# **Special Issue**

# The Role of Probiotics in the Development of Sustainable Aquaculture

# Message from the Guest Editor

Aquaculture, which represents one of the largest food production sectors in the world, is practiced with a wide variety of extensive to superintensive technologies for culturing a large number of vertebrate and invertebrate species in sea and freshwater. Ensuring good health and well-being of animals is a cornerstone in all these systems, in which probiotics offer a sustainable and eco-friendly alternative to replacing antibiotics and synthetic chemicals. Beneficial microbes play a pivotal role in regulating health conditions directly and by helping the immune system, growth performance, and feed utilization of animals. Their use in aquafeeds was the first area of intense development, which remains ongoing. However, the application of probiotics offers effective new and sustainable ways of maintaining good water quality and even increasing the biomass of natural food organisms in different pond cultures.

Developments in microbiome science are opening new frontiers of research for probiotics, prebiotics, and postbiotics not only in human healthcare but also in aquaculture.

#### **Guest Editor**

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## Deadline for manuscript submissions

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# Editor-in-Chief

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