Professor Tahar Hassaine Daouadji

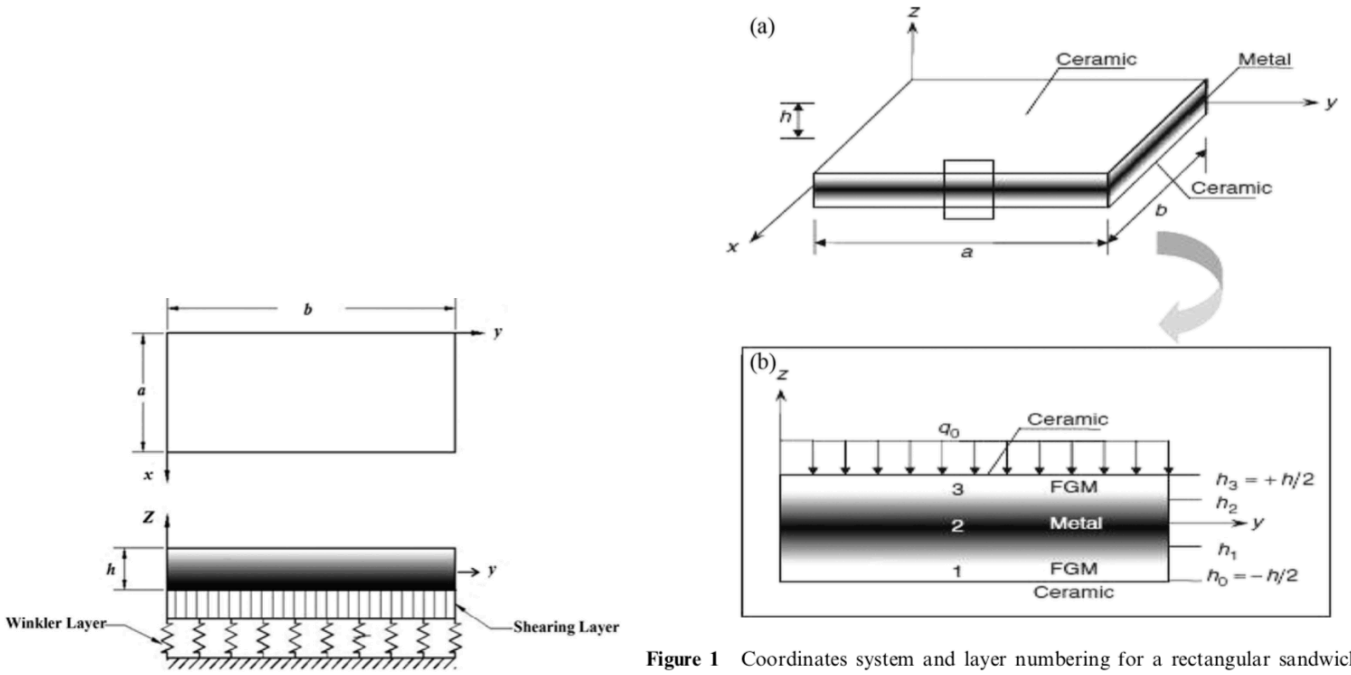

Figure 1 Coordinates system and layer numbering for a rectangular sandwich plate.

Left-hand image above is from: Benferhat, R., Hassaine Daouadji, T. and Said Mansour, M. (2015), "A higher order shear deformation model for bending analysis of functionally graded plates", Tran. Indian Inst. Metal., 68(1), 7-16

Right-hand image above is from: Tlidji, Y., Hassaine Daouadji, T., Hadji, L., Tounsi, A. and Adda Bedia, E.A. (2014), "Elasticity solution for bending response of functionally graded sandwich plates under thermo mechanical loading", J. Therm. Stress, 37, 852-869.

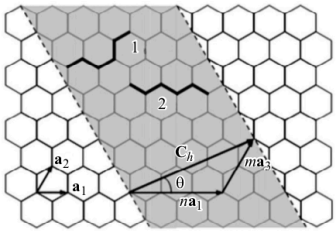

Fig. 1. The chiral vector $\mathbf{C}_h$ and the chiral angle θ of armchair (1) and zigzag (2) tubules.

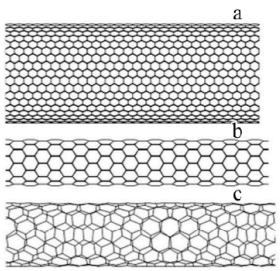

Fig. 2. Carbon nanotubes: armchair (a), zigzag (b), and chiral (c).

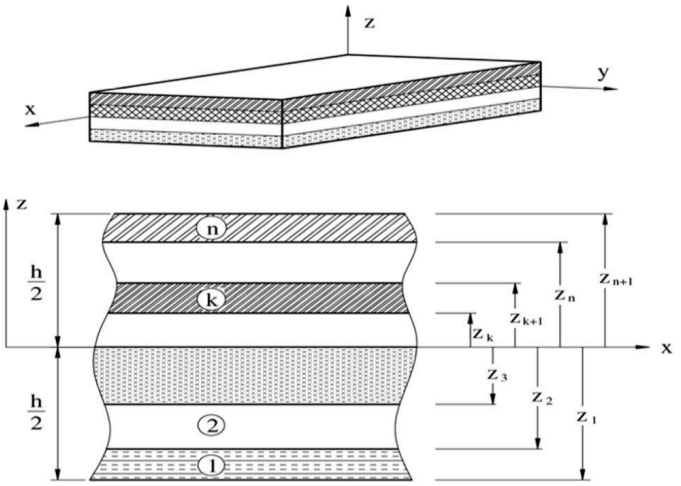

Fig. 1 Coordinate system and layer numbering used for a typical laminated plate

Left-hand image above is from: M. Zidour, T. H. Daouadji, K. H. Benrahou, A. Tounsi, E. A. Adda Bedia, and L. Hadji, "Buckling analysis of chiral single-walled carbon nanotubes by using the nonlocal Timoshenko beam theory," Mech. Compos. Mater., 50, No. 1, 95-104 (2014).

Right-hand image above is from: Adim, B., Hassaine Daouadji, T. and Rabahi, A. (2016), "A simple higher order shear deformation theory for mechanical behavior of laminated composite plates", Int. J. Adv. Struct. Eng., 8, 103-117.

Professor Tahar Hassaine Daouadji

See:
https://www.researchgate.net/profile/Hassaine_Daouadji_Tahar3

Department of Civil Engineering
University Ibn Khaldoun Tiaret, Tiaret, Algeria

Selected Publications:

Daouadji TH, Henni AH, Tounsi A, Bedia EAA. A new hyperbolic shear deformation theory for bending analysis of functionally graded plates. Model Simul Eng 2012;2013:1–10.
Daouadji T, Tounsi A, Hadji L. A theoretical analysis for static and dynamic behavior of functionally graded plates. Mater Phys Mech 2012;14:110–128
T.H. Daouadji, A.H. Henni, A. Tounsi, and E.A.A. Bedia, "Elasticity solution of a cantilever functionally graded beam," Appl. Compos. Mater., vol. 20, no. 1, pp. 1–15, 2013.
Daouadji TH, Tounsi A, Bedia EAA. A new higher order shear deformation model for static behavior of functionally graded plates. Adv Appl Math Mech 2013;5(3):351–364
Hassaine Daouadji, T., Tounsi, A. and Adda Bedia, E.A. (2013), "Analytical solution for bending analysis of functionally graded plates", Scientia Iranica, Tran. B: Mech. Eng., 20, 516-523.
M. Zidour, T. H. Daouadji, K. H. Benrahou, A. Tounsi, E. A. Adda Bedia, and L. Hadji, "Buckling analysis of chiral single-walled carbon nanotubes by using the nonlocal Timoshenko beam theory," Mech. Compos. Mater., 50, No. 1, 95-104 (2014).
Tlidji, Y., Hassaine Daouadji, T., Hadji, L., Tounsi, A. and Adda Bedia, E.A. (2014), "Elasticity solution for bending response of functionally graded sandwich plates under thermo mechanical loading", J. Therm. Stress, 37, 852-869.
Benferhat, R., Hassaine Daouadji, T. and Said Mansour, M. (2015), "A higher order shear deformation model for bending analysis of functionally graded plates", Tran. Indian Inst. Metal., 68(1), 7-16
Abdelhak Z., Hadji, L., Hassaine Daouadji, T. and Adda bedia, E.A. (2015), "Thermal buckling of functionally graded plates using a n-order four variable refined theory", Adv. Mater. Res., 4(1), 31-44
Merazi, M., Hadji, L., Daouadji, T.H., Tounsi, A. and Adda Bedia, E.A. (2015), "A new hyperbolic shear deformation plate theory for static analysis of FGM plate based on neutral surface position", Geomech. Eng., 8(3), 305-321
Hadji, L., Hassaine Daouadji, T. and Adda Bedia, E.A. (2015), "A refined exponential shear deformation theory for free vibration of FGM beam with porosities", Geomech. Eng., Int. J., 9(3), 361-372.
Hassaine Daouadji, T. and Hadji, L. (2015), "Analytical solution of nonlinear cylindrical bending for functionally graded plates", Geomech. Eng., Int. J., 9(5), 631-644
Khelifa, Z., Hassaine Daouadji, T., Hadji, L., Tounsi, A. and Adda Bedia, E.A. (2015), "A new higher order shear deformation model of functionally graded beams based on neutral surface position", Trans. Indian Inst. Met., 69(3), 683-691
Sallai, B., Hadji, L., Hassaine Daouadji, T. and Adda Bedia, E.A. (2015), "Analytical solution for bending analysis of functionally graded beam", Steel Compos. Struct., Int. J., 19(4), 829-841.
T.H. Daouadji, A. Tounsi, and E.A.A. Bedia, "A n-order refined theory for bending and free vibration of functionally graded beams," Struct. Eng. Mech., vol. 54, no. 5, pp. 923–936, 2015.
Hassaine Daouadji, T., B. Adim (2016) "Theoretical analysis of composite beams under uniformly distributed load", Adv. Mater. Res., 5(1), 1-9.
Hassaine Daouadji, T., Adim, B. and Benferhat, R. (2016), "Bending analysis of an imperfect FGM plates under hygro-thermo-mechanical loading with analytical validation", Adv. Mater. Res., 5(1), 35-53.
Adim Belkacem, Hassaine Daouadji, T., Rabia Benferhat and Lazreg Hadji, (2016), "An efficient and simple higher order shear deformation theory for bending analysis of composite plates under various boundary conditions", Earthq. Struct., 11(1), 63-82.
Adim, B., Hassaine Daouadji, T. and Rabahi, A. (2016), "A simple higher order shear deformation theory for mechanical behavior of laminated composite plates", Int. J. Adv. Struct. Eng., 8, 103-117.

Hassaine Daouadji, T., Benferhat, R. and Belkacem, A. (2016), “A novel higher order shear deformation theory based on the neutral surface concept of FGM plate under transverse load”, Adv. Mater. Res., 5(2), 107-120.
Benferhat, R., Hassaine Daouadji, T., Hadji, L. and Said, M. (2016), "Static analysis of the FGM plate with porosities", Steel Compos. Struct., Int. J., 21(1), 123-136.
Hadji, L., Meziane, M.A.A., Abdelhak, Z., Hassaine Daouadji, T. and Adda Bedia, E.A. (2016), "Static and dynamic behavior of FGM plate using a new first shear deformation plate theory", Struct. Eng. Mech., Int. J., 57(1), 127-140
Hassaine Daouadji, T. and Adim Belkacem (2016), “An analytical approach for buckling of functionally graded plates” Adv. Mater. Res., 5(3), 141-169.
Abdelhak, Z., Hadji, L., Hassaine Daouadji, T. and Adda Bedia, E.A. (2016), "Thermal buckling response of functionally graded sandwich plates with clamped boundary conditions", Smart Struct. Syst., Int. J., 18(2), 267-291
Hassaine Daouadji, T., Benferhat, R. and Belkacem, A. (2016), “Bending analysis of an imperfect advanced composite plates resting on the elastic foundations”, Coupled Syst. Mech., 5(3), 269-285
Abdelhak, Z., Hadji, L., Khelifa, Z., Hassaine Daouadji, T. and Adda Bedia, E.A. (2016), “Analysis of buckling response of functionally graded sandwich plates using a refined shear deformation theory”, Wind Struct., 22(3), 291-305.
Hadji, L., Hassaine Daouadji, T., Meziane, M.A.A., Tlidji, Y. and Adda Bedia, E.A. (2016), "Analysis of functionally graded beam using a new first-order shear deformation theory", Struct. Eng. Mech., Int. J., 57(2), 315-325.
Hadji, L., Hassaine Daouadji, T. and Adda Bedia, E.A. (2016), "Dynamic behavior of FGM beam using a new first shear deformation theory", Earthq. Struct., Int. J., 10(2), 451-461.
Adim, B., Hassaine Daouadji, T., Rabia, B. and Hadji, L. (2016), “Buckling and free vibration analysis of laminated composite plates using an efficient and simple higher order shear deformation theory” Mech. Industry, 17, 512.
Bensattalah, T., Daouadji, T. H., Zidour, M., Tounsi, A. and Bedia, E.A. (2016), "Investigation of thermal and chirality effects on vibration of single-walled carbon nanotubes embedded in a polymeric matrix using nonlocal elasticity theories", Mech. Compos. Mater., 52(4), 555-568
Benferhat, R., Daouadji, T.H. and Mansour, M.S. (2016), "Free vibration analysis of FG plates resting on an elastic foundation and based on the neutral surface concept using higher-order shear deformation theory", Compt. Rend. Mecaniq., 344(9), 631-641
Adim, B., Hassaine Daouadji, T. and Abbes, B. (2016), “Buckling analysis of anti-symmetric cross-ply laminated composite plates under different boundary conditions”, Appl. Mech., 52(6), 661-676
Benferhat, R., Hassaine Daouadji, T., Mansour, M.S. and Hadji, L. (2016), “Effect of porosity on the bending and free vibration response of functionally graded plates resting on Winkler-Pasternak foundations”, Earthq. Struct., 10(5), 1429-1449.
Hassaine Daouadji T. and Adim Belkacem (2017), “Mechanical behaviour of FGM sandwich plates using a quasi-3D higher order shear and normal deformation theory”, Struct. Eng. Mech., 61(1), 49-63.
Abdelbasset, C., Hassaine Daouadji, T., Abderezak, R., Belkacem, A., Abbes, B., Rabia, B. and Abbes, F. (2017), “A high-order closed-form solution for interfacial stresses in externally sandwich FGM plated RC beams”, Adv. Mater. Res., 6(4), 317-328.
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
Benhenni Mohamed, Hassaine Daouadji, T., Boussad Abbes, Yu Ming LI , Fazilay Abbes (2018), “Analytical and Numerical Results for Free Vibration of Laminated Composites Plates”, J. Chem. Molecular Eng., 12(6), 300-304.
Bensattalah, T., Bouakkaz, K., Zidour, M. and Daouadji, T.H. (2018), “Critical buckling loads of carbon nanotube embedded in Kerr’s medium”, Adv. Nano Res., 6(4), 339-356
Adim Belkacem, Hassaine Daouadji Tahar, Rabahi Abderrezak, Benhenni Mohamed Amine, Zidour Mohamed and Abbes Boussad, “Mechanical buckling analysis of hybrid laminated composite plates under different boundary conditions”, Structural Engineering and Mechanics, Vol. 66, No. 6, pp 761-769, 2018

Tayeb Bensattalah, Mohamed Zidour and Tahar Hassaine Daouadji, “A new nonlocal beam model for free vibration analysis of chiral single-walled carbon nanotubes”, Composite Materials and Engineering, Vol. 1, No. 1, pp 21-31, 2019
Bekki Hadj, Benferhat Rabia and Tahar Hassaine Daouadji, “Influence of the distribution shape of porosity on the bending FGM new plate model resting on elastic foundations”, Structural Engineering and Mechanics, Vol. 72, No. 1, 2019, pp 61-70
Tayeb Bensattalah, Mohamed Zidour, Tahar Hassaine Daouadji and Khaled Bouakaz, “Theoretical analysis of chirality and scale effects on critical buckling load of zigzag triple walled carbon nanotubes under axial compression embedded in polymeric matrix”, Structural Engineering and Mechanics, Vol. 70, No. 3, May 10 2019, pp 269-277
Mohammed Amine Benhenni, Tahar Hassaine Daouadji, Boussad Abbès, Fazilay Abbès, Yuming Li and Belkacem Adim, “Numerical analysis for free vibration of hybrid laminated composite plates for different boundary conditions”, Structural Engineering and Mechanics, Vol. 70, No. 5, June 10 2019, pp 535-549