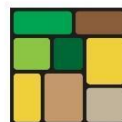


Dipartimento di Scienze Agrarie, Alimenti, Risorse Naturali e Ingegneria  
Department of Agriculture, Food, Natural resources and Engineering  
(DAFNE)

|                 |                                 |
|-----------------|---------------------------------|
| <b>CYCLE</b>    | <b>XXXVIII</b>                  |
| <b>STUDENT</b>  | <b>TAYYABA GULL</b>             |
| <b>TUTOR</b>    | <b>Prof. Matteo Francavilla</b> |
| <b>Co-tutor</b> | <b>Ing. Mario Fedele</b>        |

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CURRICULUM</b>                                | <b>1 Sustainable Agriculture, Natural Resources and Biodiversity.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>PROVISIONAL TITLE of the RESEARCH PROJECT</b> | <b>Upcycling of Plastic Waste into Valuable Products Through Microwave Assisted Co-pyrolysis with Biochar from Residual Biomass</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>DOCTORAL SCHOLARSHIP</b>                      | <b>DM 352 Sistemi Energetici Spa</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>SHORT CV</b>                                  | <p>Bachelor's in food science and technology (2015-2019)</p> <p>Master's in food technology (2020-2021)</p> <p>Ph.D. in Biotechnology and smart practices for a sustainable management of natural resources, food and agriculture (2022 - present)</p> <p>Research interests: Sustainable waste valorization, Circular economy, Microwave-assisted co-pyrolysis technologies and reaction mechanisms and process optimization</p> <p>Current studies:</p> <ul style="list-style-type: none"><li>• <i>Upcycling of Plastic Waste into Valuable Products Through Microwave Assisted Co-pyrolysis with Biochar from Residual Biomass</i></li><li>• <i>Effective utilization of plastic waste and biomass contribute to circular economy and reduce waste accumulation</i></li><li>• <i>Production of biochar from biomass to check its efficacy as low-cost catalyst</i></li></ul> <p>Expertise: Bomb Calorimeter, Elementary Analysis (CHN-S), HPLC TGA FTIR, TGM, CHN, MAP, Biochar pore size analysis, GC, MS and Micro-GC</p> |



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|                      |                                                    |
|----------------------|----------------------------------------------------|
|                      | Software: Minitab, Excel and Endnote, Zotero and R |
| <b>PUBBLICATIONS</b> |                                                    |