



NOVA SCOTIAN INSTITUTE OF SCIENCE

STUDENT SCIENCE & TECHNOLOGY COMMUNICATION COMPETITION 2023

Information for Authors

In 2023, the Nova Scotian Institute of Science (NSIS) is again sponsoring its annual Student Science and Technology Communication Competition. The competition has two categories: undergraduate/college and postgraduate.

- A prize of **\$750** will be awarded to the best paper prepared by an undergraduate or college student.
- A prize of **\$750** will be awarded to the best paper prepared by a graduate student.

Any student registered at a university or college in Nova Scotia in 2023 is eligible to participate. All students who submit a manuscript will be offered a free 1-year membership in the NSIS.

The winning and other high-quality submissions may be posted on the NSIS website and winning authors will be invited to submit their paper to the *Proceedings of the Nova Scotian Institute of Science*, a peer-reviewed, Atlantic Canadian journal. All articles published in the *Proceedings* are subject to the journal's normal editorial and peer review process.

Guidelines

The competition is open to any topic of a scientific (natural and social) or technological nature. A few possible topics are: climate change, Earth's ecosystems and cycles, the environment, human health, sustainable development, renewable energy, digital technology, innovations in space exploration, communications, mathematics, and statistics, etc., but note that these are only suggestions. Students wishing feedback or suggestions on a possible essay topic are encouraged to contact the Competition Coordinators.

Entries submitted to the Competition should be an **original essay** that

- (a) Provides a substantive review of a certain aspect of current science or technology developments including its relevance, significance and/or application, and your analysis or perspective;
- (b) Represents your own analyses and research based on literature review, or an original work of your own or in collaboration with others;
- (c) Includes a list of references from peer-reviewed science or technology journals or books, to facilitate the judging of originality, and the relevance and significance of the topic being covered

Note:

This is a science and technology communication competition. You should assume that your potential readers have a general knowledge in science and technology but are not acquainted with, or specialists in, your specific subject. We expect that your submissions will be directed to a general, albeit educated, audience. Avoid jargon and acronyms. If you must use specific technical terms or acronyms they should be defined or explained, preferably in a Glossary. *Scientific American, The Smithsonian, The New Scientist*, etc. can serve as models for the level of writing.

Authorship, Acknowledgements, and Copyrights

This being a writing competition, you must be the sole author and creator of the manuscript. You must indicate that the writing is wholly your own and acknowledge the role any others played in preparing your submission (e.g.: minor editorial suggestions from your professor or advisor, provision of photographs, etc.). If the essay includes inputs or contributions from collaborators, their contributions to the text should be kept to a minimum, and explicitly noted in the Acknowledgements. Also, indicate if the essay or paper has been, or is likely to be, used substantially elsewhere.

Please respect copyrights if you need to reproduce illustrations from journals or books.

If you use original data or results from your published work, include the name and email of your research supervisor or your collaborators, and provide a statement that they have agreed to the inclusion of the data or results in your submission. All personal or scientific information that you provide will be held in confidence.

Manuscript Format

The essay should include: Title/Author/Affiliation, Abstract (brief), Introduction, Methodology (if applicable), Results (if applicable), Discussion, Conclusions, Acknowledgements, References. No separate title page is needed. References should be presented in a readily accessible form, such as that used by *Proceedings of the NSIS* or a prominent, generalist science journal (e.g.: *Nature*).

Each submission must include a media summary of 300-400 words for communication with the general public.

Aim for about 3,000-4,000 words, not counting the abstract and media summary, figures/tables (including captions), and references. Please number all pages. Diagrams and graphs can be included and are usually printed across the width of a page. Black and white photos are fine, and figures in colour can be considered. Use a line spacing of 1.2 to 1.5 with an easy-to-read (sans serif), 12-point font, and proper formatting.

Deadlines

Registration Deadline: The author must indicate intention to enter the contest to the Competition Coordinators at the e-mail address below by: **Tuesday, 31 January 2023.**

This notification must include the following information:

- Your name, with e-mail and telephone number.
- The name of your university or college and home department.
- The name of your degree, diploma, or certification program and your current year in that program. Please clarify whether you are an undergraduate or graduate student
- The field or subject of your proposed entry, and a tentative title.

Final Submission Deadline: Submit the final manuscript to the Coordinators by:
Friday, 17 February 2023.

Electronic submission is strongly preferred. Please submit an electronic copy of your article as a Word (.doc or .docx) or Adobe (.pdf) attachment to the Coordinators at the e-mail address below. (If electronic format is unavailable to you, please contact the Coordinators for advice.)

Competition Coordinators

Ms. Jillian Phillips, Coordinator of Science Education, Discovery Centre

Drs. Jinshan Xu and Youyu Lu, Research Scientists, Bedford Institute of Oceanography

E-mail: nsis.1862.competition@gmail.com

Judging

All submissions will be judged according to the following criteria:

- Appeal to a broad audience, i.e. able to be understood by non-specialists in the area.
- Significance of the subject, unbiased analysis, novel perspectives
- Scientific or technical correctness
- Clarity of presentation: clear, comprehensive, concise, logical, well-explained, readable. Free of spelling, grammatical and typographical errors.
- Overall impression of the paper.

Our panel of Judges come from a wide variety of scientific and technological backgrounds and perspectives. To make the judging process as objective as possible, essay submissions are subject to a blind reviewing process in which your identifying information such as name, place and year of study, and department affiliations will be removed. Given there are two categories for student writing, judges will be aware whether the paper has been submitted by an undergraduate/college student or a graduate student. Judges work from a grading rubric with the above criteria. Decisions made by the panel of Judges are final and are not subject to appeal.

Winners

The winners of the competition will be contacted before the end of March 2023 and the winning entries will be announced on the NSIS website. The presentation of the awards will take place at the NSIS Public Lecture on **Monday, 3 April 2023.**