



**Professor Huu-Tai Thai**

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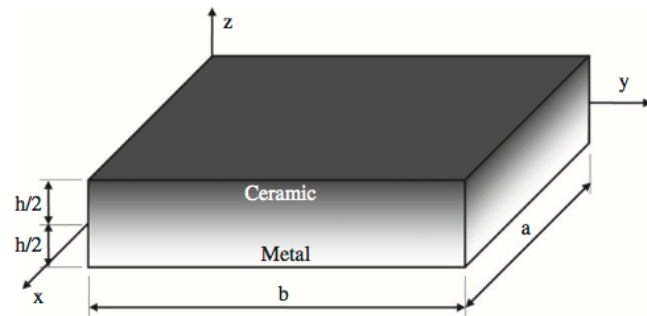
<https://www.findanexpert.unimelb.edu.au/display/person827153>  
[https://scholar.google.com/citations?user=6x96L\\_YAAAAJ&hl=en](https://scholar.google.com/citations?user=6x96L_YAAAAJ&hl=en)

NOTE: It is assumed here that Huu-Tai Thai, H.T. Thai and Tai Thai refer to the same person.

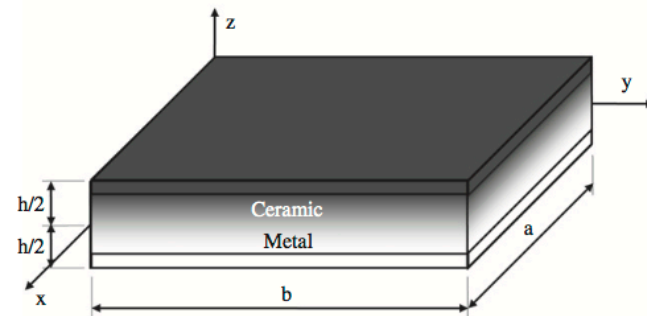
Structural Engineering  
The University of Melbourne, Australia

### Biography:

Dr Thai is a Senior Lecturer in Structural Engineering. He received his BE and ME from Ho Chi Minh City University of Technology and PhD from Sejong University in February 2010. Prior to joining the University of Melbourne, he was a Senior Lecturer at La Trobe University, an ARC DECRA Fellow and ARC Research Associate at UNSW and a Postdoctoral Fellow at Hanyang University and Sejong University. He is a member of Standards Australia Committee BD-032 on Composite Construction. He is also Associate Editor for Shock and Vibration and Mathematical Problems in Engineering, and Regional Editor (for Australia) for Open Mechanical Engineering Journal. His research interests have been in the areas of steel, steel-concrete composite, laminated composites and functionally graded materials with an emphasis on developing robust computational tools for the advanced analysis and design purposes. His current research focuses on high strength materials for sustainable construction of buildings, bridges and infrastructure.



(a) Isotropic FG plate



(b) Sandwich plate with an FG core and isotropic skins.

Fig. 1. Geometry and coordinates of FG plates.

From: Huu-Tai Thai and Seung-Eock Kim, A simple quasi-3D sinusoidal shear deformation theory for functionally graded plates. Composite Structures. 99. 2013, pp 172-180

**Education:**

PhD, Sejong University, 2010

MEng, Ho Chi Minh City University of Technology 2005

BEng, Ho Chi Minh City University of Technology 2003

**Award:**

Australian Research Council under Discovery Early Career Researcher Award (DECRA), 2014

**Selected Publications** (from <https://www.findanexpert.unimelb.edu.au/display/person827153>):

(NOTE: There are papers listed on a different website,

[https://scholar.google.com/citations?user=6x96L\\_YAAAAJ&hl=en](https://scholar.google.com/citations?user=6x96L_YAAAAJ&hl=en), that do not appear in the following list.

Perhaps this indicates that the various “Thai” names refer to different people.)

S. Thai, Tai Thai, TP Vo and S. Lee, Postbuckling analysis of functionally graded nanoplates based on nonlocal theory and isogeometric analysis. *Composite Structures*. 201. 2018

ND Nguyen, TK Nguyen, TP Vo and Tai Thai, Ritz-Based Analytical Solutions for Bending, Buckling and Vibration Behavior of Laminated Composite Beams. *International Journal of Structural Stability and Dynamics*. 2018

LC Trinh, TP Vo, Tai Thai, TK Nguyen and P Keerthan, State-space Levy solution for size-dependent static, free vibration and buckling behaviours of functionally graded sandwich plates. *Composites Part B: Engineering*. 149. 2018

Tai Thai, S-E Kim and J Kim, Improved refined plastic hinge analysis accounting for local buckling and lateral-torsional buckling 2017

LC Trinh, TP Vo, Tai Thai and JL Mantari, Size-dependent behaviour of functionally graded sandwich microplates under mechanical and thermal loads. *Composites Part B: Engineering*. 124. 2017

T-K Nguyen, N-D Nguyen, TP Vo and Tai Thai, Trigonometric-series solution for analysis of laminated composite beams. *Composite Structures*. 160. 2017

Tai Thai, B Uy, W-H Kang and S Hicks, System reliability evaluation of steel frames with semi-rigid connections. *Journal of Constructional Steel Research*. 121. 2016

TP Vo, Tai Thai, N Trung-Kien, F Inam and J Lee, A quasi-3D theory for vibration and buckling of functionally graded sandwich beams. *Composite Structures*. 119. 2015

KT Nguyen, Tai Thai and TP Vo, A refined higher-order shear deformation theory for bending, vibration and buckling analysis of functionally graded sandwich plates 2015

HT Thai and SE Kim, A review of theories for the modeling and analysis of functionally graded plates and shells. *Composite Structures*. 128. 2015

Tai Thai and S-E Kim, Second-order distributed plasticity analysis of steel frames with semi-rigid connections. *Thin-Walled Structures*. 94. 2015

HT Thai, TP Vo, TK Nguyen and J Lee, Size-dependent behavior of functionally graded sandwich microbeams based on the modified couple stress theory. *Composite Structures*. 123. 2015

TP Vo, Tai Thai, N Trung-Kien, F Inam and J Lee, Static behaviour of functionally graded sandwich beams using a quasi-3D theory. *Composites Part B: Engineering*. 68. 2015

Tai Thai, TP Vo, TQ Bui and T-K Nguyen, A quasi-3D hyperbolic shear deformation theory for functionally graded plates. *Acta Mechanica*. 225. 2014

Tai Thai and D-H Choi, Finite element formulation of a refined plate theory for laminated composite plates 2014

Tai Thai and D-H Choi, Improved refined plate theory accounting for effect of thickness stretching in functionally graded plates. *Composites Part B: Engineering*. 56. 2014

HT Thai and DH Choi, A simple first-order shear deformation theory for the bending and free vibration analysis of functionally graded plates. *Composite Structures*. 101. 2013

HT Thai and SE Kim, A simple higher-order shear deformation theory for bending and free vibration analysis of functionally graded plates. *Composite Structures*. 96. 2013

HT Thai and SE Kim, A simple quasi-3D sinusoidal shear deformation theory for functionally graded plates. *Composite Structures*. 99. 2013

Tai Thai, M Park and D-H Choi, A simple refined theory for bending, buckling, and vibration of thick plates resting on elastic foundation. *International Journal of Mechanical Sciences*. 73. 2013

HT Thai and SE Kim, A size-dependent functionally graded Reddy plate model based on a modified couple stress theory. *Composites Part B: Engineering*. 45. 2013

Tai Thai, T Park and D-H Choi, An efficient shear deformation theory for vibration of functionally graded plates 2013

Tai Thai and D-H Choi, Analytical solutions of refined plate theory for bending, buckling and vibration analyses of thick plates. *Applied Mathematical Modelling*. 37. 2013

Tai Thai and S-E Kim, Closed-form solution for buckling analysis of thick functionally graded plates on elastic foundation. *International Journal of Mechanical Sciences*. 75. 2013

Tai Thai and D-H Choi, Finite element formulation of various four unknown shear deformation theories for functionally graded plates 2013

N Valizadeh, TQ Bui, VT Vu, Tai Thai and MN Nguyen, Isogeometric Simulation For Buckling, Free And Forced Vibration Of Orthotropic Plates. *International Journal of Applied Mechanics*. 5. 2013

Tai Thai and B Uy, Levy solution for buckling analysis of functionally graded plates based on a refined plate theory 2013

HT Thai, A nonlocal beam theory for bending, buckling, and vibration of nanobeams. *International Journal of Engineering Science*. 52. 2012

Huu-Tai Thai and Thuc P Vo, A nonlocal sinusoidal shear deformation beam theory with application to bending, buckling, and vibration of nanobeams. *International Journal of Engineering Science*. 54. 2012, pp 58-66

HT Thai and DH Choi, A refined shear deformation theory for free vibration of functionally graded plates on elastic foundation. *Composites Part B: Engineering*. 43. 2012

HT Thai and DH Choi, An efficient and simple refined theory for buckling analysis of functionally graded plates. *Applied Mathematical Modelling*. 36. 2012

Tai Thai and S-E Kim, Analytical solution of a two variable refined plate theory for bending analysis of orthotropic Levy-type plates. *International Journal of Mechanical Sciences*. 54. 2012

HT Thai and SE Kim, Levy-type solution for free vibration analysis of orthotropic plates based on two variable refined plate theory. *Applied Mathematical Modelling*. 36. 2012

Tai Thai and S-E Kim, Second-order inelastic analysis of cable-stayed bridges 2012

TP Vo and HT Thai, Static behavior of composite beams using various refined shear deformation theories. *Composite Structures*. 94. 2012

Tai Thai and D-H Choi, A refined plate theory for functionally graded plates resting on elastic foundation. *Composites Science and Technology*. 71. 2011

HT Thai and SE Kim, Levy-type solution for buckling analysis of orthotropic plates based on two variable refined plate theory. *Composite Structures*. 93. 2011

Tai Thai and S-E Kim, Nonlinear inelastic analysis of concrete-filled steel tubular frames. *Journal of Constructional Steel Research*. 67. 2011

Tai Thai and S-E Kim, Nonlinear inelastic analysis of space frames. *Journal of Constructional Steel Research*. 67. 2011

Tai Thai and S-E Kim, Nonlinear inelastic time-history analysis of truss structures. *Journal of Constructional Steel Research*. 67. 2011

HT Thai and SE Kim, Nonlinear static and dynamic analysis of cable structures 2011

Tai Thai and S-E Kim, Practical advanced analysis software for nonlinear inelastic dynamic analysis of steel structures. *Journal of Constructional Steel Research*. 67. 2011

S-E Kim and Tai Thai, Second-order inelastic analysis of steel suspension bridges 2011

Tai Thai and S-E Kim, Second-order inelastic dynamic analysis of steel frames using fiber hinge method. *Journal of Constructional Steel Research*. 67. 2011

HT Thai and SE Kim, Free vibration of laminated composite plates using two variable refined plate theory. *International Journal of Mechanical Sciences*. 52. 2010

S-E Kim and Tai Thai, Nonlinear inelastic dynamic analysis of suspension bridges. *Engineering Structures*. 32. 2010

SE Kim, HT Thai and J Lee, A two variable refined plate theory for laminated composite plates. *Composite Structures*. 89. 2009

SE Kim, HT Thai and J Lee, Buckling analysis of plates using the two variable refined plate theory. *Thin-Walled Structures*. 47. 2009

Tai Thai and S-E Kim, Large deflection inelastic analysis of space trusses using generalized displacement control method. *Journal of Constructional Steel Research*. 65. 2009

Tai Thai and S-E Kim, Practical advanced analysis software for nonlinear inelastic analysis of space steel structures. *Advances in Engineering Software*. 40. 2009

### **Examples of papers listed on other websites that are not included in the above list:**

HT Thai and TP Vo, Bending and free vibration of functionally graded beams using various higher-order shear deformation beam theories, *International Journal of Mechanical Sciences* 62 (1), 57-66, 2012

HT Thai and DH Choi, Size-dependent functionally graded Kirchhoff and Mindlin plate models based on a modified couple stress theory, *Composite Structures* 95, 142-153, 2013

HT Thai and TP Vo, A new sinusoidal shear deformation theory for bending, buckling, and vibration of functionally graded plates, *Applied Mathematical Modelling* 37 (5), 3269-3281, 2013

HT Thai, TK Nguyen, TP Vo, J Lee, Analysis of functionally graded sandwich plates using a new first-order shear deformation theory, *European Journal of Mechanics-A/Solids* 45, 211-225, 2014

Thai, Huu-Tai and Vo, Thuc (2013) A size-dependent functionally graded sinusoidal plate model based on a modified couple stress theory. *Composite Structures*, 96. 376 - 383. ISSN 0263-8223

Nguyen, Van-Hau, Nguyen, Trung-Kien, Thai, Huu-Tai and Vo, Thuc (2014) A new inverse trigonometric shear deformation theory for isotropic and functionally graded sandwich plates. *Composites Part B: Engineering*, 66. pp. 233-246. ISSN 1359-8368