# Curriculum Vitae


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|---|---|
| ***Family name*** | **Kouzou** |
| ***First Name*** | ***Abdallah*** |
| ***Date of Birth*** | ***03/06/1964*** |
| ***Place of Birth*** | ***Dar Chioukh, Djelfa, Algeria*** |
| ***Actual occupation*** | ***Full professo rat University of Djelfa*** |
| ***Marital situation*** | ***Married (7 children)*** |
| ***Nationality*** | ***Algerian*** |
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| ***Tel*** | ***(+213) 6 66 08 53 40 / 5 57 83 35 78*** |
| ***Employment*** | ***Electrotechnical Department*** |
| ***Address*** | ***Faculty of Sciences and Technology, Ziane Achour University of Djelfa***<br>***P.O.Box 3117, Route Moudjbara, Djelfa, Algeria*** |
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Research ID: K-3021-2016 (http://www.researcherid.com/rid/K-3021-2016)

SciProfiles: 1606887
Researchgate:
https://www.researchgate.net/profile/Kouzou_Abdellah2?ev=hdr_xprf&_sg=WR4su6MdeMHaq_J667PrT6bJoTFrPUyvtHcre4cRxBtXwnCo0ReeXzx-xQBeqjKm
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## Employment Experience and Positions

- **Current:** Full Professor
- **2013-2017:** Associate Professor (Maitre de conférence "A")
- **2012-2013:** Associate Professor (Maitre de conférence "B")
- **2008-2012:** Lecturer, Assistant Professor. University of Djelfa (Maitre Assistant "A")
- **2005 - 2008:** Lecturer, Assistant Professor. University of Djelfa (Chargé de Cours)
- **2004 - 2005:** Assistant Professor. University Centre of Djelfa
- **1994 - 2004:** Assistant. University Centre of Djelfa
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- **1997-1999:** Head of Technology Department, University Center of Djelfa.
- **1999-2010:** Head of Electrical Department.
- **2015-2017:** The Dean of the Faculty of Sciences and Technology, University of Djelfa.

## Scientific Positions

1. Member of the CSP ( Commission Sectroriel Permanent) since **2022**
2. **2008-2010** Member of scientific council of the Science and technology faculty, University of Djelfa.
3. **2015-2017**: President of the Scientific Consul of the Faculty of sciences and Technology, Djelfa University, Algeria with the period of (**2015-2017**)
4. **1997-1999**: Member of scientific council of the National Institute of Electronics.
5. **1999-2008**: Member of scientific council of the Technology Institute, University Center of Djelfa.
6. **2021 - up to date:** The head of the research group on Diagnostics of PV power plants and Power quality at the Excellence research laboratory of Applied Automation and Industrial Diagnosis.
7. **2013 - up to date:** The head of the research group on Power Electronics and Power Quality at the research laboratory of Applied Automation and Industrial Diagnosis.

## Supervising of Graduation Students

1. From 1994 to 1998: **20** students supervised (superior technicians).
2. From 1997 to 2010: **30** Engineer students supervised. Especially in power electronics and machines control.
3. From 2012 to 2024: **30** Master student supervised
4. From 2012 to 2023: **26 PhD** thesis supervised and defended
5. Currently supervising: **2 PhD** students abroad.

## Visiting Professor and International Collaborator researcher

1. Chair of the Africa Working Group on Decarbonisation of Transport in Africa, launched by IAP/NASAC **2022-2024.**
2. Chair of the Sub-Committee on FACTS and HVDC of the Power Electronics Technical Committee in IES/IEEE.
3. External Examiner for Doctorate School at Gdansk Technical University in Poland on **2021-2023**.
4. Adjunct professor with Nisantasi University in Turkey **2021-2023**.
5. External experts in projects at Hail University, Kingdom of Saudi Arabia **2021.**
6. Permanent PHD external Examiner and member of Dissertation Jury at Gdansk Technical University in Poland
7. Giving ESP lectures to Phd and Master Students at Gdansk Technical University in Poland on **2019-2023.**
8. Visiting professor to Gdansk Technical University in Poland on **2019-2023**.
9. Collaborator researcher with Texas A&M University,at Doha, Qatar on **2012-2023.**
10. Collaborator researcher with Technical University in Germany, on **2010-2023.**
11. Collaborator researcher with Technical University of Sofia/ Plovdiv Branch in Bulgaria, on **2016-2019**.
12. Member of the Smart Grid Center, Texas A&M University, Doha, Qatar.
13. A Researcher at TUM (the technique University of Munich) **from Sept 2010 to March 2012**.

## Participation in International Dissertations PhD and Master

1. Participation as external examiner in (01) PhD dissertation at Technical University Of Munich, Germany.
2. Participation as external examiner in (01) PhD dissertation at Gdansk Technical University. Poland
3. Participation as external examiner in (01) PhD thesis at Melbourne University, Australia.
4. Participation as external examiner in (01) PhD thesis at Alighar Muslim University, India.
5. Participation as external examiner in (01) PhD thesis at Johannesburg University, South Africa.
6. Participation as invited in (01) PhD dissertation at Sfax National School of Engineering (ENIS), Tunisia.
7. Participation as external examiner in (01) Master dissertation at Qatar University, Qatar.

## Research Projects National and International

1- **Head of a research projet PNR** (2021-2024) (Agreed in Janaury 2021),
2- **Head of a research projet PRFU** (2011-2024) (Agreed in Janaury 2001),
3- **Head of a research projet PRFU** (2017-2021) (Agreed in Janaury 2017)
4- **Head of a research projet CNEPRU** (2015-5018) (Agreed on January 2015
5- **Head of a research projet CNEPRU** ( 2014-2017) (Agreed on 2014 and achieved on December 2017)
6- **Membre of ERASMUS+** Project (**COFFEE**: October 2015 to 15th Octobre 2018. Objective
7- **Member of ERASMUS+ Project** (**MODCLIM)** Programme of the European Union (EU), (2015 )
8- **Member of research project funded by** (**NPRP, Qatar**) from 2012 to 2015**.**
9- **Member of research project funded by** (**NPRP, Qatar**) from 2013 to 2018**.**
10- **Member of research project funded by** (**NPRP, Qatar**) from 2015 to 2018**.**
11- **Memebr of a research projet CNEPRU** by (**NPRP, Qatar**) from 2010 to 2013**.**

## Experts Activities

1. National Contact Points (NCP) at Horizon European Program **2022-2027**
2. Expert for the evaluation of the Doctorate program project (formation doctorale D-LMD) with Regional Conference of the Center Universities (CRUC) **2015**

3. Expert for the evaluation of the Doctorate program project (formation doctorale D-LMD) with Regional Conference of the Center Universities (CRUC) **2016**
4. Expert for the evaluation of the Socio-economics projects at DGRSDT.
5. Expert for the evaluation of the Socio-economics projects at ATRST.
6. Expert for the evaluation of the Research Laboratories at ATRST.
7. Expert within the Committee for University Habilitation **2021**.

## Publications (Only during the last four years 2022-2024)

[1]. Abdesattar Mazouzi, Nadji Hadroug, Walaa Alayed, Ahmed Hafaifa, Abdelhamid Iratni, ***Abdellah Kouzou***, Comprehensive optimization of fuzzy logic-based energy management system for fuel-cell hybrid electric vehicle using genetic algorithm, International Journal of Hydrogen Energy, Volume 81, **2024**.

[2]. Mohammedi, R.D.; Kouzou, A.; Mosbah, M.; Souli, A.; Rodriguez, J.; Abdelrahem, M. Allocation and Sizing of DSTATCOM with Renewable Energy Systems and Load Uncertainty Using Enhanced Gray Wolf Optimization. Appl. S*ci.* **2024**, *14*, 556.

[3]. Tamersit, K.; Kouzou, A.; Rodriguez, J.; Abdelrahem, M. Electrostatically Doped Junctionless Graphene Nanoribbon Tunnel Field-Effect Transistor for High-Performance Gas Sensing Applications: Leveraging Doping Gates for Multi-Gas Detection. Nanomaterial*s* **2024**.

[4]. Tamersit, K.; Kouzou, A.; Rodriguez, J.; Abdelrahem, M. Performance Projection of Vacuum Gate Dielectric Doping-Free Carbon Nanoribbon/Nanotube Field-Effect Transistors for Radiation-Immune Nanoelectronics. Nanomaterial*s* **2024**.

[5]. Amrani, Z.; Beladel, A.; Kouzou, A.; Rodriguez, J.; Abdelrahem, M. Four-Wire Three-Level NPC Shunt Active Power Filter Using Model Predictive Control Based on the Grid-Tied PV System for Power Quality Enhancement. Energies **2024**.

[6]. Saci, A.; Nadour, M.; Cherroun, L.; Hafaifa, A.; Kouzou, A.; Rodriguez, J.; Abdelrahem, M. Condition Monitoring Using Digital Fault-Detection Approach for Pitch System in Wind Turbines. Energies **2024**.

[7]. Boutheyna Hadmer, Said Drid, Abdallah Kouzou, Larbi Chrifi-Alaoui "Voltage Sensorless Control of Five-Level Packed U-Cell Inverter Based on Lyapunov Approach for Grid-Connected Photovoltaic System". (**2024**). Revue Roumanine des Sciences Techniques-Série Electrotechnique et Energetique, 69(2), 135-140.

[8]. Benalia, N.; Laroussi, K.; Benlaloui, I.; Kouzou, A.; Bensalah, A.-D.; Kennel, R.; Abdelrahem, M. Optimized Power Pads for Charging Electric Vehicles Based on a New Rectangular Spiral Shape Design. Sustainability **2023**, 15, 1230.

[9]. Khadar, S.; Kaddouri, A.M.; Kouzou, A.; Hafaifa, A.; Kennel, R.; Abdelrahem, M. Experimental Validation of Different Control Techniques Applied to a Five-Phase Open-End Winding Induction Motor. Energies **2023**, 16, 5288.

[10]. Fezzani, A.; Guermoui, M.; Kouzou, A.; Hafaifa, A.; Zaghba, L.; Drid, S.; Rodriguez, J.; Abdelrahem, M. Performances Analysis of Three Grid-Tied Large-Scale Solar PV Plants in Varied Climatic Conditions: A Case Study in Algeria. Sustainability **2023**, *15*, 14282.

[11]. Boulanouar, S.A.; Kaddouri, A.M.; Kouzou, A.; Benaissa, A.; Teta, A.; Hafaifa, A.; Kennel, R.; Abdelrahem, M. Multifunctional Control Technique for Grid-Tied Hybrid Distributed Generation System Taking into Account Power Quality Issues. Energies **2023**, 16, 6565.

[12]. Sellali, M.; Ravey, A.; Betka, A.; Kouzou, A.; Benbouzid, M.; Djerdir, A.; Kennel, R.; Abdelrahem, M. Multi-Objective Optimization-Based Health-Conscious Predictive Energy Management Strategy for Fuel Cell Hybrid Electric Vehicles. Energies **2022**, 15, 1318.

[13]. Fezzani, A.; Hadj-Mahammed, I.; Kouzou, A.; Zaghba, L.; Drid, S.; Khennane, M.; Kennel, R.; Abdelrahem, M. Energy Efficiency of Multi-Technology PV Modules under Real Outdoor Conditions—An Experimental Assessment in Ghardaïa, Algeria. Sustainability **2022**, 14, 1771.

[14]. Tamersit, K.; ***Kouzou, A***.; Bourouba, H.; Kennel, R.; Abdelrahem, M. Synergy of Electrostatic and Chemical Doping to Improve the Performance of Junctionless Carbon Nanotube Tunneling Field-Effect Transistors: Ultrascaling, Energy-Efficiency, and High Switching Performance. Nanomaterials **2022**, 12, 462.

[15]. Bensalem, Y., Abbassi, A., Abbassi, R., Houssem Jerbi, Mansoor Alturki, Abdullah Albaker, ***Abdallah Kouzou***, M. N. Abdelkrim et al. Speed tracking control design of a five-phase PMSM-based electric vehicle: a backstepping active fault-tolerant approach. Electr Eng (**2022**).

[16]. Wlas, M.; Galla, S.; ***Kouzou, A***.; Kolodziejek, P. Analysis of an Energy Management System of a Small Plant Connected to the Rural Power System. Energies **2022**, 15, 719.

[17]. Bensalem Y.,***Kouzou A***.; Abbassi R., Jerbi H., Kennel R., Abdelrahem M. "Sliding-Mode-Based Current and Speed Sensors Fault Diagnosis for Five-Phase PMSM." Energies **2022**, 15, 71.

[18]. Schofield, D.; Mohapatra, D.; Chamorro, H.R.; Roldan-Fernandez, J.M.; Abdellah, K.; Gonzalez-Longatt, F. Design and Implementation of Low-Cost Phasor Measurement Unit: PhasorsCatcher. Energies **2022**.

[19]. Tamersit, K.; Madan, J.; Kouzou, A.; Pandey, R.; Kennel, R.; Abdelrahem, M. Role of Junctionless Mode in Improving the Photosensitivity of Sub-10 nm Carbon Nanotube/Nanoribbon Field-Effect Phototransistors: Quantum Simulation, Performance Assessment, and Comparison. Nanomaterial*s* **2022**, *12*, 1639.

[20]. Belboul, Z.; Toual, B.; Kouzou, A.; Mokrani, L.; Bensalem, A.; Kennel, R.; Abdelrahem, M. Multiobjective Optimization of a Hybrid PV/Wind/Battery/Diesel Generator System Integrated in Microgrid: A Case Study in Djelfa, Algeria. *Energies* **2022**, *15*, 3579.

## Book Chapters

[1]. Muhammad H. Rashid, Abdallah Kouzou, Chapter 15 - Power Factor Correction Circuits, Editor(s): Muhammad H. Rashid, Power Electronics Handbook (Fifth Edition), Butterworth-Heinemann, **2024**.

[2]. Cherroun, L., Nadour, M., Kouzou, A., Boumehraz, M. Type-1 and Type-2 Fuzzy Techniques: Application to Robotic Systems. In: Derbel, N., Nouri, A.S., Zhu, Q. (eds) Advances in Robust Control and Applications. Studies in Systems, Decision and Control, vol 474. Springer, Singapore. **2023**

[3]. B. Nail , ***A. Kouzou***, A. Hafaifa, Fault Detection and Localization of Centrifugal Gas Compressor System Using Fuzzy Logic and Hybrid Kernel-SVM Methods," Diagnosis, Fault Detection & Tolerant Control, Chapter: 07, Publisher: Springer, Singapore, 2020

[4]. Teta Ali, ***A. Kouzou***, M.M Rezaoui, A. Djalab, "Fuzzy Logic Based MPPT for Grid-Connected PV System with Z-Source Inverter: Artificial Intelligence in Renewable Energetic Systems," Chapter in book Renewable

[5]. B. Nail , ***A. Kouzou***, A. Hafaifa, "Digital Stabilizing and Control for Two-Wheeled Robot," Chapter 11 in book New Developments and Advances in Robot Control. DOI: 10.1007/978-981-13-2212-9_11, January, **2019**.

[6]. L. Cherroun, M. Boumehras, ***A. Kouzou***, "Mobile Robot Path Planning Based on Optimized Fuzzy Logic Controllers," Chapter 12 in book New Developments and Advances in Robot Control., January, **2019**.

[7]. Saadat Boulanouar, Ahmed Hafaifa and ***Abdallah Kouzou***, " Gas Turbine Supervision Based on Vibration Analysis and Measurement: Gas Compression Station," Advances in Technical Diagnostics, Applied Condition Monitoring, **2018**.

[8]. Hadroug Nadji, Ahmed Hafaifa and ***Abdallah Kouzou***, " Improvement of Gas Turbine Availability Using Reliability Modeling Based on Fuzzy System," Advances in Technical Diagnostics, Applied Condition Monitoring, **2018.**

[9]. ***A. Kouzou***, "Power Factor Correction Circuits," Power Electronics Handbook, 4th Edition, Chaper 16. ISBN: Imprint**:** Butterworth-Heinemann, Published Date: 1st September **2017**

[10]. Benrabeh Djaidir, Ahmed Hafaifa and ***Abdallah Kouzou,*** "Vibration Detectionin Gas Turbine Rotor Using Artificial Neural Network Combined with Continuous Wavelet," Advances in Acoustics and Vibration, Applied Condition Monitoring, Springer International Publishing Switzerland **2017**, pp:101-113.

[11]. ***A. Kouzou***, Mahmoudi M:O, Boucherit M.S, "The Space Vector Modulation PWM Control Methods Applied on Four Leg Inverters," Chapter 12, Electric Machines and Drives, InTech, Edition February **2011**.

## Plenaries presented:National and International Conferences

[1]. 1st International Conference on Electrical-Electronics and Computer Engineering (ICEECE **2021**), July 24-25, Avrasya University, **Trabzon, Turkey**.

[2]. 1st Algerian Symposium on Renewable Energy and Materials December 16-17, **2020** , **Médéa – ALGERIA** ( ASREM 2020 )

[3]. 1st International Conference on Smart grid organized by the department Electrical Engineering at « Ecole Nationale Polytechnique d'Oran (ENPO) –Maurice Audin" in collaboration with IUT Montreuil (Université Paris 8-France) and the SCAMFRE and LAAS laboratories of ENPO, 16-17 March **2019**. **Oran, Algeria**

[4]. the International Conference on Applied Smart Systems Medea University, **Medea, ALGERIA** (ICASS'2018) 24-25 November **2018**.

[5]. the AUS Faculty Workshop on Renewable Energy, Education and Research FW-REER'18 November 7-8, **2018, Sharjah, UAE**

[6]. the Sixth Inational Scientific Conference on Engineering , Technology and Systems, TECHSYS **2017**, Technical University of Sofia, Plovdiv Branch, 18-20 May 2017, **Plovdiv, Bulgaria**.

[7]. the International Conference on Advances and Innovations in Engineering (ICAIE), Firat University, Faculty of Engineering, **Elazığ, Turkey** May 10-12, **2017**

[8]. the 5th Colloque de Recherche Applique et de Transfert de Technologie (CRATT **2015**), 30-31 Octobre & 1 Novembre, **Hammamet, Tunisia.**

## Languages

- **Arabic:** Mother tongue
- **English:** Very Good level
- **French:** Very good level
- **German.** A1/A2 level.