

**The First National Conference on Renewable Energies and Advanced
Electrical Engineering (NCREAE'25)**

May 06-07th, 2025

University of M'Sila
Faculty of Technology

Electrical Engineering Laboratory (LGE)



CERTIFICATE OF PARTICIPATION

This Certificate is Awarded to:

LADJAL Badreddine

for presenting a paper entitled: **Using FTC based on BSC and nonlinear adaptive observer for dual star induction machine modeling and control**

Authors: ***Ladjal Badreddine, Zeghlache Samir, Berabbah Fouad***

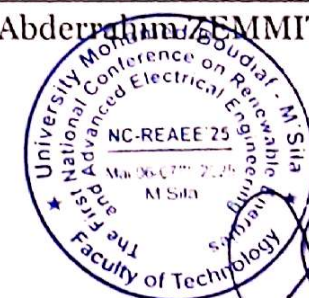
at the First National Conference on Renewable Energies and Advanced Electrical Engineering
(NC-REAE'25), held at M'Sila University- Algeria, on May 6–7th 2025.

Paper ID: 51



Conference Chair

Dr. Abderrahmane ZEMMIT



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This Certificate is Awarded to:

LADJAL Badreddine

for presenting a paper entitled: **Sturdy Adaptive Fuzzy Backstepping Control for Enhanced Tracking Performance in a 2-Dof Laboratory Helicopter System**

Authors: *Ladjal Badreddine, Berabbah Fouad, Zeghlache Samir*

at the First National Conference on Renewable Energies and Advanced Electrical Engineering (NC-REAEE'25), held at M'Sila University- Algeria, on May 6–7th 2025.

Paper ID: 48



Conference Chair

Dr. Abdelhakim ZEMMIT

