



INNOVATIVE
RESEARCH
INVENTION
COMPETITION

2024 - Season 1

Official Website

fusac.fusso.org

Competition Host

[Future Science Scholar Organization](#)



HOST INTRODUCTION

Future Science Scholar Organization (FuSSO) is a STEM academic community established in 2022 by scholars around the world. It is an inclusive, diverse, "purely academic," non-profit student organization with over 2500 professional scholars from 10+ countries and 50+ regions. This community includes a wide range of ethnicities, cultural backgrounds, academic expertise, and educational levels, spanning from high school students to Ph.D.

FuSSO's mission is to cultivate an exceptional team of research leaders to transform STEM knowledge into real-world application, benefiting societies with the power of science



COMPETITION INTRODUCTION

INNOVATIVE RESEARCH AND INVENTION COMPETITION

The Innovative Research and Invention Competition (IRIC) aims to stimulate innovative thinking among contestants, cultivate students' ability to use theoretical knowledge to create practical applications to solve social problems, and give high school students a platform to showcase their unique ideas. The competition will provide students with an open platform and extensive resources, which encourages students to learn interdisciplinary theoretical knowledge, use their strategies to face real-world challenges, solve urgent social problems, and meet urgent human needs in creative ways. Such competition can not only influence the way contestants view and solve problems, but also shape the leadership capabilities of future innovators and cultivate talents who are brave enough to explore the unknown.



COMPETITION RANGE



Competition Dates: 4/1/2024 - 9/1/2024

Competition Audience: International High School Students

SEASONAL THEME

SUSTAINABLE DEVELOPMENT

Each team will choose a topic from following:

Artificial Intelligence and Machine Learning:

Exploring the Potential of Artificial Intelligence in Achieving a Zero-Waste Society

Sustainable Energy:

Next-Generation Energy Conversion Technologies: Beyond the Boundaries of Solar and Wind Power

Robotics and Mechanics:

Developing Robotic Solutions for Environmental Cleanup and Conservation

Biotechnology:

The Application and Ethical Considerations of Gene Editing Technology in Enhancing Agricultural Sustainability

Material Science:

Advancements in Sustainable Materials for Reducing the Environmental Footprint of Consumer Products

Smart Cities and Transportation:

Integrating IoT and Big Data for Adaptive Management Systems of Urban Infrastructure

Chemistry:

The Prospects of Nanotechnology in Environmental Pollution Control and Resource Recovery

Social Science:

The Impact of Social Behavior in the Digital Age on Sustainable Development Strategies

Competition Process

Preparation Phase (Before April 1)

- Contestants form teams and familiarize themselves with the competition's rules, procedures, scoring criteria, and other relevant information.

Initial Submission Phase (April 1 - April 20)

- Teams submit their chosen topic and its outline to mentors for professional advice and preliminary ratings.

Research and Drafting Phase (April 20 - July 10)

- Teams conduct academic research, complete the writing of the first draft paper, and submit it to their mentor for professional feedback and ratings.

Revision Phase (July 10 - July 30)

- Teams submit the second draft of their paper to mentors and receive further professional advice and ratings.

Final Submission (August 5)

- Teams submit the final draft of their paper, the PDF version of the display board, its explanation video, slides, and other auxiliary materials.

Judging and Voting Phase (August 5 - August 20)

- Public and professional judges evaluate submissions. Meanwhile, teams canvass for votes and prepare for their final presentations.

Final Presentations (August 21)

- Teams present their research outcomes in their final presentations.

Evaluation Phase (August 22 - August 26)

- The organizing committee evaluates all scores received by each team.

Award Ceremony (August 27)

- The competition concludes with an award ceremony to honor and celebrate the achievements of the participating teams.

Prize Settings

First place (1 group):

- Award certificates
- Honor Wall: All team members and their accomplishments will be displayed on IRIC's official website.
- Free paper revision guidance and publication by JOSER(Journal of Scientific Explorative Research).
- Fu-Lab Access: free mentoring, opportunity for recommendation letters, etc.
- Patent application assistance: If the research includes related innovative inventions products, IRIC would offer patent registration assistance

Second place (3 groups):

- Award certificates
- Honor Wall: All team members and their accomplishments will be displayed on IRIC's official website.
- Free paper revision guidance and publication by JOSER(Journal of Scientific Explorative Research).
- Fu-Lab Access: free mentoring, opportunity for recommendation letters, etc.

Third place (5 groups):

- Award certificates
- Honor Wall: All team members and their accomplishments will be displayed on IRIC's official website.
- Free paper revision guidance and publication by JOSER(Journal of Scientific Explorative Research).

Excellence Award (5 groups):

- Award certificates
- Honor Wall: All team members and their accomplishments will be displayed on IRIC's official website.

Best Influence Award:

- Award certificates

Judges Introduction

The judge committee are from:

Boston University

University of North Carolina, Chapel Hill,

Pennsylvania State University

University of California, San Diego

University College London

Galway University School of Medicine

Vanderbilt University

China University of Political Science and Law

Washington University, Monash University

University of Toronto

University of Toronto (Mississauga)

Fudan University

Hong Kong Polytechnic University (Hong Kong, China)

Columbia University

Haverford College

University of California, Los Angeles

New York University

University of California, Merced

National University of Singapore

Johns Hopkins University

University of Melbourne

Registration Process

Registration:

- Access the official website: fusac.fusso.org
- Fill out the Registration Form

Registration Fee:

- There is no registration fee needed, but there will be penalty for violating the participants' agreement

Team Up:

- Accepted participants would receive a email from the IRIC administration, including the instructions on "What to do next?"
- Participants' group-chat-links/QR codes would be attached to the email
- After joining the group chat, participants can form teams with 2-6 people
- The team captains would have to fill out the Team Registration Form

Then, you can begin your innovative journey here at IRIC!

CONTACT

Email Address:
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Official Website:
fusac.fusso.org

Registration

