

Carmen Arena

C. Arena is Associate Professor of Ecology at the Department of Biology, University of Naples Federico II, where she teaches Ecology and Laboratory. She is a member of the Erasmus and Internationalization Committee for the Department of Biology and has been supervisor of over 90 bachelor and master students in Biology and tutor and co-tutor of 8 PhD students.

The expertise of C. Arena regards the ecological aspects of photosynthesis and, in particular, the plant morpho-functional adaptations to natural and anthropized environments and the study of photoinhibition and photoprotection mechanisms in response to mono and multiple abiotic stresses.

C. Arena has broad experience in gas exchange and chlorophyll fluorescence emission techniques, enzymatic assays, and proteomic analysis of Photosystem II. Her research activity holds three main issues: 1) the effect of space factors on photosynthesis in Bioregenerative Life Support Systems (BLSSs) for supporting human life in Space. 2) the impact of light quality on plant development and production of functional metabolites in natural and closed environments (vertical farming, greenhouses). 3) Effects of pollutants on photosynthetic apparatus of plants in biomonitoring and phytoremediation studies.

Currently, she collaborates with several Departments of the University of Naples Federico II as well as with different Italian (CNR-IPSP, CNR-ISAFOM, Stazione Zoologica "Anton Dohrn") and International Research Institutes (Gesellschaft für Schwerionenforschung GSI Germania; Bulgarian Academy of Sciences, Bulgaria, Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Serbia).

She was involved in numerous National and International projects funded by the Italian Space Agency (ASI), European Space Agency (ESA), MIUR, Campania Region and Bilateral Project supported by the Bulgarian Academy of Sciences (BAS) and National Research Council of Italy (CNR).

C. Arena serves as Associate Editor for *Frontiers in Plant Science* (JCR 2019 Q1 Plant Science), Editorial Board member for *Plants Basel* (JCR 2019 Q1 Plant Science) and *Peer J* (JCR 2019 Q2 Multidisciplinary), and she is a reviewer for several international journals (Blackwell Publishing, Springer, Elsevier, Oxford Journals, Nature Research, MDPI).

C. Arena is a member of the Società Italiana di Ecologia (SItE), Federation of European Societies of Plant Biology (FESPB), Society of Experimental Biology (SEB); Società Italiana per le Ricerche sulle Radiazioni (SIRR), Comunità Scientifica di Riferimento Stazione Zoologica Anton Dohrn di Napoli, Società dei Naturalisti.

She received several Prize for her scientific activity: 2004 "Marchetti Prize" from the Italian Society of Ecology (SItE); 2015 award from Italian Space Agency for the contribution to the LISS (Lessons on International Space Station) Project; 2017 Best Poster Award at the 43rd Annual Meeting of the European Radiation Research Society (ERRS), Hessen, Germany; 2018 Irene Manton Poster Prize from Society of Experimental Biology (SEB); 2018 First prize at the 1st Joint AgroSpace-MELiSSA Workshop, Rome, Italy; 2020 Best Poster Award from Società Italiana per le Ricerche sulle Radiazioni.

C. Arena has participated in many National and International Congresses and Workshops (> 150) also as a speaker or invited speaker (>30).

C. Arena is the author of more than 100 publications peer-reviewed, 89 of them ISI-WoS/Scopus.

Bibliometric indicators:

Google Scholar

<https://scholar.google.com/citations?user=Wvvd6aoAAAAJ&hl=en>

Scopus

<https://www.scopus.com/authid/detail.uri?authorId=9939125300>