PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

Techno Hub of Sidi Abdellah Abdelhafid Ihaddaden

THE NATIONAL HIGHER SCHOOL OF MATHEMATICS ORGANIZES

NATIONAL HIGHER SCHOOL
OF MATHEMATICS
المدرسة الوطنية
العليا في الرياضيات

THE FIRST NATIONAL CONFERENCE ON

ADVANCING TECHNICAL COMMUNICATION: INNOVATIONS FOR ESP IN STEM DISCIPLINES
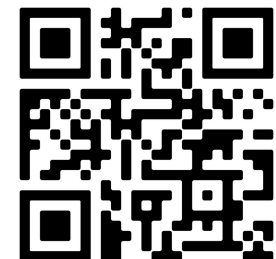
Keynote Speakers

Prof. Mohammed Dib
University of Mascara

Prof. Souryana Yassine
University of Tizi Ouzou

MAY 07TH, 2025

Chaired by
Prof. Azzeddine Bouhassoun
Dr. Fatima Goura

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RATIONALE

In a fast and rapid growing economic and integrated world, English remains the primary language of economics and sciences. STEM fields are no exception since globalization requires mastery of English.

For this purpose, the "Advancing Technical Communication: Innovations in ESP for STEM Fields" conference addresses the pivotal role of English for Specific Purposes (ESP) in enhancing communication within technical fields such as science, technology, engineering, and mathematics. Recent scholarship, notably Alison L. Bailey et al. (2018), has increasingly recognized the linguistic challenges students face when navigating discourse across STEM disciplines. In fact, teaching mathematics and sciences, and all STEM disciplines requires a specialized registry and relies heavily on specialized language to convey, understand and certainly engage in problem solving. English learners encounter several language challenges in STEM from technical terminology to understanding complex texts or even communicating ideas with precision in collaborative tasks. ESP displays primordial interest to the four skills - reading, writing, speaking, and listening in STEM fields. As a matter of fact, Teaching English in STEM fields spans from pedagogical strategies and innovations to program design in ESP with the aim at enhancing and promoting English proficiency within specific professional and technical fields.

This conference aims at exploring the intersection of ESP and STEM education, a critical yet underexplored area in language and pedagogical research. Recent studies in ESP highlight the linguistic challenges students face in STEM discourse, especially in multilingual contexts or when students have to use a foreign language. STEM language is also a complex semiotic system with unique semantic and syntactic features, therefore ESP needs to provide clear frameworks to overcome linguistic barriers in STEM comprehension and communication.

This conference also aims to provide a platform for knowledge exchange, collaboration, and innovation in teaching STEM fields through ESP. It emphasizes analyzing STEM texts' vocabulary, syntax, and discourse structures, developing instructional materials tailored to learners' linguistic needs, and integrating technology to support ESP in STEM education. By focusing on these areas, the conference seeks to advance ESP in STEM education and empower students in their academic and professional pursuits. Of course, teaching challenges in STEM fields are taken to the technology implementation and use as well. Intersections between research in STEM education and digital technologies encounter obstacles in teaching practices (Mariam Haspekian and Carolyn Kieran, 2023).

The first national conference that The National Higher School of Mathematics hosts invites scholars specialized in STEM, ESP, and other fields to work on the intersection of English and STEM fields, and digital technologies.

TOPICS OF INTEREST

Pedagogical Innovations: Focus on innovative teaching methods like project-based learning and flipped classrooms to enhance technical English learning, and the design of ESP curricula for STEM students.

Technological Integration: Explore digital tools and technologies to facilitate technical English learning and present case studies on technology's role in language and STEM integration.

Assessment and Evaluation: Discuss and examine assessment techniques for evaluating technical English proficiency and methods for providing effective feedback and continuous improvement in ESP teaching.

Professional Development: Focus on professional development opportunities for ESP teachers, including workshops and certifications, and strategies for sharing best practices and resources.

Integrating AI in ESP and STEM disciplines: Explore AI driven tools in all teaching and learning activities where mathematics and STEM disciplines are involved.

Important Dates

Abstract Submission Deadline:
March 30th, 2025

Notification of Acceptance:
April 20th, 2025

Conference Date: May 07th, 2025

Submission Guidelines

Abstract should be no more than 250 words with at least 5 keywords.

Language of the conference is English

Venue of the Conference: National Higher School of Mathematics, Techno Hub of Sid-Abdellah, P. O. Box Algiers 16093, Algeria.

Please submit your abstract via the following registration link

https://docs.google.com/forms/d/e/1FAIpQLSc18vS5cqaYn_nK2KY wo8oLVWVFk6f1s6iyqbC-sYUU0RWpmQ/viewform?usp=pp_url

Scientific Committee Members

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