃ and Nd:Y₂O₃ Nanoparticles: Synthesis, Pegylation, Characterization and Study of Their Luminescence Properties. Chemosensors. 11, (2023) 20. <https://doi.org/10.3390/chemosensors11010020>
- Supramolecular Detection of a Sub-ppm Nerve Agent Simulant by a Smartphone Tool. ACS Omega. 41 (2023) 38038-38044. <https://doi.org/10.1021/acsomega.3c03759>
- Internalization of Pegylated Er:Y₂O₃ Nanoparticles inside HCT-116 Cancer Cells: Implications for Imaging and Drug Delivery. ACS Applied Nano Materials. 6, 20 (2023) 19126-19135. <https://doi.org/10.1021/acsanm.3c03609>
- Extracellular Vesicles From Follicular Fluid in Infertile Women: Size, Morphology and miRNA Content Analysis. Journal of Extracellular Biology. 4,3, (2025). 10.1002/jex2.70041
- Emissive Pentacene-Loaded β cyclodextrin-Derived C-Nanodots Exhibit Red-Light Triggered Photothermal Effect. Pharmaceutics. 17, 5, 543, (2025). 10.1002/jex2.70041