

Tentative Outline

The Open Biology Journal

Title of thematic issue: Importance, Threats and Conservation

Guest Editors: Fuad A. Al-Horani

Aims & Scope:

Coral reefs are major biological ecosystems at a global scale. They are comprised from an array of benthic communities that interact among each other to form highly complex ecosystems with very high diversity and productivity values. The coral reefs are equivalent to tropical rain forests in terms of their contribution to diversity, socioeconomic and the ecological importance. The coral reefs are suffering from various anthropogenic and natural threats, among which the pollution, climate change and coral diseases are the most threats that might influence their existence. In the past few decades, the rate of coral reefs deterioration was relatively fast and the number of red listed species in those ecosystems has increased significantly according IUCN Red List Index, which shows that corals have the highest loss in biodiversity among other species.

The coral reef research efforts have been focused on various aspects of the reef components, including monitoring and conservation, developing new tools for the study of biodiversity, the study of coral diseases, in addition to research related to climate changes and pollution impacts, paleoclimate studies, as well as the socioeconomic and management issues. The new approaches and novel tools used in studying the coral reefs helped giving insights about the different aspects of the reefs structure and help understanding the future impacts of climate changes and pollution.

From time to time, we need to revise the information accumulated in each one of the fields related to coral reef studies in order to define coral reef related fields that have scares or lack of information, so that researchers can think of future studies needed to enrich our understanding of the reefs. The contributors to this theme are distinguished scientists who are experts in each one of the subjects of the theme. They will contribute a review articles covering the past and present information in the respective subject.

Keywords:

Subtopics:

The sub-topics to covered by this theme include (but are not restricted to them subject to availability of authors) the followings;

- Diversity of coral reef communities
- Physiology of calcification in corals
- Conservation of coral reefs
- Reproduction modes and strategies of corals
- Corals as proxies for paleoclimate, climate and pollution
- Climate change and coral reefs
- Symbiosis in coral reefs
- Fish communities in coral reefs
- Nutrient fluxes in coral reef environment
- Socioeconomic values of coral reef environment
- Coral diseases
- New technologies used for the study of coral reefs

- Interactions among of Seagrass communities with coral reefs
- Coral reefs as a source of bioactive substances

Schedule:

✧ Submission deadline: **31st December 2023**

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