

## Professor Mohamed Bourada

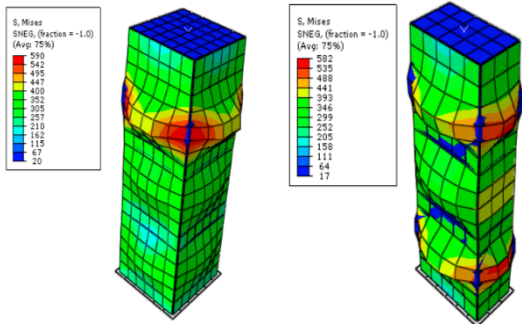


Fig. 10. Failure modes of CFSST for group 2; a) Square section (SH2C90), b) Section rectangular (RH2C90)

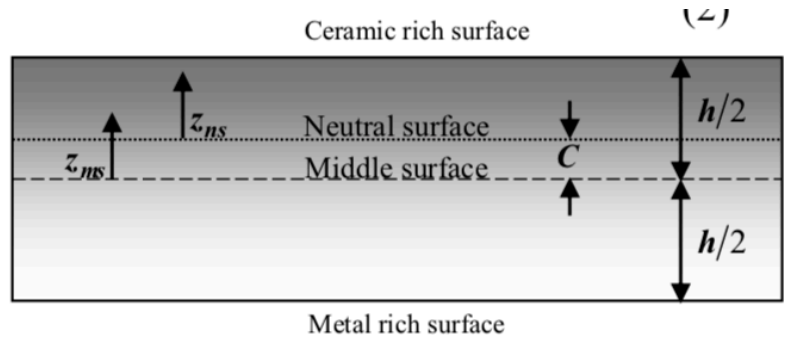


Fig. 1: The position of middle surface and neutral surface for a functionally graded plate.

**The left-hand image above is from:** Attia Bachiri, Samir Benyoucef, Mohamed Mekerbi, Mohamed Bourada and Salah Amara, “Critical design study for concrete-filled austenitic stainless steel tubular stub column”, Fourth International Symposium on Materials and Sustainable Development (ISMSD2019), November 12-14, 2019, Boumerdes, Algeria

**The right-hand image above is from:** Ahmed Boukhari, Fouad Bourada, Ahmed Bakora, Mohamed Bourada and Abdelouahed Tounsi, “Wave propagation behaviour of functionally graded material plates based on neutral surface position”, Publication and date not identified in the pdf file. Most recent reference is dated 2015)

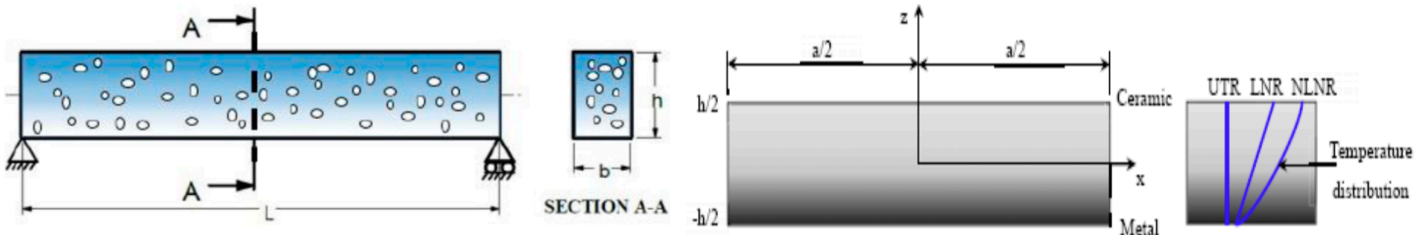


Figure 2. A porous functionally graded simply-supported beam.

Fig. 1 Geometry and coordinate of a FG beam

**The left-hand image above is from:** Attia Bachiri, Abdelkader Mahmoudi, Mohamed Bourada, Samir Benyoucef and Abdelouahed Tounsi, “Bending and free vibration of imperfect FGM beam resting on elastic foundation”, Congres National sur les Energies et Materiaux (CNEM), Naama, Algeria, December 17-18, 2018

**The right-hand image above is from:** Abdelkader Safa, Lazreg Hadji, Mohamed Bourada and Nafissa Zouatnia, “Thermal vibration analysis of FGM beams using an efficient shear deformation beam theory”, Earthquakes and Structures, Vol. 17, No. 3, pp 329-336, 2019

## Professor Mohamed Bourada

See:

[https://www.researchgate.net/profile/Mohamed\\_Bourada](https://www.researchgate.net/profile/Mohamed_Bourada)  
<https://www.researchgate.net/lab/Mohamed-Bourada-Lab>

Material and Hydrology Laboratory, Department of Civil Engineering, Faculty of Technology, University of Sidi Bel Abbas, Sidi Ben Abbas, Algeria.

### Selected Publications:

Bourada M, Tounsi A, Houari MSA, Adda Bedia EA (2012) A new four-variable refined plate theory for

thermal buckling analysis of functionally graded sandwich plates. *J Sandw Struct Mater* 14:5–33

M. Bourada, A. Kaci, M.S.A. Houari, A. Tounsi A new simple shear and normal deformations theory for functionally graded beams, *Steel Compos. Struct.*, 18 (2015), pp. 409-423

Fouad Bourada, Khaled Amara and Mohamed Bourada, “Renforcement des poutres FGM par des plaques FRP (Cas d'imperfection de la poutre)”, *Revue Science des Materiaux, Laboratoire Larhyss No. 8*, pp 19-27, November 2016

Mohamed Bourada, Fouad Bourada, Fatima Bounouara, Bouzza Fahsi and A. Tounsi, “Etude du comportement thermique es plaques en materiaux fonctionnellement gradues en utilisant une theorei d'ordre eleve”, Third International Conference on Energy, Materials, Applied Energetics and Pollution (ICEMAEP2016), October 30-31, 2016, Constantine, Algeria

Houari Hachemi, Abdelhakim Kaci, Mohammed Sid Ahmed Houari, Mohamed Bourada, Abdelouahed Tounsi and S.R. Mahmoud, “A new simple three-unknown shear deformation theory for bending analysis of FG plates resting on elastic foundations”, *Steel and Composite Structures*, Vol. 25, No. 6, pp 717-726, 2017

Fourn, H., Atmane, H.A., Bourada, M., Bousahla, A.A., Tounsi, A. and Mahmoud, S. (2018), “A novel four variable refined plate theory for wave propagation in functionally graded material plates”, *Steel Compos. Struct.*, 27(1), 109-122.

Zoubida Khelifa, Lazreg Hadji, Tahar Hassaine Daouadji and Mohamed Bourada, “Buckling response with stretching effect of carbon nanotube-reinforced composite beams resting on elastic foundation”, *Structural Engineering and Mechanics*, Vol. 67, No. 2, pp 125-130, July 2018

Babil Hebbar, Mohamed Bourada, Mohamed Sekkal, Abdelouahed Tounsi and S.R. Mahmoud, “A novel four-unknown quasi-3D shear deformation theory for functionally graded plates”, *Steel and Composite Structures*, Vol. 25, No. 5, pp 599-611, 2018

Attai Bachiri, Mohamed Bourada, Abdelkader Mahmoudi, Samir Benyoucef and Abdelouahed Tounsi, “Thermodynamic effect on the bending response of elastic foundation FG plate by using a novel four variable refined plate theory”, *Journal of Thermal Stresses*, Vol. 41, No. 8, pp 1042-1062, 2018

Attia Bachiri, Abdelkader Mahmoudi, Mohamed Bourada, Samir Benyoucef and Abdelouahed Tounsi, “Bending and free vibration of imperfect FGM beam resting on elastic foundation”, *Congres National sur les Energies et Materiaux (CNEM)*, Naama, Algeria, December 17-18, 2018

Bourada, F., Bousahla, A.A., Bourada, M., Azzaz, A., Zinata, A. and Tounsi, A. (2019), “Dynamic investigation of porous functionally graded beam using a sinusoidal shear deformation theory”, *Wind Struct.*, 28(1), 19-30.

Nasrine Belbachir, Kada Draich, Abdelmoumen Anis Bousahla, Mohamed Bourada, Abdelouahed Tounsi and M. Mohammadimehr, Bending analysis of anti-symmetric cross-ply laminated plates under nonlinear thermal and mechanical loadings , *Steel and Composite Structures*, Vol. 33, No. 1, October 10 2019, pp 81-92

Mohamed Bourada, Abed Bouadi, Abdelmoumen Anis Bousahla, Amel Senouci, Fouad Bourada, Abdelouahed Tounsi and S.R. Mahmoud, “Buckling behavior of rectangular plates under uniaxial and biaxial compression”, *Structural Engineering and Mechanics*, Vol. 70, No. 1, April 10, 2019, pp 113-123

Abdelkader Safa, Lazreg Hadji, Mohamed Bourada and Nafissa Zouatnia, “Thermal vibration analysis of FGM beams using an efficient shear deformation beam theory”, *Earthquakes and Structures*, Vol. 17, No. 3, pp 329-336, 2019

Bendaho, B., Belabed, Z., Bourada, M., Benatta, M.A., Bourada, F. and Tounsi, A. (2019), “Assessment of new 2D and quasi-3D Nonlocal theories for free vibration analysis of size-dependent functionally graded (FG) nanoplates”, *Adv. Nano Res.*, 7(4), 279-294.

Boukhlif, Z., Bouremana, M., Bourada, F., Bousahla, A.A., Bourada, M., Tounsi, A. and Al-Osta, M.A. (2019), “A simple quasi-3D HSDT for the dynamics analysis of FG thick plate on elastic foundation”, *Steel Compos. Struct.*, 31(5), 503-516.

Tlidji, Y., Zidour, M., Draiche, K., Safa, A., Bourada, M., Tounsi, A., Bousahla, A.A. and Mahmoud, S.R. (2019), “Vibration analysis of different material distributions of functionally graded microbeam”, *Struct. Eng. Mech.*, 69(6), 637-649

Hellal, H., Bourada, M., Hebali, H., Bourada, F., Tounsi, A., Bousahla, A.A. and Mahmoud, S.R. (2019), “Dynamic and stability analysis of functionally graded material sandwich plates in hygro-thermal environment using a simple higher shear deformation theory”, *J. Sandw. Struct. Mater.*, <https://doi.org/10.1177/1099636219845841>.

Boussoula, A., Boucham, B., Bourada, M., Bourada, F., Tounsi, A., Bousahla, A.A. and Tounsi, A. (2019), “A

simple nth-order shear deformation theory for thermomechanical bending analysis of different configurations of FG sandwich plates”, *Smart Struct. Syst.* (accepted)

Attia Bachiri, Samir Benyoucef, Mohamed Mekerbi, Mohamed Bourada and Salah Amara, “Critical design study for concrete-filled austenitic stainless steel tubular stub column”, *Fourth International Symposium on Materials and Sustainable Development (ISMSD2019)*, November 12-14, 2019, Boumerdes, Algeria

Ahmed Boukhari, Fouad Bourada, Ahmed Bakora, Mohamed Bourada and Abdelouahed Tounsi, “Wave propagation behaviour of functionally graded material plates based on neutral surface position”, Publication and date not identified in the pdf file. Most recent reference is dated 2015)