

Call for Abstracts

April 12, 2025

Hosted by **Miami University, Oxford, Ohio**

Abstracts must be completed by February 25, 2025 at 5:00 PM

About the Meeting

The Ohio Academy of Science's Annual Meeting is for academic, governmental, and industrial scientists and engineers, university and pre-college educators, undergraduate and graduate students, and interested lay citizens in the Ohio region. Annually, the scientific presentations are complemented by the Keynote Lecture and a Panel Discussion. Dr Mary Crowe, program officer at the Technology Innovation Partnerships (TIP) directorate of the National Science Foundation, will be the keynote speaker.

This year The Ohio Academy of Science and The Ohio chapter of Project Kaleidoscope [PKAL/AACU-STEM] will hold a joint meeting at Miami University, Oxford. This conference will feature a common keynote address, panel discussion, lunch and poster sessions, and a number of concurrent oral sessions. The overarching theme of the conference is "Workforce development: Connecting college to careers through STEM education."

It is a unique opportunity for STEM students (graduate and undergraduate) and STEM professionals to (1) present at a regional conference; (2) attend the conference sessions; and (3) network with scientists, engineers, educators, employers, and students across Ohio.



"Workforce development: Connecting college to careers through STEM education"

Call for Abstracts

Whatever your scientific interest, this Call for Abstracts is your invitation to participate.

There are two options are available to present papers:

- Professionals and college students of all levels, who have completed research may submit an abstract; abstracts must contain results.
- College undergraduates <u>only</u>, may submit an Undergraduate Research-in-Progress Summary or an abstract if it includes research results.

All abstracts and Undergraduate Research-in-Progress Summaries will be peer-reviewed. After the meeting all abstracts will be published in the Program Abstracts issue of The Ohio Journal of Science (OJS). Research-in-Progress Summaries will be included after the results are added. This publication assures that researchers across Ohio, else where in the United States, and in dozens of foreign countries will have access to your work.

Research papers are welcome in ALL FIELDS of science, engineering, technology, education and their applications.

About Our Host

Miami University, an original Public Ivy, was established in 1809 and is ranked among the top 50 national public universities by U.S. News & World Report. With four campuses located in southwest Ohio and one in Luxembourg, students, faculty, and staff are provided opportunities to engage in meaningful research, workforce development initiatives, and lifechanging programming in and out of the classroom.

The university maintains a strong connection to the sovereign Miami Tribe of Oklahoma and the campus blends tradition with innovation. Recent investments and partnerships in advanced manufacturing, entrepreneurship, medical sciences, and data analytics are infused throughout the campuses.

Learn More about Miami University at https://miamioh.edu/ Love and Honor –

On the Web

Please see instructions https://www.ohiosci.org/annual-meeting/ for additional instructions.

How to prepare an ABSTRACT for peer review

An abstract must be prepared for each paper to be presented at the Annual Meeting. An abstract is a concise summary of the educational, scientific, engineering, or technological research contents of the paper, and not merely a general description of what the paper is about. Tell what the specific facts are, not what they are going to be when you talk. Avoid personal pronouns. Quality abstracts are highly structured and contain all of the following elements:

(1) background or introduction including goals, objectives, purpose, problem and hypothesis, (2) methods and materials, (3) results, data or observations, and (4) discussion or conclusion(s). Phrases like "will discuss, will review, will talk about, or will present" are unacceptable in an abstract. All important facts should be stated with brevity, but not such sparing use of words as to leave ambiguity. Abstracts should be 250 words or fewer. Tables and graphs should not be included. New techniques or new apparatus and their functions should be mentioned. New constants, critical data or formulae should be included. Names of new species should not be listed in the abstract, but use full scientific names for all organisms. Use the term "significant" only if you state the statistical test(s) used. Always define the sample(s), population or trials (N=?). NEVER use the phrase "Results show" without first stating the results. The value of abstracts is real and considerable, not only for those in attendance, but also for others unable to attend. All abstracts will be peer-reviewed. Acceptable final abstracts will be published in the program abstracts issue of The Ohio Journal of Science and shall be presented by the first author. The first author of multiauthored abstracts must obtain permission from all authors to submit the content of the abstract.

Content of an Abstract:

Please include one or two sentences on each of the following:

- background or introduction including goals, objectives, purposes, problem and hypothesis
- methods & materials
- results, data or observations
- discussion or conclusion(s)

How to prepare a College Undergraduate Research-in-Progress Summary

The Ohio Academy of Science accepts undergraduate research that is unfinished by the abstract submission deadline as Undergraduate Research-in-Progress Summaries. Papers, based on the student's research, may be presented in either podium or poster format. This summary is a statement following the general typing and submission instructions for an abstract. Avoid personal pronouns. The summary shall contain the following elements in this order: (1) background or introduction including goals, objectives, purpose, problem and hypothesis, (2) methods and materials, and (3) if available, initial observations. Phrases like "will discuss, will review, will talk about, or will present" are unacceptable in a summary. All important facts should be stated with brevity, but not such sparing use of words as to leave ambiguity. Summaries should be 250 words or fewer. Tables and graphs should not be included. New techniques or new apparatus and their functions should be mentioned. New constants, initial critical data, if available, or formulae should be included. Names of new species should not be listed in the summary, but use full scientific names for all organisms. State the statistical test(s) you plan to use and always define the expected sample(s), population or trials (N=?). NEVER use the phrase "Results show" without first stating the results. The value of summary is real and considerable, not only for those in attendance, but also for others unable to attend. Summaries shall be presented by the college undergraduate first author. It is the responsibility of the first author of multi-authored summaries to obtain permission from all authors and research advisor(s) to submit the content of the summary. All Undergraduate Research-in-Progress Summaries will be peer-reviewed. Acceptable final summaries will be published in the Program Abstracts issue of The Ohio Journal of Science after results have been added.

Content of an Research-in Progress Summary:

Please include one or two sentences on each of the following:

- background or introduction including goals, objectives, purposes, problem and hypothesis
- methods & materials
- Initial observations if available

Formatting and Submission Instructions

Your heading should be formatted using these guidelines; use 12 point Times New Roman or Century Schoolbook:

TYPE YOUR TITLE IN ALL CAPITAL LETTERS. Put a period "." after the title. Leave a space then type your first, middle initial, last name, email and any other authors full name with emails. Do not type your last name in all capital letters. Put a comma "," after your name and any other authors. Follow all author names by YOUR complete mailing address. Only the first author/presenter should have a complete mailing address. Your mailing address should have a comma "," after each part of the address. Do not put comma "," after the city and please use a two-letter state abbreviation (e.g. OH). For summaries include your advisor's name in parentheses.

Skip one line and then type your abstract or summary.

SAMPLE #1 - Single author of an undergraduate research-in-progress summary SEASONAL EFFECTS FOUND IN PLANKTON IN THE PORTAGE LAKES. Gary M. Walker, name@abc.edu, (Charles Smith, name@abc.edu), Mount Union College, 1972 Clark Ave, Alliance OH 44601. NOTE: Please use advisor's full name without title.

SAMPLE #2 - Single author of an abstract INVASION OF ALIEN PLANTS IN A RECLAIMED STRIP MINE, CARROLL COUNTY, OHIO. Jay Johnson, name@abc.edu, Muskingum College, Dept. of Biology, New Concord OH 43222.

SAMPLE #3 - Multiple authors of an abstract from the same institutions
A PRELIMINARY INVENTORY OF AQUATIC MACROINVERTEBRATE TAXA FROM RESTORED AND
NATURAL WETLANDS OF THE BEAVERCREEK WATERSHED. Mary D. McIntosh, name@abc.edu,
Jerry Vale, name@abc.edu, Brian T. Conn, name@abc.edu, Eric Ben, name@abc.edu, Thomas J
Bury, name@abc.edu, University of Dayton, Dept of Biology, Dayton OH 54469-2320.

SAMPLE #4 - Multiple authors of an abstract from multiple institutions FEEDING THE WORLD: SALT WATER FARMING. Madeline Smith , name@abc.edu, Bran Wilson , name@abc.edu, Michael Bow, name@abc.edu, AJ Burk, name@abc.edu, University of Dayton, Dept of Biology, Dayton OH 45469-2320 and Ohio Department of Natural Resources, Division of Natural Areas and Preserves.