Launchpad Cohort 2 Feedback | Quarter 1

Christina Frieder, SeaO2

Advisor: Christina Frieder

Organization/Affiliation: Southern California Coastal Water Research Project

Areas of Expertise: ocean biogeochemistry, CO2 chemistry, marine experimental design and research, numerical ocean modeling

Launchpad Team Advised: SeaO2

Overview of engagement

Monthly calls and in-person meeting at the Ocean Visions Summit.

Established SeaO2's needs: numerical ocean modeling, impingement and entrainment, experiments, biological monitoring

Currently narrowing in on a more focused discussion about an environmental effects framework.

Challenges and obstacles

Identifying topics of highest priority to dive into

MRV is a complicated topic with minimal industry precedence

The range of expertise required for MRV spans many domains (modeling, observational, experimental, regulatory, etc.).

Successes and achievements

Primary milestone is identification of focal areas to further explore.

Key work in the next quarter

Creating a generalized list for various modes of action of effects from Direct Ocean Capture discharge waters.

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Nicolás Sánchez, SeaO2

Advisor: Nicolás Sánchez

Organization/Affiliation: Geomar Helmholtz Centre for Ocean Research Kiel

Areas of Expertise: Marine Ecology and Biogeochemistry

Launchpad Team Advised: SeaO2

Overview of engagement

Identifying possible environmental concerns associated to direct ocean capture, repurposing the parallels in alkalinity enhancement studies to pinpoint potential sensitivities in marine food webs.

Challenges and obstacles

Designing a cost-effective and thorough environmental assessment framework that could be applied to a pilot field study programmed by the company.

Nicolás Sánchez has put SeaO2 in contact with phytoplankton experts to discuss strategies to fill critical knowledge gaps around measuring nuances parameters such as plankton community composition.

Successes and achievements

Successfully transferred lessons learned from ocean alkalinity enhancement literature to DOC and identified potential risks exclusively associated with DOC.

Progressively built a network of experts that SeaO2 can tap to when dealing with environmental and CO2-capture efficiency concerns.

Shaping an environmental monitoring strategy for their upcoming field study.

Key work in the next quarter