

Name (-): Sardinian Culture Collection of Algae (SCCA)**Title (*):****Country/Countries (*):** Italy**Institute name:** University of Cagliari**Department/section:** Interdepartmental Center of Environmental Science and Engineering (CINSA)**E-Mail:** giacomo.cao@dimcm.unica.it**Web address:** <http://pcserver.unica.it/web/cinsa/index.php?pid=16>**I AM LOOKING FOR :** A PARTNER (FOR MY PROJECT) A PROJECT TO JOIN**BRIEF DESCRIPTION OF YOUR PARTNER SEARCH (*) (2-3 lines to be published on the website – the complete form will be available to download)**

We are looking for a project whose main objectives are: to increase ex situ conservation of biodiversity; to improve the knowledge of microorganisms; to preserve algal strains to be used in systematic and taxonomic research activities and in mass culture research; environmental protection, evaluation of the biotechnological potential of individual strains and identification of promising producers of high-value compounds.

Please complete the information below depending if you are looking for a partner (to join your project), or a project (you would like to join) – Max 1 page.

DESCRIPTION OF YOUR EXPERTISE /SKILLS

The Mediterranean basin is one of the Earth's biodiversity hotspots for conservation priority. The primary mission of SCCA is the isolation, identification, selection and in vitro cultivation of photosynthetic microorganisms from different Sardinian habitats. Microalgae are photosynthetic microorganisms that are responsible for almost half of the total global carbon dioxide fixation and thus play a pivotal role as primary producers in the world's ecosystems. The SCCA collection is exclusive because it is composed only with algal flora from Sardinia. The collecting sites include pristine as well as polluted localities. In addition, the collection is involved in the use of algae as research material for environmental restoration, biotechnology and alternative sources of energy. In particular the strains of this collection can provide a source of extremely useful material for laboratory experimentation and for mass culture research.

DESCRIPTION OF YOUR PROJECT / THE PROJECT YOU WOULD LIKE TO JOIN

We would like to join on a project aimed to integrate the conservation and protection of biodiversity. In fact the SCCA greatly contributes to the CBD (Convention on Biological Diversity) that proposed to "adopt measures for the ex-situ conservation of components of biological diversity, preferably in the country of origin of such components". There is an urgent need to inventory the world's algae, conserve species in culture collections and genetic stocks in 'seed' banks, as well as to preserve natural communities by protecting sites of phycological importance. The most important aim for us is intended to preserve, establish and maintain an effective and innovative conservation community that works in synergy to achieve common conservation objectives and that can be a promotion of environmental education inside the Universities and may raise public awareness.

DESCRIPTION OF THE EXPERTISE/SKILLS YOU ARE LOOKING FOR IN YOUR PROJECT

The SCCA would have a role on the isolation, identification, selection and in vitro cultivation of microorganisms. The CINSA will play also an important role not only in hosting the collection by taking advantage of its facilities but also in performing through its personnel suitable laboratory experiments involving such strains that are related to carbon dioxide absorption from simulated flue gases, as well as to bio-oil and fine chemical extraction from the algae.

Please send this form back to: biodiversa@fondationbiodiversite.fr