

Curriculum vitae with a detailed presentation of my educational and scientific activities (Before and after university accreditation)

1. Personal and professional information

Name : ABBOUDI
First name : ABDELAZIZ
Date of birth 01/12/1962
Place of birth : Khenchela (Algeria)
Family situation : Married with three children
Tel : 06 64582952



Home address Housing estate 344, rue Med Redjil, Khenchela, Algeria
Business address : Department of Mechanical Engineering – Faculty of Sciences and Technology –Khenchela University
Grade : Lecturer A
Email addresses: aboudist@univ-khenchela.dz
 aboudiabelaziz23@gmail.com

2. University training

2.1 Diplomas (Graduation)	Year	Establishment
Baccalaureate Option : Science	1981	Chihani Bachir High School, Khenchela, Algeria
Engineering: Mechanical Engineering Option :: Mechanical construction	1989	El Hadj Lakhdar University, Batna, Algeria
2.2 Diplomas (Post-graduation)	Year	Establishment
Magister: Materials sciences Option : Fracture mechanics.	2009	Abbes Laghrour Khenchela University, Algeria
Doctorate: Mechanical Engineering Option : Materials sciences.	2017	University of Batna 2
University Accreditation: to direct research in mechanical engineering Option : Materials sciences	2019	University of Batna 2

▪ **Title of the Engineering dissertation:**Study of machine rigidity

- **Title of Magister’s dissertation:**Characterization of the destructive and non-destructive effects of steel tubes welded by high frequency induction
- **Title of the doctoral thesis:**Study of the mechanical and structural properties of the deposits of thin layers of molybdenum nitrides under the effect of zirconium by the PVD method

3. Professional experience

3.1 Function	Period	Establishment
Secondary education teacher	1989	Salah Djbaili khenchela high school
	At 2009	Khalef Bachir High School Khenchela
Teacher at university	2009	Abbes Laghrour Khenchela University

Teacher researcher, Lecturer (A)	06/13/2019 Nowadays	Department of Mechanical Engineering, University of Khenchela, Algeria
3.2 Responsibilities Educational/Administrative	Year	Establishment
Head of materials engineering specialty Member of the training team	2010	Abbes Laghrour Khenchela University, Algeria
Head of mechanical engineering department	2013 - 2019	Abbes Laghrour Khenchela University, Algeria
Chairman of the department's disciplinary council. Member of the faculty's scientific council. President of the Faculty Disciplinary Council.	2013 - 2024	Abbes Laghrour Khenchela University, Algeria
President of the Housing Commission (2021)	2021	Abbes Laghrour Khenchela University, Algeria
Dean of the Faculty of Science and Technology since	2019 Nowadays	Abbes Laghrour Khenchela University, Algeria

3.3 Supervision and research activities	Year	Establishment
End of study dissertations (LMD degree in mechanical engineering).		
End of study dissertations (Academic and professional Masters in mechanical engineering).	2019 Nowadays	Abbes Laghror Khenchela University, Algeria
Doctoral supervision of two doctoral students in science.		
PhD supported Moussaoui abderrahmane	05/12/2023	Abbes Laghrou Khenchela University, Algeria
Laboratory member: ISMA	since 2013	Advanced Materials Engineering and Structures Laboratory, University of Khenchela, Algeria
PRFU project: A11N01UN400120190002 A11N01UN400120230001	2019 2023	Abbes Laghrou Khenchela University, Algeria
3.4 Scientific Work	Year	Establishment
Publications of scientific articles in indexed and impacted journals.		
Participant in national and international seminars.		
Member of seminar organizing committees.	2019 Nowadays	Abbes Laghror Khenchela University, Algeria
International conference president ICMSE'21-Khenchela		
Head of research group that designed and developed an artificial oxygen respirator		

Responsible for the training offer for the professional master's degree specialized in manufacturing

Doctoral thesis in sciences – materials sciences	2019	Abbes Laghror Khenchela University, Algeria
LMD course materials (license + Master)	Nowadays	

Several courses on the Moodle platform

3.5.1 Work	Year	Establishment
Practical notions on corrosion European University Editions 2021 Number of pages: 100		
<hr/>		
3.5.2 Handout (Course handouts validated by scientific authorities and posted online)	Year	Establishment
Metal Technology 3rd Degree in Materials Engineering Number of pages: 75	2020	Abbes Laghrour Khenchela University, Algeria
Degradation of materials by effect Corrosion 3rd Degree in Materials Engineering Number of pages: 67	2022	Abbes Laghrour Khenchela University, Algeria
Deterioration of materials 3rd Degree in Materials Engineering Number of pages: 110	2019	Abbes Laghrour University Khenchela Algeria

4.1 Leadership of teaching teams certified by the head of department:

Activity	Period	Establishment
Seminar, Workshop, Educational Responsibility, CP Presidency	2019	Abbes Laghror Khenchela University, Algeria
Responsible: Dean of the Faculty	Nowadays	

4.2 Supervision of master's or engineering thesis or equivalent

5. Research projects

Research project	Period	Establishment
PRFU; Study of the structural, mechanical and tribological behavior of thin layers (MoN, ZrN, VN, MoVN,	2019	A11N01UN400120190002

MoZrN) deposited on XC100 substrate by magnetron cathode sputtering

PRFU;

A11N01UN400120230001

Modeling the thermomechanical behavior of thin layers using the finite element method 2023

6. IT tools and languages

6.1 IT tools

Solidworks-abaqus-Autocad-Excel-word-power point-...

6.2 Languages

Arabic, French and English.

7. International publications, international and national communications

7.1 International publications before university accreditation

Article title	The newspaper	Publication date
Mechanical and Structural Studies of Ternary Mo–Zr–N Layers Deposited on Substrate by PVD	Metallofizika I new technology	06/2017
Characterization of the Microstructural and Mechanical Properties of MoZrN Coating	Journal of nano and physics electronics	01/2017
Characterization of Mo–V–N Coatings Deposited on XC100 Substrate by Sputtering Cathodic Magnetron	Metallofizika I new technology	2017
Simulation of the Flattening of High Frequency Induction Welded Tubes	Mechanics and Mechanical Engineering	06/2018
Effect of Heat Treatments on the Mechanical Properties of a Form Tool	Journal of nano and physics electronics	2018
Characterization of precipitates in the 18-1-1-5 high speed steel during tempering after previous quenching	Journal of nano and physics electronics	2018

7.2 International publications after university accreditation

Article title	The newspaper	Address and date of publication
Observer-based fault-tolerant predictive control for LPV systems with fault sensors: An active car suspension application	Applied sciences	2022 https://doi.org/10.3390/app12020684
A Spider Monkey Optimization Based on Beta-Hill Climbing Optimizer for Unmanned Combat Aerial Vehicle (UCAV)	Applied sciences	<i>Appl. Sci.</i> , 2023, 13(5), 3273 https://doi.org/10.3390/app13053273
Observer-Based Robust Fault Predictive Control for Wind Turbine Time-Delay Systems with Sensor and Actuator Faults	Energies	Energies 2023, 16 (2), 858 https://doi.org/10.3390/en16020858
Effect of fluoric acid concentration on the structural, optical, and photocatalytic properties of TiO ₂ thin films	Inorganic Chemistry Communications	2023 https://doi.org/10.1016/j.inoche.2023.111073
A Robust Fault-Tolerant Predictive Control for Discrete-Time Linear Systems Subject to Sensor and Actuator Faults	sensors	<i>Sensors</i> 2021, 21(7), 2307 https://doi.org/10.3390/s21072307
Effect of Mo addition on the mechanical and tribological properties of magnetron sputtered TiN films	Surface and Coatings Technology	2023 https://doi.org/10.1016/j.surfcoat.2023.129862
Effect of film thickness on the structural and tribo-mechanical properties of reactive sputtered molybdenum nitride thin films	Metallurgical and materials Engineering	2022 DOI: https://doi.org/10.30544/823 Flight. 28 No. 3
New Fractional Wavelet with Compact Support and Its Application to Signal Denoising	JOURNAL OF NANO-AND ELECTRONIC PHYSICS	2023 DOI: 10.21272/jnep.15(2).02023 Flight. 15 No 2, 02023(5pp)

2022

Transient 3D Thermomechanical Simulation of the Frictional Contact of the Pin-on-Disc System JOURNAL OF NANO- AND ELECTRONIC PHYSICS DOI:[10.21272/jnep.14\(4\).04006](https://doi.org/10.21272/jnep.14(4).04006)

Flight. 14 No 4,
04006(5pp)

2022

Numerical Modeling of Thin-Film Growth by Random Deposition with Particle Evaporation JOURNAL OF NANO- AND ELECTRONIC PHYSICS DOI:[10.21272/jnep.14\(6\).06016](https://doi.org/10.21272/jnep.14(6).06016)

Flight. 14 No 6,
06016(6pp)

2022

Vickers Hardness Test of Steel Pipes Welded by High Frequency Induction JOURNAL OF NANO- AND ELECTRONIC PHYSICS DOI:[10.21272/jnep.14\(1\).01013](https://doi.org/10.21272/jnep.14(1).01013)

Flight. 14 No 1,
01013(4pp)

7.3 National and international communications before university accreditation

Title of the communication	Title of the scientific event / location	Year
Tribological simulation of the temperature distribution in a MoZrN coating	ICFMTUNISIA-HAMMAMET (international)	September 05-08,2017
Characterization of the mechanical and structural properties of MoVN coating deposited by magnetron RF sputtering	ICAME'2016 Türkiye-ISTANBUL (International)	May 10-13,2016
Tribological study of dynamic contact of a pin-disc coating in MoVN	AAT'16 Türkiye-ISTANBUL (international)	October 11-14,2016

Deposition of MoN produced by PVD on an XC100 substrate with variation of pressure-temperature quantities	CACPM3C-1'2015 ALGERIA-KHENCHELA	May 19-21,2015
Thermal and Tribological study of dynamic contact of a pin-disc coating in MoZrN	EMM-FM 2015 TUNISIA-HAMMAMET (International)	September 09-13,2015
Influence of polarization, pressure-temperature parameters on the MoN coating produced by PVD	CMEME 2015 ALGERIA-BISKRA	December 8-9,2015
Cfd modeling of turbulent air flow in three different diffusers used in a turbocharger compressor	ISMRE'2018	December 10-11-12,2018
Cfd modeling of thermophysical properties influence on the heat transfer in metal foam heat sinks	El-Oued (International)	December 19-21,2018
Modeling of a HS 18-0-1 type HSS shaped milling cutter	ISMRE'2018	October 22-24,2018
Numerical thermomechanical distribution of dynamic pin-disk friction	El-Oued (International)	October 23-24,2018
Numerical test of flattening compared to the experimental	ISMRE'2018	October 23-24,2018
Study of flattening	ICAME 2018 ISTANBUL	February 24-25-26,2019
Comsol software digital simulation of thermomechanical behavior during contact	TURKEY (International)	February 24-25-26,2019

Comsol software numerical simulation of heat and mass exchanges within a metal foam used as a heat sink

5th Franco-Maghrebi scientific days

October 22-24,2018

Numerical simulation of heat source's cooling by a metal foam block in forced convection environment

EL HAMMAMET
(International)

October 23-24,2018

Impact of the texture gradient effect on behavior Anisotropic of a sheet.

ISIEAM'2018 SKIKDA
(International)

October 23-24,2018

7.4 National and international communications after university accreditation

Title of the communication	Title of the scientific event / location	Address and Year
The influence of the mechanical stress on the flattening of the welded tubes 1	IMMAT'2019 MonastirTunisia	October 17-19, 2019
Heat treatment of a shaped cutter DOCID2908032	IMMAT'2019 MonastirTunisia	October 17-19, 2019
Mechanical and tribological behavior of nanocomposite titanium nitride coating 5	MEE'2020 El Oued Algeria	January 20-21, 2020
Characterization of the mechanical effects of flattening of welded tubes by IHF1	MEE'2020 El Oued Algeria	January 20-21,2020
Mechanical and tribological behaviors of nanocomposite titanium nitride coating 5	MEE'2020 El Oued Algeria	January 20-21, 2020
Robust Fuzzy Model Predictive Control with time delays for Nonlinear Systems3	ScienceDirect Available online at Computer Science 186 (2021) 109–119	2021 www.sciencedirect.com/Procedia
Characterization of the mechanical effects of flattening of welded tubes by IHF1	MEE'2020 El Oued Algeria	January 20-21, 2020

Impact of heat effects on the behavior of the head of the pawn disc on systemin MoZrN1	ICME'2021 The 6th international conference on mechanics and energy	2021
Signals denoising using fractional wavelets 2	V-ICMSE International video conference on Materials science and engineering Abbes Laghrour University -Khenchela	2021
New fractional wavelets with compact support 2	V-ICMSE Visio international conference on materials science and engineering Abbes Laghrour University -Khenchela	2021
Fault-tolerant predictive control with sensor faults 1	ICEECA'2022 The 5th international conference on electrical engineering and control applications	2022 https://iceeca.org/
Dynamic event –triggered estimation control of markovian switching systems applied to DC-DC converters 3	ICEECA'2022 The 5th international conference on electrical engineering and control applications	2022 https://iceeca.org/
A spider Monkey optimization based on local search-based heuristic method for unmanned combat aerial vehicle (UCAV) path planning 3	ICEECA'2022 The 5th international conference on electrical engineering and control applications	2022 https://iceeca.org/
Prediction of flow stresses of a microalloyed steel by neural approach 2	V-ICMSE Visio international conference on Materials science and engineering Abbes Laghrour University -Khenchela	2021
Electrochemical preparation and properties of Ni/SiC composite coatings 2	V-ICMSE Visio international conference on Materials science and engineering Abbes Laghrour University -Khenchela	2021
ANN approach to predict the flow stress of CMn(Nb-Ti-V)micro alloy steel based on compression tests 2	V-ICMSE Visio international conference on Materials science and engineering Abbes Laghrour University -Khenchela	2021
Prediction of flow stress by an Arrhenius-type model with a series of variable coefficients depending on the strain 2	V-ICMSE Visio international conference on Materials science and engineering Abbes Laghrour University -Khenchela	2021
Impact of geometric shape of cavity on heat exchange using hybrid nanofluid 2	V-ICMSE Visio international conference on Materials science and engineering Abbes Laghrour University -Khenchela	2021
Industrial simulation of flattening test 1	(SNGCTP) 1 1st national seminar on civil engineering and public works Abbes Laghrour University -Khenchela	2022

Corrosion behavior of composite coatings based on nickel and silicon carbide on steel 2	(SNGCTP) 1 1st national seminar on civil engineering and public works Abbes Laghrour University -Khenchela	2022
Hot ductility analysis of (C-Mn-S-Al-Nb-V-Ti) microalloyed steel 2	(SNGCTP) 1 1st national seminar on civil engineering and public works Abbes Laghrour University -Khenchela	2022
Importance of carbon in gibbsite and its transition aluminas 2	MSE'22 1st national conference on materials sciences and engineering Abbes Laghrour University -Khenchela	2022
Numerical simulation of the thermomechanical behavior of a thin layer	NCME'23 1st national conference on mechanical engineering Batna2	2023 https://conference.univ-batna2.dz/ncme23/home

Dr. Abdelaziz Abboudi