



Oualid Chahaoui

Teacher

PROFILE

 Cite 257 Khenchela

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LANGUAGES

Arab 
French 
English 

RESUME

Department of Mechanical Engineering

Abbes Laghrour Khenchela University.

Date and place of birth: 03/27/1974 in Khenchela

Married with 4 children

Personal address: BP 446 Poste Kahina Khenchela 40004- Algeria.

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Languages: Tamazight, Arabic, French, English

Training

- ✓ **2021 (December): Professor of mechanical engineering (CUN 46)**
- ✓ **2015 (February):**University habilitation diploma in Mechanics (Option: Metallurgy) from the University of Batna
- ✓ **2011 (February):**Doctor of Science degree in metallurgy from the University of Annaba, Material shaping option.
- ✓ **Mention :**Very honorable ;theme: "Mechanical modeling and experimental study of a ferritic sheet presenting textural heterogeneities (texture gradient and deviation from orthotropy)".
- ✓ **2003(July):** Master's degree in metallurgy and materials engineering from the University of Annaba, Specialty Metal treatment by deformation with honors; theme : "Modeling of Friction in shaping -case of rolling"
- ✓ **1998: State engineer**in metallurgy and materials engineering from the University of Annaba. Research subject: Formulation and identification of the law of behavior of C11B during cold rolling.
- ✓ **1992: Baccalaureate**in Natural Sciences.

Professional experience and administrative responsibilities

- ✓ **10/12/2003 to date:**Research professor atAbbots Laghrour University. Khenchela. Algeria
- ✓ **12/20/2012 to 10/03/2013:**Acting dean of the Faculty of Science and Technology at the university Abbots Laghrour. Khenchela. Algeria
- ✓ **01/20/2011 to 12/19/2012:**Director of the Institute of Science and Technology at Abbés University Laghrour. Khenchela. Algeria
- ✓ **04/07/2011 to 04/05/2012: President**of the university social works commission of the university from Khenchela. Algeria
- ✓ **01/02/2000 to 10/12/03:**Senior Quality Control Engineer-ISPAT ANNABA- Ex-complex steel industry.Algeria.

The research interests:

Area of computational plasticity, hardening models, material behaviour, yields criteria. More specifically, I am interested in metal computational plasticity for forming processes

Publications

➤ ***Thesis publication:***

Mechanical modeling and experimental study of a ferritic sheet presenting textural heterogeneities (texture gradient and deviation from orthotropy).

ISBN 10:3841622852

ISBN 13:9783841622853

Editor:FRENCH-SPEAKING ACADEMIC PRESSES

Year: 10/2018

<http://biblio.univ-annaba.dz/wp-content/uploads/2019/01/These-CHahaoui-Oualid.pdf>

➤ ***Publication of a work:***

Basic Concepts of Continuum Mechanics (CMM)

ISBN 10:6139570808

ISBN 13:978-613-9-57080-5

Editor:EditingEuropean University

Year: 04/2020

<https://www.morebooks.de/store/fr/book/concepts-de-base-sur-la-m%C3%A9canique-des-milieux-continus-%20%20%20mmc/isbn/978-613-9-57080-5>

Journal Publications

- 1 Boulahrouz Salim, Saoudi Abdenourb, **Chahaoui Oualid**, Hadi M. Marwani, Rokkaya Sami, NI Aljuraide, Raed H. Althomali, Mohammed M. Rahman, Meser M. Ali, MA El Bouz: 'Three-dimensional transient CFD modeling of multiple finned aluminum foam heat sinks in a horizontal channel' Alexandria Engineering Journal 78(2023)426–437.
- 2 B. Regaiguia, **O. Chahaoui**, A. Saoudi, S. Boulahrouz, ML Fares, 'An Evolutionary Anisotropic Behavior for DC04 Sheet Using Hill48 Function under Non-Associated Flow Rule Hypothesis' JOURNAL OF NANO- AND ELECTRONIC PHYSICS, Vol. 14 No. 5, 05009(5pp) (2022).
- 3 A. Saoudi, L. Aissani, S. Boulahrouz, L. Radjehi, **O. Chahaoui**, M. Mebarki, H. Djebaili " Influence of the Surface Diffusion Length on the Roughness of Thin Layers Obtained by Random Deposition " JOURNAL OF NANO - AND ELECTRONIC PHYSICS, Vol. 14 No. 5, 05021(5pp) (2022).
- 4 N. Sid, S. Boulahrouz, A. Saoudi, **O. Chahaoui**, K. Mansouri "Numerical Studies of Thermal Management of Multiple Electronic Devices Using Metal Foam Heat Sinks" JOURNAL OF NANO- AND ELECTRONIC PHYSICS, Vol. 14No 4, 04032(5pp) (2022).
- 5 **O. Chahaoui**,N. Matougui, S. Boulahrouz, MIE Haddar, K. Babouri,'An Associated and Nonassociated Flow Rule Comparison for AISI 439-430TI Forming: Modeling and Experimental Analysis' Latin American Journal of Solids and Structures, 2021, 18(7), e406.
- 6 Saoudi Abdenour, Aissani Linda, **Chahaoui Oualid**, Bestandji Ali, Louafi Mohammed Salah, Djebaili Hamid and Chinesta Francisco'Influence of the carburization time on the structural and mechanical properties of XC20 steel'Materials Research Express.8 (2021) 085604.
- 7 H, Soltani, **O. Chahaoui**, N, Matougui 'Experimental Study and Modeling of the Ferritic Steel Anisotropic Behavior under Associated and Non-Associated Flow Rule" Materials Science Forum. Science.net. ISSN: 1662-9752, Vol. 1016, pp. 1356-1360.(2021).

- 8 **O. Chahaoui**, H, Soltani, N, Matougui "Application of Associated and Non-Associated Flow Metal Plasticity for FSS sheet" Journal of Defect and Diffusion Forum. Science.net. ISSN: 1662-9507, Vol. 406, pp. 473-480. (2021).
- 9 B. Regaiguia, **O. Chahaoui**, S. Boulahrouz, N. Brinis, Mr L Fares "Constitutive modeling of an industrial rolled sheet for a DIN 1623 St14 (DC04) steel" Journal of: Solid State Phenomena, Flight. 297, pp. 31-50, (2019).
- 10 N. Brinis, B. Regaiguia, **O. Chahaoui**, N. Maatougui, M. L Fares "Modelling Mechanical Properties of AISI 439-430Ti Ferritic Stainless-Steel Sheet", Journal of Solid Mechanics Vol. 11, No. 2, pp. 425-439. DOI: 10.22034/JSM.2019.665911. (2019).
- 11 **O. CHAHAOUI**, Mr. L. FARES, D. PIOT, F MONTHEILLET, "Mechanical Modeling of the Macroscopic Behavior for Anisotropic and Heterogeneous Alloys". Metals and Materials International. Flight. 19, No. 5 (2013), pp. 1005~1019. doi:10.1007/s12540-013-5013-3.
- 12 ML Fares, M. Belaid, **O. Chahaoui**, H. Ghous and Y. Khelfaoui, "An Investigation on the Usefulness and Performance of New Hot Working Tool Steel by Nitrocarburizing Process". Journal of Surface Science and Nanotechnology 10 pp1-11, DOI:10.1380/ejsnt.2012.1,(2012).
- 13 **O. CHAHAOUI**, Mr. L. FARES, D. PIOT, F MONTHEILLET, "Monoclinic effects and orthotropic estimation for the behavior of rolled sheet". Journal of Materials Research. 46 pp1655-1667, DOI: 10.1007/s10853-010-4983-5,(2011).

International Communications

- 1 **O. Chahaoui**, S. Boulahrouz, M. Bouatrous "Effect of plastic anisotropy on the mechanical behavior of AISI 439/430Ti ferritic stainless steel" 1st International Conference on Physico_Chimistry, Material Sciences and Applied Mathematics ICPCMSAM'23) November 27-28, 2023. Sekikda. Algeria.
- 2 **O. Chahaoui**, S. Boulahrouz, M. Bouatrous, "Mechanical modeling of anisotropic and heterogeneous alloys". 1st International Conference on Physico_Chimistry, Material Sciences and Applied Mathematics ICPCMSAM'23) November 27-28, 2023. Sekikda. Algeria.
- 3 Babouri Kaoutar, Nedjoud Matougui, Oualid Chahaoui "Analysis and Numerical Simulation of macrostructural and microstructural Plastic Anisotropy Behavior of DIN 1623 St14 Steel Sheet under Associated Flow Rule Approach, before and after Recrystallization" 1st international Conference on Chemical matters and Environment Preservation IC-CMEP'22 March 09-10, 2022, Ouargla – Algeria,
- 4 Babouri Kaoutar, Nedjoud Matougui, Oualid Chahaoui " Analysis and Numerical Simulation of Microstructural Anisotropy Behavior of DIN 1623 St14 Steel Before and After Recrystallization " the 6th World Congress on Integrated Computational Materials Engineering (ICME 2022) held April 24 - 28, 2022 in Incline Village, NV, US
- 5 **O. Chahaoui**, S. Razgoun, N. Maatougui, N. Brinis, B. Regaiguia "Modeling and optimization of isotropic hardening laws". International Seminar in Industrial Engineering and Applied Mathematics (ISIEAM'2018) October 23-24, 2018. Sekikda. Algeria.
- 6 S. Chouarfia, O. Chahaoui "Modeling and optimization of the mechanical properties of sheets by three flow functions (Hill48, Yld2000-2d and Yld96)". The first Arab Conference on mechanical engineering. Biskra December 10th, 11 th 2017. Algeria.
- 7 B. Regaiguia, N. Brinis, O. Chahaoui, M. L Fares "Mechanical characterization of a sheet under different geometries" International conference on materials and their applications - Khenchela October 29-31, 2017. Algeria.

- 8 N. Brinis, B. Regaiguia, O. Chahaoui, M. L Fares" Prediction of the mechanical behavior of a ferritic stainless steel (FSS) sheet intended for stamping" International conference on materials and their applications - Khenchela October 29-31, 2017. Algeria.

- 9 M. L Fares, O. Chahaoui, N. Brinis, B. Regaiguia, " Influence of the sollicitation mode on the mechanical behavior of hot-rolled sheets" InternationalConference on Mathematics and Engineering 10-12 May, 2017, Istanbul, Turkey.

- 10 ML FARES, O. CHAHAOUI "MODELING THE MECHANICAL BEHAVIOR OF HETEROGENEOUS AND ANISOTROPIC METAL ALLOYS" 9th Mechanics Congress, FS Semlalia, MarrakechApril 21 – 24, 2009.

- 11 A. ALLAOUI,**O. CHAHAOUI**, ML FARES, "Mechanical modeling of homogeneous and anisotropic metallic alloys using the CMTP approach". The First International Conference on Metallurgy, ICM'2009, March 4-5, 2009, Biskra (Algeria).

- 12 **O. CHAHAOUI**, ML FARES, F. MONTHEILLET, "Mechanical characterization of heterogeneous and anisotropic metallic alloys".**V**Songres**I**nternational on the**M**etallurgy and**E**nvironment (CIME_07), April 21-23, 2007 Annaba (Algeria).

- 13 Mr. LABAIZ,**O. CHAHAOUI**, Mr. ZAAF Mohamed, Mechanics of metal cylinder shaping and friction during sheet metal rolling ("the 17th French congress of mechanics" September CFM2005 University of Technology of TROYES).