

**BACKGROUND INFORMATION
AND
CONFIDENTIAL CONFLICT OF INTEREST DISCLOSURE**
For Ocean Alkalinity Enhancement Best Practices Guide

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PREAMBLE

It is essential that the development of the Best Practices Guide for Ocean Alkalinity Enhancement Research is not compromised by any significant conflict of interest. For this purpose, **the term "conflict of interest" means any financial or other interest which conflicts with the service of the individual because it (1) could significantly impair the individual's objectivity or (2) could create an unfair competitive advantage for any person or organization.** Except for those situations in which a conflict of interest is unavoidable and that conflict of interest promptly and publicly disclosed, no individual can serve as author of the guide if the individual has a conflict of interest that is relevant to the functions to be performed. The term "conflict of interest" means something more than individual bias. There must be an *interest*, ordinarily financial, that could be directly affected by the work on the document.

By filling in and signing this Conflict of Interest Disclosure document, we will ensure that all information provided in the Best Practices Guide is unbiased and follows best scientific practices.

INSTRUCTIONS

Please provide the information requested below regarding **relevant** organizational affiliations, government service, public statements and positions, research support, and additional information (if any). Information is "relevant" if it is related to -- and might reasonably be of interest to others concerning -- your knowledge, experience, and personal perspectives regarding Ocean Alkalinity Enhancement and your contribution to the Ocean Alkalinity Enhancement Research Best Practices Guide.

I. ORGANIZATIONAL AFFILIATIONS. Report your relevant business relationships (as an employee, owner, officer, director, consultant, etc.) and your relevant remunerated or volunteer non-business relationships (e.g., professional organizations, trade associations, public interest or civic groups, etc.).

- Employed as Professor and Head of the Department of Oceanography at Dalhousie University, Halifax, Canada
- Chair of the Canadian BGC-Argo Committee
- Member of the international BGC-Argo Mission Team
- Member of the Science and Technology Advisory Committee of the Copernicus Marine Environment Monitoring Service (CMEMS)
- Scientific Advisory Committee for the US NSF-funded GO-BGC project

II. GOVERNMENT SERVICE. Report your relevant service (full-time or part-time) with federal, state, or local government (including elected or appointed positions, employment, advisory board memberships, military service, etc.).

- Member of the Scientific Advisory Board of the Institute for Baltic Sea Research Warnemuende, Germany

III. RESEARCH SUPPORT. Report relevant information regarding both public and private sources of research support (other than your present employer), including sources of funding, equipment, facilities, etc.

I hold funding in support of OAE research from the Natural Sciences and Engineering Research Council of Canada and from Carbon to Sea as follows:

- NSERC Alliance Grants (ALLRP 570525-21) – Missions, entitled “Assessment and Verification Tools for Ocean-based Carbon Dioxide Removal (CDR)”, with Pro-Oceanus Systems Incorporated, Planetary Hydrogen Inc., Canadian Integrated Ocean Observing System, COVE
- Carbon to Sea Ocean Alk-align grant, entitled “Aligning ocean alkalinity for sustainable, safe and verifiable long-term CO₂ removal”, with GEOMAR, University Hamburg, University of Tasmania, and Southern Cross University

IV. PUBLIC STATEMENTS AND POSITIONS. Provide a brief description of relevant positions of any organizations or groups with which you are closely identified or associated.

My public statements on OAE have been reported in the following:

- September 15, 2023 – The Weather Network article about the magnesium hydroxide addition in Halifax ([link](#))
- September 13, 2023 – CBC News clip about the magnesium hydroxide addition in Halifax ([link](#))
- Aug 24, 2023 – Le Devoir: A geoengineering experiment about to start in Halifax ([link](#))
- Aug 20, 2023 – Xatake (Spanish News): Canada has made a peculiar decision in its fight against climate change: dye a port pink ([link](#))

- Aug 15, 2023 – Focus (Polish News), Translated with Google translate: The river is all pink like Barbie. They poured hectoliters of chemicals in the name of ecology and climate protection ([link](#))
- Aug 11, 2023 – CityNews 95.7 Radio: Interview with Jordi Morgan ([link](#))
- Aug 10, 2023 – CTV National News: Removing CO2 from the air ([link](#))
- Aug 10, 2023 – CTV Atlantic: Halifax Harbour dye test ([link](#))
- Aug 10, 2023 – Saltwire: Dalhousie researchers dye Halifax Harbour for climate change study ([link](#))
- Aug 10, 2023 – CBC Radio Maritime Noon: Interview with Brett Ruskin (at 00:43 seconds; [link](#))
- Aug 10, 2023 – CBC Nova Scotia (web): Dyeing the Halifax Harbour pink to help fight climate change ([link](#))
- Aug 9, 2023 – Global News Morning: Dalhousie dye-tracing study in Halifax Harbour ([link](#))
- Aug 4, 2023 – Saltwire: Bedford Basin to be dyed pink to fight climate change ([link](#))

V. **ADDITIONAL INFORMATION.** If there are relevant aspects of your background or present circumstances not addressed above that might reasonably be construed by others as affecting your judgment in matters within the assigned task of the committee or panel on which you have been invited to serve, and therefore might constitute an actual or potential source of bias, please describe them briefly.

As part of the NSERC Alliance Missions project focused on OAE, I am collaborating with Planetary Technology, a climate-tech company, and Pro-Oceanus Systems Inc., an ocean technology company. As required by the funding agency, they are listed as partners but neither of these companies have made direct financial contributions to the project. I am also collaborating with Planetary Technology in the context of the Ocean Alk-align project. The company is not an official partner and provides no direct financial contributions.

VI. **FINANCIAL INTERESTS.** (a) Taking into account stocks, bonds, and other financial instruments and investments including partnerships (but excluding broadly diversified mutual funds and any investment or financial interests valued at less than \$10,000), do you or, to the best of your knowledge others with whom you have substantial common financial interests, have financial investments that could be affected, either directly or by a direct effect on the business enterprise or activities underlying the investments, by the best practices guide?

(b) Taking into account real estate and other tangible property interests, as well as intellectual property (patents, copyrights, etc.) interests, do you or, to the best of your knowledge others with whom you have substantial common financial interests, have property interests that could be directly affected by the best practices guide?

(c) Could your employment or self-employment (or the employment or self-employment of your spouse), or the financial interests of your employer or clients (or the financial interests of your spouse's employer or clients) be directly affected by the best practices guide?

(d) Taking into account research funding and other research support (e.g., equipment, facilities, industry partnerships, research assistants and other research personnel, etc.), could your current research funding and support (or that of your close research colleagues and collaborators) be directly affected by the best practices guide?

(e) Could your service on the author committee of the best practices guide create a specific financial or commercial competitive advantage for you or others with whom you have substantial common financial interests?

If the answer to all of the above questions under FINANCIAL INTERESTS is either "no" or "not applicable," check here X (NO).

If the answer to any of the above questions under FINANCIAL INTERESTS is "yes," check here (YES), and briefly describe the circumstances below.

Date & signature

A handwritten signature in black ink, appearing to read 'Kajal' followed by a stylized flourish.

November 19, 2023