

Curriculum vitae

Dr. Boutabba Tarek

Maître de conférences « A », Université Abbès Laghrour Khenchela, Algérie.

Laboratoire de recherche: Laboratoire des Systèmes Propulsion Induction Electromagnétiques LSPIE-Batna'2000.

Né le: 03/10/1980 à BATNA

Situation familiale : Marié ,2 enfants.

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I. FORMATION ET DIPLOMES

- **3^{eme} Post graduation : Habilitation universitaire**, Univ. BATNA 2, **Octobre 2021.**
- **2^{eme} Post graduation :** Doctorat en sciences en Electrotechnique, Univ. BATNA 2, **Octobre 2018.**
- **1^{er} Post graduation :** Magister en Electrotechnique, Univ. BATNA, **Juillet 2008.**
- **Graduation :** Ingénieur d'état en Electrotechnique, Univ. BATNA, **Juillet 2004.**

EXPERIENCE PROFESSIONNELLE :

- **2006/2012** Enseignant vacataire, Tronc Commun LMD (Science et technique), université de Batna
- **2013/14, Maître assistant**, département science et technique, Université de Khenchela.
- **2013/18, Chargé de cours**, département de génie industriel, Université de Khenchela.
- **18 Octobre 2018, Maître de conférences**, département de génie industriel, **Université d'Abbès Laghrour Khenchela.**

II. EXPERIENCE PROFESSIONNELLE HORS UNIVERSITE :

2008/2012 Enseignant permanent a l'institut d'enseignement professionnel IEP Batna : Degré 2 Spécialité « Electrotechnique ».

III. ACTIVITES SCIENTIFIQUES :

- ✚ Membre de laboratoire LSPIE «Laboratoire de Systèmes d'Induction et Propulsion Electromagnétique », sous la direction du Dr. Makouf Abdeslam, Université de Batna 2000.
- ✚ Membre du projet de recherche PNR : " Etude d'une éolienne de moyenne puissance à base d'une machine synchrone à aimants permanents en vue d'une alimentation en énergie électrique de la déchetterie de Biskra.
- ✚ Membre dans le projet de Recherche intitulé «Contribution à l'amélioration des performances des systèmes hybrides». Projet CNEPRU Université de Batna 2014, Chef de projet: Pr. Abdessemed Rachid **code : A01L07UN050120140015.**
- ✚ Membre du Comité d'organisation de la conférence : *5rd Conference on Electrical Engineering CEE'08, 27-29 October 2008, BATNA 2008.*
- ✚ Membre du Comité d'organisation de la conférence : *6th international Conference on systems and control , ICSC'17, 7-9 Mai 2017, BATNA.*
- ✚ Chef du projet PRFU dans le projet de Recherche intitulé «Contribution au contrôle et à la gestion optimale en temps réel d'un système de pompage photovoltaïque pour le développement durable des zones arides». Projet a l'Université de Khenchela 2021/2022, Code N°**A01L07UN400120220001.**
- ✚ Co-Chairman de la première conférence internationale sur le génie électrique et les technologies avancées ICEEAT'23, tenue à l'Université de Batna 2, Algérie (November 5-7th, 2023, Batna, Algeria, First International Conference on Electrical Engineering and Advanced Technologies, ICEEAT23).

IV. COMMUNICATION & PUBLICATIONS

A. Conférences :

1. **T. Boutabba**, A. Makouf and S. Drid ” Implementation of Digitized Vector Control of Induction Machine drive with DSpace 1103” : **2008**, the 5th International Conference on Electrical Engineering, CEE’08, Oct., Batna, Algeria,
2. **Tarek BOUTABBA**, Said DRID and Abdessalam MAKOUF, “Robust Discrete-Time Field-Oriented Control of a Permanent Magnet Synchronous Machine Fed by a Three-Level Inverter,” **5-7 December 2009**, Proceedings of the 3rd International conference of Electrical Engineering ICEE2009, Boumerdes, Alger .
3. **T. BOUTABBA**, S. DRID and A. MAAKOUF, “Robust Controller Design for Speed Control of an Indirect Field Oriented Control “IFOC” Induction Machine Drive with Implementation in Software Dspace 1103,” **May, 9-10-2010**, Proceedings of the International Conference On Industrial Engineering and Manufacturing ICIEM’10, , Batna, Algeria
4. **T. Boutabba**, S. Drid and S. Ameziane, “ EKF Based on Sensorless Discrete Time Field Oriented Control “DTFOC” of PMSM Drive Fed by Three Level Inverter,” **25, 26 & 27 mai 2010**, 2èmes Journées d’Electrotechnique, de Maintenance, et de Compatibilité Electromagnétique, , JIEMCEM’10, ENSET d’Oran.
5. Sadek AMEZIANE, Said DRID, **Tarek BOUTABBA**, “IMPLANTATION EXPERIMENTALE D’UN M.P.P.T POUR UN SYSTEME DE GENERATION EOLIENNE A AXE HORIZONTAL,” **11 & 12 avril 2010**, la 1er Séminaire Méditerranéen sur L’Energie Eolienne, SMEE’2010, Tipaza, Algérie.
6. S, AMEZIANE N, Nait said S, Drid **T, Boutabba**, “Implantation experiential d’un MPPT pour un système de generation Photovoltaïque ” **11 -13 October 2010**, the 6th International Conference on Electrical Engineering
7. **T. BOUTABBA**, S. DRID and A. MAAKOUF, “Implementation of RST controller for Speed Control of an Indirect Field Oriented Control “IFOC” Induction Machine Drive using Dspace 1103 Software” **May, 7-9,2012**, ICEE’12 – the 4th INTERNATIONAL CONFERENCE ON ELECTRICAL ENGINEERING, Algeria .
8. T. Boutabba, **H. Benbouzid and S. Drid** ” Discrete-time Power Control of a Variable Speed Wind Turbine Driving an DFIG fed by a three levels inverter ” : Oct 2012 the 7th International Conference on Electrical Engineering, **CEE’12, Batna, Algeria**,
9. **Boutabba Tarek**, Drid said and M.E.H. Benbouzid, “Maximum Power Point Tracking Control for Photovoltaic System Using Adaptive Neuro- Fuzzy “ANFIS”” **2013 Ecological Vehicles and Renewable Energies (EVER)**, 8th International Conference and Exhibition on Ecological Vehicles and Renewable Energies (EVER), Monaco and IEEE.
10. **Boutabba Tarek**, Drid said and M.E.H. Benbouzid, “A Multi-output Boost Converter (MOB) controlled by Fuzzy Logic Technique supplied by a Photovoltaic System with Grid-Connected and fed by three level inverter” **November, 10-11, 2014**, International Conference on Electro-Energy ICEE’14, Skikda, Algeria.
11. **Tarek Boutabba**, Said Drid and M.H. Benbouzid, “A Hybrid Power Generations System (Wind Turbine/Photovoltaic) to Driving a DFIG fed by a Three inverter” **STA’2014**, the 15th international Conference on Sciences and Techniques of Automatic control & computer engineering, Hammamat Tunisia.
12. **T. Boutabba**, S. Drid, L. Chrifi-Alaoui, M. Ouriagli and M.E.H. Benbouzid, « dSPACE real-time implementation of maximum power point tracking based on ripple correlation control (RCC) structure for photovoltaic system” **2016 IEEE ICSC At: Marrakesh (Morocco) Volume: pp. 371–376**.
13. **Tarek boutabba**, Said DRID, Larbi CHRIFI-ALAOUI, Driss Mehdi, Mohamed Benbouzid, Abdelaali Alibi, mohammed ouriagli, «dSPACE Real-Time Implementation of Sliding Mode Maximum Power Point Tracker for Photovoltaic System” 7th International Conference on Systems and Control ICSC 2018, València, **Spain during October 24-26, 2018**.
14. **BOUTABBA Tarek**, DRID Said, CHRIFI-ALAOUI Larbi, Ouriagli Mohammed, “MPPT Technique for Standalone Hybrid PV-Wind system Using Fuzzy Controller with Power Management” 8th International Conference on Systems and Control **October 23-25, 2019, Marrakesh, Morocco**.
15. **Tarek BOUTABBA**, Hamza SAHRAOUI , mouhamed lamine BECHKA, Said DRID, Larbi Chrifi-Alaoui, “A comparative study of MPPT Techniques for Standalone Hybrid PV-Wind with Power Management”, Fourth

- International Conference on Electrical Engineering and Control Applications, ICEECA'2019, November, 19-21, 2019, **Constantine, Algeria.**
16. Fatima Menzri, **Tarek Boutabba**, Rachid CHENNI ,”Energy Management System Using a Fuzzy Logic Controller for Grid-Connected Hybrid Renewable Energy Sources”, International Pluridisciplinary PhD Meeting (IPPM'20) 1st Edition, **February 23-26, 2020, Echahid Hamma Lakhdar University - El-Oued, Algeria.**
 17. Menzri F, BECHKA M L, **Boutabba T**, Rachid CHENNI ,”Comparative study of an intelligent energy management of standulone hybrid generation power system” , IC-AIRES2020 4th International Conference on Artificial Intelligence in Renewable Energetic Systems, **Held on December 22-24,2020 in ESC-Koléa-Tipasa, Algeria.**
 18. **Boutabba T**, BECHKA M L, Menzri F, DRID S ,”Energy Saving Analysis of Municipal Pool fed from hybrid renewable energy in Batna Algeria”, IC-AIRES2020 4th International Conference on Artificial Intelligence in Renewable Energetic Systems, **Held on December 22-24,2020 in ESC-Koléa-Tipasa, Algeria.**
 19. KHEMIS Abd Rahmane, **Boutabba T**, DRID S ,”Discrete time Sensorless PMSM Control using an Extended Kalman tilter for Electric Vehicle Traction Systems Fed by Multi Level Inverte” , IC-AIRES2020 4th International Conference on Artificial Intelligence in Renewable Energetic Systems, **Held on December 22-24,2020 in ESC-Koléa-Tipasa, Algeria.**
 20. Dalila Khamari, Courouk Bouchareb, Idriss Benlaloui, Fouzia Benmessaoud, **Tarek Boutabba** and Larbi Chrifi-Alaoui, “A New Approach for Online Stator Fault Diagnosis in PMSM based on Robust Gain Scheduled H_{∞} LPV Current Observer”. **5th International Conference on Control, Automation and Diagnosis (ICCAD'21) being held at “ Polygone Scientifique ”, in Grenoble - France on November 3-5, 2021.**
 21. Idriss Benlaloui, Farouk Mechnane, Mebrouk Bensmaine, **Tarek Boutabba**, Dalila Khamari, Said Drid and Larbi Chrifi-Alaoui, “Linear Parameters Varying Torque Control for Singularly Perturbed Induction Motor.” **5th International Conference on Control, Automation and Diagnosis (ICCAD'21) being held at “ Polygone Scientifique ”, in Grenoble - France on November 3-5, 2021.**
 22. **Tarek Boutabba**, Amir Fatah, Hamza Sahraoui, Dalila Khamari, Idriss Benlaloui, Said Drid and Larbi Chrifi-Alaoui, “ dSPACE Real-Time Implementation of Maximum Power Point Tracking Based on Kalman Filter Structure using Photovoltaic System Emulator”. **5th International Conference on Control, Automation and Diagnosis (ICCAD'21) being held at “ Polygone Scientifique ”, in Grenoble - France on November 3-5, 2021.**
 23. Fouzia Benmessaoud, Mebrouk Bensmaine, Dalila Khamari, Idriss Benlaloui, **Tarek Boutabba** and Abdesslem Makou, “ H_{∞} Linear parameter varying Induction Motor Flux Observer Synthesis” **5th International Conference on Control, Automation and Diagnosis (ICCAD'21) being held at “ Polygone Scientifique ”, in Grenoble - France on November 3-5, 2021.**
 24. Mebrouk Bensmaine, Fouzia Benmessaoud, Amir Fatah, Dalila Khamari, Idriss Benlaloui and **Tarek Boutabba**, “Impacts Analysis of Decentralized Production on Distribution Electric Grid Protection” **5th International Conference on Control, Automation and Diagnosis (ICCAD'21) being held at “ Polygone Scientifique ”, in Grenoble - France on November 3-5, 2021.**
 25. Amir Fatah, Farouk Mechnane, Idriss Benlaloui, **Tarek Boutabba**, Dalila Khamari, Said Drid and Larbi Chrifi-Alaoui “A Modified Perturbe and Observe MPPT Technique for Standalone Hybrid PV-Wind with Power Management” **5th International Conference on Control, Automation and Diagnosis (ICCAD'21) being held at “ Polygone Scientifique ”, in Grenoble - France on November 3-5, 2021.**
 26. Farouk Mechnane, Said Drid, Hamza Sahraoui, Idriss Benlaloui, **Tarek Boutabba**, Nasreddine Nait Said and Larbi Chrifi-Alaoui, “Implementation of Super-twisting control with Photovoltaic System Emulator” **5th International Conference on Control, Automation and Diagnosis (ICCAD'21) being held at “ Polygone Scientifique ”, in Grenoble - France on November 3-5, 2021.**
 27. Amir Fatah; **Tarek Boutabba**; Idriss Benlaloui; Dalila Khamari; Said Drid,” THD Analysis of Maximum Power Point Tracking Based on Kalman Filter Structure using Photovoltaic System Emulator”, **5th International Conference on Power Electronics and their Applications (ICPEA) ,2022.**

28. Sabir Ouchen; Idriss Benlaloui; Dalila Khamari; **Tarek Boutabba**; Fouzia Benmessaoud; Achour Betka, "Comparative Study between DPC and PDPC Controls Applied on Shunt Active Power Filter", **5th International Conference on Power Electronics and their Applications (ICPEA) ,2022.**
29. Dalila Khamari; Idriss Benlaloui; **Tarek Boutabba**; Fouzia Benmessaoud, "Synthesis of Induction Motor Rotor Flux Observer based on linear parameter varying systems theory", **5th International Conference on Power Electronics and their Applications (ICPEA) ,2022.**
30. Fatima Menzri, **Boutabba Tarek**, Idriss Benlaloui, Dalila Khamari, "Optimization of Energy management using a particle swarm optimization for hybrid renewable energy sources", **2nd International Conference on Advanced Electrical Engineering (ICAEE), 2022.**
31. Fatah Amir, **Boutabba Tarek**, Said Drid, Dalila Khamari, " Modeling And Simulation of the Photovoltaic Pumping System with Optimum Operation", **2nd International Conference on Advanced Electrical Engineering (ICAEE), 2022.**
32. Dalila Khamari; Idriss Benlaloui; **Tarek Boutabba** , "Robust induction motor control using Polytopic Models" **,Fifth International Conference on Electrical Engineering And Control Applications, ICEECA'22.**
33. A. Khemis ,**T. Boutabba**, L. Laggoun, and B. Ghoulem , "A New approach of Sensorless Control Of Induction Motor Using Type-2 Fuzzy Logic Observer", **Fifth International Conference on Electrical Engineering And Control Applications, ICEECA'22.**
34. Nadir Benalia and Kouider Laroussi ; Idriss Benlaloui ; **Tarek Boutabba** "Optimization of Mutual Inductance in a Wireless Energy Transfer System for Electric Vehicles", **Graduate Students Research Conference" On 24th March 2022.**
35. Nadir Benalia ; Kouider Laroussi ; Idriss Benlaloui ; **Tarek Boutabba** ; Rachad Mounni ; Amor Fezzani, "Improving Efficiency and Reliability in Wireless Energy Transfer Systems via Electromagnetic Analysis", **November 14-15, 2023, Boumerdes, Algeria · The 1st National Conference on Green Energy (NCGE'2023).**
36. FAROUK MECHNANE; Mohamed Dhiaeddine Drid; Said Drid; **Tarek Boutabba**; Nait-Said Nasreddine; Larbi Chrifi-Alaoui, " A Comparative Analysis of Classic and Intelligent MPPT Techniques for a Photovoltaic System", **November 5-7th, 2023, Batna, Algeria, First International Conference on Electrical Engineering and Advanced Technologies, ICEEAT23.**
37. Lekmine Anfal; Amir Fatah; Fatima Menzri; **Tarek Boutabba**; Idriss Benlaloui; Dalila Khamari, " Investigation of a Photovoltaic Immersed Water Pumping System: Theoretical and Experimental Analysis", **November 5-7th, 2023, Batna, Algeria, First International Conference on Electrical Engineering and Advanced Technologies, ICEEAT23.**
38. A Fatima Menzri; Anfal Lekmine ; Amir Fatah ; **Tarek Boutabba**; Idriss Benlaloui; Dalila Khamari, " mprovement of energy management of standalone hybrid generation power system using Adaptive neuro fuzzy system", **November 5-7th, 2023, Batna, Algeria, First International Conference on Electrical Engineering and Advanced Technologies, ICEEAT23.**
39. Amir FATAH; Fatima Menzri; Anfal Lekmine; Idriss Benlaloui; **Tarek Boutabba**; Fezzani Amor; Dalila Khamari, "Control of Water Pumping System Based On Floating Photovoltaic System with a Solar Tracking Control", **November 5-7th, 2023, Batna, Algeria, First International Conference on Electrical Engineering and Advanced Technologies, ICEEAT23.**
40. Fatima Menzri, **Tarek Boutabba**, Mustafa.Ergin Şahin , "Optimal Energy Management System In A Grid-Connected Renewable Hybrid System With Direct Power Control", **October 13-16,2023, Trabzon, Turkey, 5th International Conference of Materials and Engineering Technology (TICMET'23).**
41. Loubna Belbedj , Anfal Lekmine , Idriss Benlaloui , Amor Fezzani, **Tarek Boutabba**, "MODELING AND SIMULATION OF ENERGY CONVERSION FOR RENEWABLE ENERGY SOURCES " , **February 13, 14 , 2024, 2nd NATIONAL CONFERENCE ON MATERIALS, ENERGY& ENVIRONMENT (NCMEE'24), BISKRA - ALGERIA.**

B. Publications

1. **T. Boutabba**, S. Drid , L. Chrifi-Alaouic , M. E. Benbouzid, "A New Implementation of Maximum Power Point Tracking based on Fuzzy Logic Algorithm for Solar Photovoltaic System", **IJE TRANSACTIONS A: Basics Vol. 31, No. 4, (April 2018) 184-191 .**
2. **Tarek BOUTABBA**, Said DRID, Larbi CHRIFI-ALAOUI, «Experimental Control of Photovoltaic System Using Neuro- Kalman filter MPPT Technique», **Int. J. Emerg. Electr. Power Syst. IJEPS 2020**, <http://doi.org/10.1515/ijeeps-2019-0210>.
3. Farid Boumaraf, **Tarek Boutabba**, Sebti Belkacem, "Dual direct torque control of doubly fed induction machine using second order sliding mode control ", **JOURNAL OF MEASUREMENTS IN ENGINEERING, DOI <https://doi.org/10.21595/jme.2021.21432> .**
4. Boumaraf farid, **Boutabba Tarek**, Belkacem Sebti, "Fuzzy super twisting algorithm dual direct torque control of doubly fed induction machine" **International Journal of Electrical and Computer Engineering (IJECE) Vol. 11, No. 5, October 2021, pp. 3782-3790 ISSN: 2088-8708, <http://doi.org/10.11591/ijece.v11i5.pp3782-3790>.**
5. Abderrahmane Khemis, **Boutabba Tarek**, Said Drid "Model reference adaptive system speed estimator based on type-1 and type-2 fuzzy logic sensorless control of electrical vehicle with electrical differential" ,*Electrical Engineering & Electromechanics journal* , 2023(4):19-25. <https://doi.org/10.20998/2074-272X.2023.4.03>