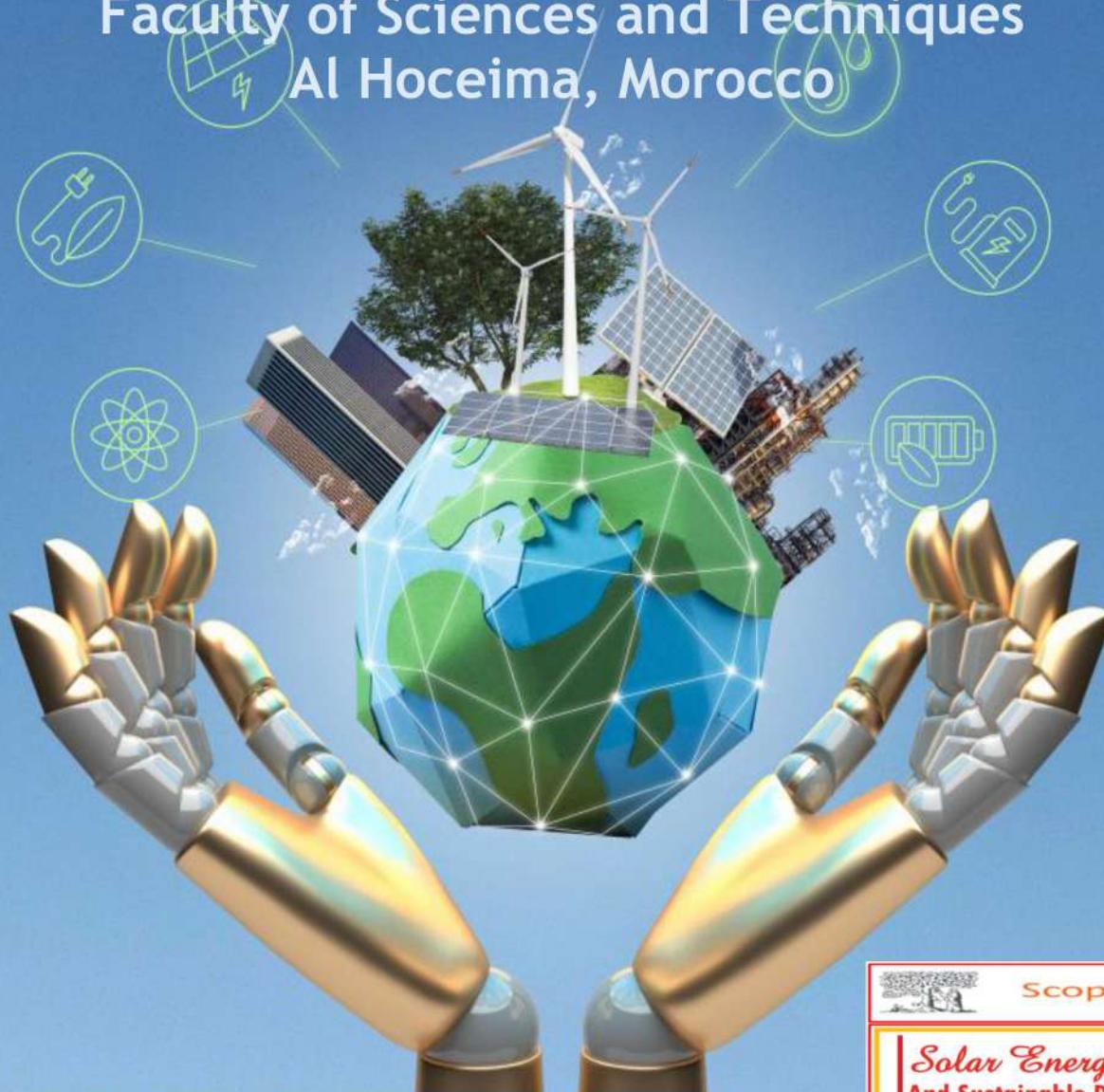


ABSTRACT BOOK

1st International Conference on Sciences and Techniques for Renewable Energy and the Environment STR2E 2025

MAY 06-08, 2025

**Faculty of Sciences and Techniques
Al Hoceima, Morocco**



Preface

We are pleased to present the proceedings of the **1st International Conference on Sciences and Techniques for Renewable Energy and the Environment (STR2E 2025)**, held from **May 6 to 8, 2025**, at the **Faculty of Sciences and Techniques of Al Hoceima**, Morocco.

STR2E 2025 was jointly organized by the **Chemistry, Computer Science and Artificial Intelligence Research Team (ERCI2A)** of **Abdelmalek Essaadi University**, Tetouan, Morocco, and the **Moroccan Association of Sciences and Techniques for Sustainable Development (MASTSD)**, based in Beni Mellal, Morocco.

This first edition of STR2E brought together researchers, academics, and industry professionals from around the world to discuss recent scientific and technological advances in the fields of **renewable energy and environmental sustainability**. The event provided a multidisciplinary platform for exchanging ideas, showcasing cutting-edge research, and fostering collaborations aimed at developing innovative and sustainable solutions to today's pressing energy and environmental challenges.

The conference featured a rich program of **keynote lectures, oral and poster presentations, and thematic sessions**, offering attendees a comprehensive overview of current research trends and future directions in the field.

We extend our deepest gratitude to all the **researchers and contributors** for their high-quality submissions and active participation. We also sincerely thank the **scientific reviewers, session chairs, and organizing committees** for their dedication and efforts in ensuring the academic excellence and smooth execution of the event. Our thanks also go to our **partners and sponsors**, whose support played a key role in the success of STR2E 2025.

Selected papers from the conference have been accepted for publication in **indexed journals and conference proceedings**, ensuring the visibility and impact of the presented research within the scientific community.

A special acknowledgment goes to the **conference chair, Professor Charaf Laghlimi**, whose leadership, vision, and unwavering dedication were instrumental in the successful organization of this inaugural edition.

We hope that **STR2E 2025** will pave the way for future editions that will further promote scientific innovation, knowledge sharing, and interdisciplinary collaboration in the service of a more sustainable future.

We hope that this first edition of **STR2E** will inspire continued collaboration and serve as a catalyst for new research initiatives in support of a more sustainable future.



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