

# Prof. Dr. Belgacem MAMEN

N° 483 El-Nasr, 40002, Khenchela, Algeria

Civil Engineering Department, Abbes Laghrour University, 40000 Khenchela, Algeria

[belgacem.mamen@univ-khenchela.dz](mailto:belgacem.mamen@univ-khenchela.dz)

[mamen.belgacem@gmail.com](mailto:mamen.belgacem@gmail.com)



## HIGHER EDUCATION

02/2024	<b>PhD in Civil Engineering</b> – (Sidi Bel Abbes University, ALGERIA) Structures and Materials
07/2019	<b>Accreditation to supervise research</b> – (Annaba University, ALGERIA) Structures and Materials
12/2013	<b>PhD in Engineering Science</b> – (UFC Besançon, FRANCE) Numerical simulation in materials science and engineering
02/2010	<b>Magister in Civil Engineering</b> – (Batna 2 University, ALGERIA) Geotechnics
07/2009	<b>Research Master In Mechanics, Energetics and Engineering</b> – (Grenoble, FRANCE) Modelling and experimentation in solid mechanics
07/2006	<b>Civil Engineer</b> – (Batna 2 University, ALGERIA) Civil and Industrial Constructions ( <i>Top of the class</i> )

## ACADEMIC EXPERIENCE

02/2024 – to date	<b>Professor in Civil Engineering</b> – (Khenchela University, ALGERIA)
08/2019 – 01/2024	<b>Associate Professor (A)</b> – (Civil Engineering Department, Khenchela University, ALGERIA)
12/2016 – 07/2019	<b>Associate Professor (B)</b> – (Civil Engineering Department, Khenchela University, ALGERIA)
12/2015 – 11/2016	<b>Assistant Professor (B)</b> – (Civil Engineering Department, Khenchela University, ALGERIA)
09/2013 – 09/2014	<b>Temporarily attached to education and research</b> (UFC Besançon, FRANCE)

## NON-ACADEMIC EXPERIENCE

09/2008 – 08/2009	<b>Design Engineer</b> Design based on manual as well as appropriate design softwares
09/2006 – 08/2008	<b>Civil Site Engineer</b> Consortium between two companies (SERO-EST, Algeria) and (Matière, FRANCE)

## RESPONSIBILITIES

12/2023 – to date	<b>Manager of specialty (Licence – Public Works)</b>
12/2017 – 11/2023	<b>Manager of specialty (Master – VOA)</b>

## SERVICE ACTIVITIES

Reviewer for several International Journals

## PRINCIPLE PUBLICATIONS WITHIN LAST TEN YEARS (Selected)

Mamen, B., Bouhadra, A., Bourada, F., Bourada, M., Tounsi, A., & Hussain, M. (2024). Four-variable Quasi-3D model for nonlinear thermal vibration of FG plates lying on Winkler-Pasternak-Kerr foundation. *Scientia Iranica*, (), -. <https://doi.org/10.24200/sci.2024.60340.6746>

Messaoudi, A., Bouhadra, A., Menasria, A., Mamen, B., Boucham, B., Benguediab, M. & Al-Osta, M. A. (2023). Impact of the Shear and Thickness Stretching Effects on the Free Vibrations of Advanced Composite Plates. *Mechanics of Composite Materials*, 1-18. <https://doi.org/10.1007/s11029-023-10148-0>

Ali Rachedi, M., Bouhadra, A., Mamen, B., Benyoucef, S., Tounsi, A., & Ghazwani, M. H. (2023). Assessment of the effect of the materials composition on the bending response of FG plates lying on two models of elastic foundations in thermo-hydro-mechanical environments. *Acta Mechanica*, 1-26. <https://doi.org/10.1007/s00707-023-03696-y>

Lekouara, L., Mamen, B., Bouhadra, A., Menasria, A., Benrahou, K.H, Tounsi, Al-Osta, MA. (2023). Theoretical buckling analysis of inhomogeneous plates under various thermal gradients and boundary conditions. *Structural Engineering and Mechanics*, 86(4):443-459. <https://doi.org/10.12989/sem.2023.86.4.443>

Yahiaoui, D., Boutrid, A., Saadi, M., Mamen, B., & Bouzid, T. (2023). New Anchorage Technique for GFRP Flexural Strengthening of Concrete Beams Using Bolts-End Anchoring System. *International Journal of Concrete Structures and Materials*, 17(1), 1-15. <https://doi.org/10.1186/s40069-023-00578-4>

Sahli, M., Abid, M., Barrière, T., & **Mamen, B.** (2023). Investigation on machining of a Ti–6Al–4V alloy using FEM simulation and experimental analysis. International Journal on Interactive Design and Manufacturing (IJIDeM), 17(2), 801-811. <https://doi.org/10.1007/s12008-022->

Lemsara, F., Bouzid, T., Yahiaoui, D., **Mamen, B.**, & Saadi, M. (2023). Seismic Fragility of a Single Pillar-Column Under Near and Far Fault Soil Motion with Consideration of Soil-Pile Interaction. Engineering, Technology & Applied Science Research, 13(1), 9819-9824. <https://doi.org/10.48084/etasr.5405>

Hadj, M., Bouhadra, A., **Mamen, B.**, Menasria, A., Bousahla, A.A., Bourada, F., Bourada, M., Benrahou, H.H., and Tounsi, A. (2023). Combined influence of porosity and elastic foundation parameters on the bending behavior of advanced sandwich structures. Steel and composite structures, 46(1), 1-13. <https://doi.org/10.12989/scs.2023.46.1.001>

Tamrabet, A., **Mamen, B.**, Menasria, A., Bouhadra, A., Tounsi, A., Ghazwani, M. H., Alnujaie, A., and S.R. Mahmoud (2023). Buckling behaviors of FG porous sandwich plates with metallic foam cores resting on elastic foundation. Structural Engineering and Mechanics, 85(3), 289. <https://doi.org/10.12989/sem.2023.85.3.289>

Sahli, M., Abid, M., Barrière, T., & **Mamen, B.** (2022). Investigation on machining of a Ti–6Al–4V alloy using FEM simulation and experimental analysis. International Journal on Interactive Design and Manufacturing (IJIDeM), 1-11. <https://doi.org/10.1007/s12008-022-01116-4>

**Mamen, B.**, Bouhadra, A., Bourada, F., Bourada, M., Tounsi, A., Mahmoud, S. R., & Hussain, M. (2022). Combined Effect of Thickness Stretching and Temperature-Dependent Material Properties on Dynamic Behavior of Imperfect FG Beams Using Three Variable Quasi-3D Model. Journal of Vibration Engineering & Technologies, 1-23. <https://doi.org/10.1007/s42417-022-00704-8>

Berkia, A., Benguediab, S., Menasria, A., Bouhadra, A., Bourada, F., **Mamen, B.**, Tounsi, A., Benrahou, K.H., Benguediab, M., and Hussain, M. (2022). Static buckling analysis of bi-directional functionally graded sandwich (BFGSW) beams with two different boundary conditions. Steel and composite structures, 44(4), 489-503. <https://doi.org/10.12989/scs.2022.44.4.503>

Himeur, N., **Mamen, B.**, Benguediab, S., Bouhadra, A., Menasria, A., Bouchouicha, B., Bourada, F., Benguediab, M. Tounsi, A. (2022). Coupled effect of variable Winkler-Pasternak foundations on bending behavior of FG plates exposed to several types of loading. Steel and composite structures, 44(3), 339-355. <https://doi.org/10.12989/scs.2022.44.3.353>

Fissah, B., Belghalem, H., Djedou, M., **Mamen, B.** (2022). Critical thermal shock temperature prediction of alumina using improved hybrid models based on artificial neural networks and Shannon entropy. Journal of Mechanical Engineering and Sciences, 16(2), 8892-8904. <https://doi.org/10.15282/jmes.16.2.2022.07.0703>

Messas, T., Achoura, D., Abdelaziz, B., & **Mamen, B.** (2022). Experimental investigation on the mechanical behavior of concrete reinforced with Alfa plant fibers. Frattura ed Integrità Strutturale, 16(60), 102-113. <https://doi.org/10.3221/IGF-ESIS.60.08>

Yahiaoui, D., **Mamen, B.**, Saadi, M., & Bouzid, T. (2022). Experimental verification of the new models applied to glass fibre reinforced concrete (gfrc) confined with glass fibre reinforced polymer (GFRP) composites. Ceramics–Silikáty, 66(3), 384-395. <https://doi.org/10.13168/cs.2022.0034>

**Mamen, B.**, & Hammoud, F. (2021). Microstructural observations of shear zones at cohesive soil-steel interfaces under large shear displacements. Geomechanics and Engineering, 25(4), 275-282. <https://doi.org/10.12989/gae.2021.25.4.275>

**Mamen, B.**, Benali, F., Boutrid, A., Sahli, M., Hamidouche, M., & Fantozzi, G. (2021). Experimental investigation and non-local modelling of the thermomechanical behaviour of refractory concrete. Ceramics–Silikáty, 65(3), 295-304. <https://doi.org/10.13168/cs.2021.0031>

**Mamen, B.**, Kolli, M., Ouedraogo, E., Hamidouche, M., Djoudi, H., & Fantozzi, G. (2019). Experimental characterisation and numerical simulation of the thermomechanical damage behaviour of kaolinitic refractory materials. Journal of the Australian Ceramic Society, 55, 555-565. <https://doi.org/10.1007/s41779-018-0262>

Sahli, M., **Mamen, B.**, Ou, H., Gelin, J. C., Barrière, T., & Assoul, M. (2018). Experimental analysis and numerical simulation of sintered micro-fluidic devices using powder hot embossing process. The International Journal of Advanced Manufacturing Technology, 99, 1141-1154. <https://doi.org/10.1007/s00170-018-2509>

**Mamen, B.**, Barriere, T., Gelin, J-C. (2013). Investigations on thermal debinding process for fine 316L stainless steel feedstocks and identification of kinetic parameters from coupling experiments and finite element simulations. Powder technology, 235, 192-202. <https://doi.org/10.1016/j.powtec.2012.10.006>

**Mamen, B.**, Song, J., Barriere, T., & Gelin, J. C. (2015). Experimental and numerical analysis of the particle size effect on the densification behaviour of metal injection moulded tungsten parts during sintering. Powder technology, 270, 230-243. <https://doi.org/10.1016/j.powtec.2014.10.019>

Amrane, B., Ouedraogo, E., **Mamen, B.**, Djaknoun, S., & Mesrati, N. (2011). Experimental study of the thermo-mechanical behaviour of alumina-silicate refractory materials based on a mixture of Algerian kaolinitic clays. Ceramics International, 37(8), 3217-3227. <https://doi.org/10.1016/j.ceramint.2011.05.095>