



Journal of Electrical Engineering and Renewable Energies Development (JEERED) 2025

Vol. 01, Issue N°02

e-ISSN: 3088-8360

Publisher: University Tahri Mohamed of Bechar
BP 417, Route Kenadsa-Bechar, Bechar, 08000, ALGERIA



Journal of Electrical Engineering and Renewable
Energies Development
JEERED 2025
University Tahri Mohamed of Bechar



Journal of Electrical Engineering and Renewable Energies Development (JEERED)

Vol. 01, No. 02 — Year 2025, e-ISSN: 3088-8360

Editorial Team

Editor-in-Chief

Prof. Abdel Ghani AISSAOUI, University Tahri Mohamed (UTM) of Bechar, Algeria

Editors

- ✓ **Prof. Ahmed Tahour**, ESSA, Tlemcen, Algeria
- ✓ **Prof. Ahmed Chaouki Megherbi**, Univ. Biskra, Algeria
- ✓ **Prof. Abdelmounaim Moulay Lakhdar**, UTM Bechar, Algeria
- ✓ **Prof. Ismail Khalil BOUSSERHANE**, UTM Bechar, Algeria
- ✓ **Prof. Abdallah Kouzou**, Univ. Djelfa, Algeria
- ✓ **Prof. Tahar BAH**I, University of Annaba, Algeria
- ✓ **Prof. Mohamed ABID**, University of sidi Bel Abbes, Algeria
- ✓ **Prof. Youcef SOUFI**, University of Tebessa, Algeria
- ✓ **Prof. Fateh Krim**, Univ. Setif, Algeria
- ✓ **Dr. Mustapha Hatti**, UDES, Algeria
- ✓ **Dr. Wahiba Yaïci**, CanmetENERGY Research Centre, Cannada
- ✓ **Dr. MAHI Mohamed Salah**, UTM Bechar, Algeria
- ✓ **Dr. Ahmed HAFFANE**, UTM Bechar, Algeria
- ✓ **Dr. Othmane BOUGHAZI**, UTM Bechar, Algeria
- ✓ **Prof. Adel MELIT**, Univ. of Djijel, Algeria
- ✓ **Prof. Smail BERRAH**, Univ. of Bejaia, , Algeria
- ✓ **Prof. Mourad Oussalah**, Univ. of Oulu, Finland
- ✓ **Prof. Abdelkrim KHIREDINE**, Univ. Bejaia, , Algeria
- ✓ **Prof. Zianou AHMED SEGHIR**, Univ. Khenchela, , Algeria
- ✓ **Dr. Kenneth Eloghene Okedu**, Melbourne Institute of Technology, Australia
- ✓ **Prof. Mouloud DENAI**, ESGEE Oran, Algeria
- ✓ **Prof. Mohamed Arezki MELLAL**, Univ. Boumerdes, Algeria
- ✓ **Prof. Said DRID**, HNS-RE2SD, Batna, Algeria
- ✓ **Prof. Saad MEKHILEF**, Swinburne University of Technology, Australia
- ✓ **Dr. Mohammad Hamdan Saleh AL-SMAIRAN**, Al al-Bayt University, Jordan

TABLE OF CONTENTS

Design And Analysis Of A Fractional-Order State-Space Adaptive Controller For Second-Order Systems <i>Authors: Souad ANTEUR, Rochdi BACHIR BOUIADJRA, Mohammed Benmadani DEBBAT, Ramon VILANOVA ARBOS, Marwa GAIDI, Fatima Zohra HACENE</i>	41
Optimizing Hybrid Smart Grids Through V2G: Bidirectional Power Flow for Improved Load Balancing and Stability <i>Authors: Abdelghani BAHAKKOU, Brahim BERBAOUI, Hassan DAHBI, Seddik ZEMITTE, Soukina BACHIKH, Messaoud HAMOUDA</i>	49
Robust Control of PMSM using Fully Synergetic Control with SVPWM and Real-Time Load Torque Estimation <i>Authors: Mohammed BEGHDADI, Katia KOUZI, Aissa AMEUR</i>	58
Digital Fuzzy Logic and Dahlin Control Design for a DC-DC Boost Converter <i>Authors: Ghrissi TAHRI, Fatima TAHRI, Ali TAHRI</i>	67
PSO-Optimized FOPID Controller for Electric Vehicle: Comparative study <i>Authors: Nawal TOUHAMI, Smail MANSOURI, Omar OULED-ALI</i>	74