

Sessions and session chairs for science conference Aquanor 2022

SESSION 1 (Wednesday 23.08. 2023)

Feed resources for future expansion of aquaculture

Chair: Mari Vold Bjordal, Bellona (DNV)

Chair: Ida Grong Aursand, SINTEF Ocean

The main objective of the session is to elaborate on further development of feed resources for cultured fish that can secure a sustainable expansion of marine aquaculture in the coming decades. A potential for deriving more feed ingredients is for example found in new resources of captured fish and other marine animals, farmed seaweed and marine low trophic animal species, byproducts from the agriculture food chain, products from industrial biotechnology, and products taken from the aquaculture and fishery wastes cycles. Challenges that are to be met when building new industries within this field are economic and environmental sustainability, avoiding major societal conflicts, and legal aspects. There will be a special focus on proteins and selected essential nutritional ingredients such as for example EPA, DHA and astaxanthin.

Key words: Marine and terrestrial resources, waste cycles, higher plants, farmed seaweed, farmed low trophic animal species, economic and environmental sustainability, societal aspects, technological and biological aspects, life cycle aspects

SESSION 2 (Thursday 24.08.2023)

Non-fed extractive aquaculture – species with aquaculture potential and their cultivation techniques

Chair: Inka Anglade, NTNU

Chair: Xinxin Wang, NOFIMA

The main objective of the session is to explore the potential of non-fed extractive aquaculture species as an alternative to traditional aquaculture. Many locations along the coast are not suited for cage aquaculture but could be suitable for growing other high-value low-trophic species. Various techniques and strategies used to cultivate these species, including sea-ranching, as well as the environmental and economic benefits they can provide, are highly relevant for sustainable aquaculture production. Current practices, regulations and research related to these species, as well as challenges and opportunities that come with the development of non-fed extractive aquaculture species are of importance. Species of interest are, among others, seaweeds, shellfish, crustaceans, other invertebrates, and non-salmonid omnivorous fishes.

Key words: Species potentials, biology, low trophic aquaculture, extractive aquaculture, farming technologies, sea ranching, economic sustainability, societal and environmental sustainability, management regulations