

# Αναλυτικό Βιογραφικό Σημείωμα

**Πάνος Γουργιώτης**  
Αναπληρωτής Καθηγητής  
Τμήμα Πολιτικών Μηχανικών  
Πανεπιστήμιο Θεσσαλίας




## Προσωπικά Στοιχεία

Ημερομηνία γεννήσεως: 29 Μαΐου 1979  
Οικογενειακή κατάσταση: Έγγαμος με δυο παιδιά

## Διεύθυνση Εργασίας

Τμήμα Πολιτικών Μηχανικών  
Πανεπιστήμιο Θεσσαλίας  
Πεδίον Άρεως, Βόλος 38334

☎: +30 24210 74151  
Fax: +30 24210 74169  
E-mail: [pgourgiotis@uth.gr](mailto:pgourgiotis@uth.gr)  
 [webpage](#)

## Ακαδημαϊκές Θέσεις

- 2020 - Σήμερα **Αναπληρωτής Καθηγητής** στην Θεωρητική και Εφαρμοσμένη Μηχανική των Υλικών, *Τμήμα Πολιτικών Μηχανικών, Πανεπιστήμιο Θεσσαλίας.*
- 2016 - 2020 **Επίκουρος Καθηγητής (tenured)** στην Εφαρμοσμένη Μηχανική, *Department of Engineering, Durham University, UK.*
- 2014 - 2016 **Ερευνητής (Research Associate)** ERC Advanced Grant 2013-ADG-340561 - INSTABILITIES. *Department of Civil, Environmental and Mechanical Engineering. University of Trento, Italy*
- 2012 - 2014 **Ερευνητής (Marie Curie Experienced Researcher)** IAPP IAP-GA-2011-286110-INTERCER2. *Department of Civil, Environmental and Mechanical Engineering. University of Trento, Italy*
- 2011 - 2012 **Μεταδιδακτορικός Υπότροφος** - Ίδρυμα Κρατικών Υποτροφιών (ΙΚΥ). Τομέας Μηχανικής, Ε.Μ.Π.
- 2010 - 2012 **Μεταδιδακτορικός Ερευνητής** - Προγράμματα Βασικής Έρευνας ΠΕΒΕ 2010. Τομέας Μηχανικής, Ε.Μ.Π.

## Τίτλοι Σπουδών

- 2009 **Διδάκτωρ Μηχανικός Ε.Μ.Π.** – Τομέας Μηχανικής, Σχολή Εφαρμοσμένων Μαθηματικών και Φυσικών Επιστημών.
- 2005 **Μεταπτυχιακό Δίπλωμα Ειδίκευσης Ε.Μ.Π.** - Διατμηματικό Πρόγραμμα Σπουδών «Δομοστατικός Σχεδιασμός και Ανάλυση Κατασκευών». Σχολή Πολιτικών Μηχανικών.
- 2003 **Δίπλωμα Πολιτικού Μηχανικού Ε.Μ.Π.** - Κατεύθυνση Δομοστατικού Μηχανικού.

## Επιστημονικός Υπεύθυνος σε Ερευνητικά Προγράμματα

- 2019-2020 *Flexoelectric Instabilities in Dielectric Materials* (PI) [E201,093.00] [EPSRC - EP/T010649/1] (Host Institution: Durham University, UK) [διακόπηκε λόγω εκλογής μου στο Τμήμα Πολιτικών Μηχανικών, Πανεπιστήμιο Θεσσαλίας]

## Διδακτικό Έργο

- 2020 – Σήμερα **Αναπληρωτής Καθηγητής** – Τμήμα Πολιτικών Μηχανικών, Πανεπιστήμιο Θεσσαλίας
- Αυτοδύναμη Διδασκαλία**
1. Αντοχή Υλικών I (3<sup>ο</sup> Εξάμηνο)
  2. Αντοχή Υλικών II (4<sup>ο</sup> Εξάμηνο)
  3. Ανάλυση Επιφανειακών Φορέων (9<sup>ο</sup> Εξάμηνο)
- 2016 - 2020 **Επίκουρος Καθηγητής** - Department of Engineering, Durham University, UK
- Αυτοδύναμη Διδασκαλία**
1. L1 Mechanics of Systems: *Statics and Dynamics*
  2. L3 Applied Mechanics: *Fracture and Fatigue*
  3. L3 Civil Design: *Bridge Design* (συνδιδασκαλία με AECOM, Newcastle)
  4. L3 Materials: *Ceramics*
  5. L4 Applied Mechanics: *Contact Mechanics*
- 2011 - 2012 **Επικουρικό Έργο Διδασκαλίας**
- Μεταπτυχιακά Μαθήματα:**
1. *Θεωρία Ελαστικότητας* [2011, 2012] [Σ.Ε.Μ.Φ.Ε., Ε.Μ.Π.]
  2. *Μηχανική του Συνεχούς Μέσου* [2011, 2012] [Σ.Ε.Μ.Φ.Ε., Ε.Μ.Π.]
  3. *Ελαστοδυναμική* [2011, 2012] [Σ.Ε.Μ.Φ.Ε., Ε.Μ.Π.]
- Προπτυχιακά Μαθήματα:**
1. *Προχωρημένη Μηχανική των Υλικών* [2007-2011] [Σχολή Πολιτικών Μηχανικών, Ε.Μ.Π.]

## Ερευνητικά Ενδιαφέροντα

Μηχανική των Υλικών ■ Μικρομηχανική ■ Μηχανική των Θραύσεων ■ Ελαστοδυναμική  
■ Μηχανική των Επαφών ■ Θερμοελαστικότητα ■ Μηχανική των Ατελειών ■ Θεωρίες  
Γενικευμένου Συνεχούς Μέσου ■ Αναλυτικές και Αριθμητικές Μέθοδοι

## Δημοσιεύσεις σε Διεθνή Περιοδικά με Κριτές<sup>1</sup>

- [J30] S. Nikolopoulos, **P.A. Gourgiotis**, T. Zisis (2021). Analysis of the tilted shallow wedge problem in couple-stress elasticity. *Journal of Elasticity*, **144**, 205–221. [\[LINK\]](#)
- [J29] W. Wongviboonsin, **P.A. Gourgiotis**, C.N. Van, S. Limkatanyu, J. Rungamornrat (2021). Size effects in two-dimensional layered materials modelled by couple-stress elasticity. *Frontier of Structural and Civil Engineering*, **15**, 425–443. [\[LINK\]](#)
- [J28] **P.A. Gourgiotis**, T. Zisis, A.E. Giannakopoulos, H.G. Georgiadis (2019). The Hertz contact problem in couple-stress elasticity. *International Journal of Solids and Structures*, **168**, 228-237. [\[LINK\]](#)
- [J27] **P.A. Gourgiotis** (2018). Interaction of shear cracks in microstructured materials modelled by couple-stress elasticity. *Journal of Mechanics of Materials and Structures*, **13**, 401-419. [\[LINK\]](#)
- [J26] **P.A. Gourgiotis** (2018). Shear crack growth in brittle materials modelled by constrained Cosserat elasticity. *Journal of the European Ceramic Society*, **38**, 3015-3036. [\[LINK\]](#)
- [J25] **P.A. Gourgiotis**, T. Zisis, H.G. Georgiadis (2018). On concentrated surface loads and Green's functions in the Toupin-Mindlin theory of strain-gradient elasticity. *International Journal of Solids and Structures*, **130-131**, 153-171. [\[LINK\]](#)
- [J24] K.P. Baxevanakis, **P.A. Gourgiotis**, H.G. Georgiadis (2017). Interaction of cracks with dislocations in couple-stress elasticity. Part II: Shear modes. *International Journal of Solids and Structures*, **118-119**, 192-203 [\[LINK\]](#)
- [J23] K.P. Baxevanakis, **P.A. Gourgiotis**, H.G. Georgiadis (2017). Interaction of cracks with dislocations in couple-stress elasticity. Part I: Opening mode. *International Journal of Solids and Structures*, 118-119, 179-191 [\[LINK\]](#)
- [J22] **P.A. Gourgiotis**, D. Bigoni (2017). The dynamics of folding instability in a constrained Cosserat medium. *Philosophical Transactions of the Royal Society A* **375**(2093): 20160159 [\[LINK\]](#)
- [J21] Th. Papathanasiou, **P.A. Gourgiotis**, F. Dal Corso (2016). Finite element simulation of a gradient elastic half-space subjected to thermal shock on the boundary. *Applied Mathematical Modelling* **40**, 10181-10198 [\[LINK\]](#)
- [J20] D. Bigoni, **P.A. Gourgiotis**, (2016) Folding and faulting of an elastic continuum, *Proceedings of the Royal Society A. Mathematical, Physical and Engineering Sciences*, **472**: 20160018 [\[Cover Paper\]](#) [\[LINK\]](#)

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<sup>1</sup> Το ερευνητικό μου έργο αποτελείται από **30** δημοσιεύσεις [J] σε Διεθνή Περιοδικά με κριτές, και έχει λάβει **610** αναφορές με *h*-index **15** και *i10*-index **19** [Scholar 30/6/2021].

- [J19] **P.A. Gourgiotis**, Th. Zisis and K.P. Baxevanakis (2016) Analysis of the tilted flat punch problem in couple-stress elasticity, *International Journal of Solids and Structures*, **85**, 34–43 [\[LINK\]](#)
- [J18] **P.A. Gourgiotis** and D. Bigoni (2016) Stress channelling in extreme couple-stress materials Part II: Localized folding vs faulting of a continuum in single and cross geometries, *Journal of the Mechanics and Physics of Solids* **88**, 169–185 [\[LINK\]](#)
- [J17] **P.A. Gourgiotis** and D. Bigoni (2016) Stress channelling in extreme couple-stress materials Part I: Strong ellipticity, wave propagation, ellipticity, and discontinuity relations, *Journal of the Mechanics and Physics of Solids* **88**, 150–168 [\[LINK\]](#)
- [J16] Th. Zisis, **P.A. Gourgiotis**, and F. Dal Corso (2015) A contact problem in couple stress thermoelasticity: The indentation by a hot flat punch, *International Journal of Solids and Structures* **63**, 226–239 [\[LINK\]](#)
- [J15] **P.A. Gourgiotis** and Th. Zisis (2015) Two-dimensional indentation of microstructured solids characterized by couple-stress elasticity, *Journal of Strain Analysis for Engineering Design* **51**, 318–331 [\[LINK\]](#)
- [J14] **P.A. Gourgiotis** and H.G. Georgiadis (2015) Torsional and SH surface waves in an isotropic and homogeneous elastic half-space characterized by the Toupin–Mindlin gradient theory, *International Journal of Solids and Structures* **62**, 217–228 [\[LINK\]](#)
- [J13] D.S. Anagnostou, **P.A. Gourgiotis** and H.G. Georgiadis (2015) The Cerruti problem in dipolar gradient elasticity, *Mathematics and Mechanics of Solids* **20**, 1088–1106 [\[LINK\]](#)
- [J12] **P.A. Gourgiotis** and S. Stupkiewicz (2014) Macroscopic stress and strain in a doubly periodic array of dislocation dipoles, *Proceedings of the Royal Society A. Mathematical, Physical and Engineering Sciences*, 470: 20140309 [\[LINK\]](#)
- [J11] H.G. Georgiadis, **P.A. Gourgiotis** and D.S. Anagnostou (2014) The Boussinesq problem in dipolar gradient elasticity, *Archive of Applied Mechanics* **84**, 1373–1391 [\[LINK\]](#)
- [J10] **P.A. Gourgiotis** and A. Piccolroaz (2014) Steady-state propagation of a mode II crack in couple stress elasticity, *International Journal of Fracture* **188**, 119–145 [\[LINK\]](#)
- [J9] Th. Zisis, **P.A. Gourgiotis**, K.P. Baxevanakis and H.G. Georgiadis (2014) Some basic contact problems in couple-stress elasticity, *International Journal of Solids and Structures* **51**, 2084–2095 [\[LINK\]](#)
- [J8] **P.A. Gourgiotis**, H.G. Georgiadis and I. Neocleous (2013) On the propagation and reflection of plane waves in half-spaces of microstructured materials governed by dipolar gradient elasticity, *Wave Motion* **50**, 437–455 [\[LINK\]](#)
- [J7] G. Lykotrafitis, H.G. Georgiadis and **P.A. Gourgiotis** (2012) Rapid sliding motion of a rigid flat indenter over a thermoelastic half-space, *Archive of Applied Mechanics* **82**, 1481–1495 [\[LINK\]](#)

- [J6] **P.A. Gourgiotis**, H.G. Georgiadis and M.D. Sifnaiou (2011) Couple-stress effects for the problem of a crack under concentrated shear loading, *Mathematics and Mechanics of Solids* 17, 433–459 [\[LINK\]](#)
- [J5] **P.A. Gourgiotis** and H.G. Georgiadis (2011) The problem of a sharp notch in couple-stress elasticity, *International Journal of Solids and Structures* 48, 2630–2641 [\[LINK\]](#)
- [J4] **P.A. Gourgiotis**, M.D. Sifnaiou and H.G. Georgiadis (2010) The problem of sharp notch in microstructured solids governed by dipolar gradient elasticity, *International Journal of Fracture* 166, 179–201 [\[LINK\]](#)
- [J3] **P.A. Gourgiotis** and H.G. Georgiadis (2009) Plane-strain crack problems in microstructured solids governed by dipolar gradient elasticity, *Journal of the Mechanics and Physics of Solids* 57, 1898–1920 [\[LINK\]](#)
- [J2] **P.A. Gourgiotis** and H.G. Georgiadis (2008) An approach based on distributed dislocations and disclinations for crack problems in couple-stress elasticity, *International Journal of Solids and Structures* 45, 5521–5539 [\[LINK\]](#)
- [J1] **P.A. Gourgiotis** and H.G. Georgiadis (2007) Distributed dislocation approach for cracks in couple-stress elasticity: shear modes, *International Journal of Fracture* 147, 83–102 [\[LINK\]](#)

### Κεφάλαια σε Βιβλία και Τόμους

- [B3] Th. Zisis, **P.A. Gourgiotis** and H.G. Georgiadis (2018) Contact Mechanics in the Framework of Couple Stress Elasticity, in: Li S. and Gao X.L. (Eds.) *Generalized Models and Non-classical Approaches in Complex Materials 2*, in: Altenbach H. et al., Springer International Publishing AG, Chapter 14, pp. 1–28. [\[LINK\]](#)
- [B2] **P.A. Gourgiotis** and H.G. Georgiadis (2013) Crack Problems in the Theories of Couple-Stress Elasticity and Dipolar Gradient Elasticity: A Comparison, in: Li S. and Gao X.L. (Eds.) *Handbook of Micromechanics and Nanomechanics*. Pan Stanford Publishing, Chapter 12, pp. 435–465. [\[LINK\]](#)
- [B1] H.G. Georgiadis and **P.A. Gourgiotis** (2010) An approach based on integral equations for crack problems in standard couple-stress elasticity, in: Maugin G.A. and Metrikine A.V. (Eds.) *Mechanics of Generalized Continua: One Hundred Years After the Cosserats*. Springer, pp. 253–262. [\[LINK\]](#)

### Ομιλίες με Πρόσκληση

- [I2] **P.A. Gourgiotis** (2015) Folding and faulting of an elastic continuum as the response to a material instability. *Mathematics of Differential Growth, Morphogenesis, and Pattern Selection*. [OBERWOLFACH Miniworkshop ID1545b](#) (November 1-7, 2015, Oberwolfach, Germany– Organized by: Profs. K. Garikipati, A. Goriely and E. Kuhl)

- [I1] **P.A. Gourgiotis** (2011) Crack problems in the theories of couple-stress elasticity and strain-gradient elasticity: A comparison. *Department of Chemical Engineering Materials and Environment (DICMA), University of Rome La Sapienza* (November 3, 2011, Rome, Italy – Organized by: Profs. S. Vidoli and G. Sciarra)

### Διοργάνωση Συνεδρίων

- [S3] (2022) Mini-Symposium on ‘*Generalized Continua – New Developments and Applications*’, 11th European Solid Mechanics Conference [ESMC2022](#) [July 1-8, NUI Galway, Ireland] – Organizers: **Panos Gourgiotis**, Holm Altenbach, and Victor Eremeyev.
- [S2] (2018) Mini-Symposium on ‘*Mechanics of Generalized Continua with Applications to Microstructured Materials*’, 10th European Solid Mechanics Conference [ESMC2018](#) [July 1-8, Bologna, Italy] – Organizers: **Panos Gourgiotis**, Victor Eremeyev, and Patrizio Neff.
- [S1] (2016) Mini-Symposium on ‘*Micromechanics of Materials and Generalized Continua*’, 11th International Congress on Mechanics HSTAM2016 [May 27-30, Athens, Greece] – Organizers: **Panos Gourgiotis** and Thanasis Zisis.

### Εργασίες σε Διεθνή Συνέδρια με Κριτές

- [C32] **P.A. Gourgiotis**, Th. Zisis, G. Kuci, H.G. Georgiadis (2021) Some results for surface waves in the framework of gradient theories for microstructures materials (*EMASS'21*) (Modena, Italy; 26-28 April 2021)
- [C31] J.A. Marquez Ruiz, B. Chen, J. Trevelyan, **P.A. Gourgiotis**, E.L. Albuquerque (2019) Enriched BEM for water coning. *Twelfth UK Conference on Boundary Integral Methods (UKBIM12)* (Oxford Brookes, UK; 8-9 July 2019)
- [C30] G. Hattori, **P.A. Gourgiotis**, J. Trevelyan (2018) A couple-stress formulation for the boundary element method. *International Conference on Boundary Element and Meshless Techniques BETEQ* (Malaga Spain; 9-12 July 2018) [[LINK](#)]
- [C29] Th. Zisis, **P.A. Gourgiotis**, H.G. Georgiadis (2018). Contact problems in the context of couple stress elasticity. *10th European Solid Mechanics Conference ESMC2018* (Bologna Italy; 1-8 July 2018)
- [C28] **P.A. Gourgiotis** (2018). Interaction of shear cracks in couple-stress elasticity. *10th European Solid Mechanics Conference ESMC2018* (Bologna Italy; 1-8 July 2018)
- [C27] G. Hattori, **P.A. Gourgiotis**, J. Trevelyan (2018) A couple-stress formulation for the isogeometric boundary element method (IGABEM). *6th European Conference on Computational Mechanics ECCM 6* (Glasgow, UK; 11-15 June 2018)
- [C26] D. Bigoni, **P.A. Gourgiotis** (2017) Static and dynamic folding of three-dimensional elastic materials. *ICCM21 21<sup>st</sup> International Conference of Composite Materials* (Xian, China; 20-25 August 2017) [[LINK](#)]

- [C25] **P.A. Gourgiotis** (2017). Microstructural effects on shear crack propagation in brittle materials. *CERMODEL2017 Modelling and Simulation meet Innovation in Ceramics Technology* (Trento, Italy; 26-28 July 2017)
- [C24] Th. Zisis, **P.A. Gourgiotis**, K.P. Baxevanakis and H.G. Georgiadis (2016) Analysis of the tilted flat punch in couple stress elasticity. *11<sup>th</sup> HSTAM International Congress on Mechanics* (Athens, Greece; May 27-30, 2016)
- [C23] H.G. Georgiadis and **P.A. Gourgiotis** (2016) On the propagation of torsional & SH surface waves in an isotropic and homogeneous gradient elastic half-space *11<sup>th</sup> HSTAM International Congress on Mechanics* (Athens, Greece; May 27-30, 2016).
- [C22] T. K. Papathanasiou, **P.A. Gourgiotis**, F. Dal Corso (2015) On the thermoelastic response of a gradient elastic half-space subjected to a thermal shock. *8<sup>th</sup> GRACM International Congress on Computational Mechanics* (Volos, Greece; July 12-15, 2015) [[LINK](#)]
- [C21] **P.A. Gourgiotis** and D. Bigoni (2015) Stress channelling in polar materials. *XXII Congresso - Associazione Italiana di Meccanica Teorica e Applicata* (Genova, Italy; September 14-17, 2015)
- [C20] **P.A. Gourgiotis** and D. Bigoni (2015) Folding and stress channelling in Cosserat continua. *ESMC-2015, 9<sup>th</sup> European Solid Mechanics Conference* (Madrid, Spain; July 6-10, 2015)
- [C19] **P.A. Gourgiotis**, F. Dal Corso and Th. Zisis and (2015) The contact problem of a rigid flat punch indenting a couple-stress thermoelastic half-space. *EUROMECH Colloquium 575 - Contact mechanics and coupled problems in surface phenomena* (Lucca, Italy; 30 March-2 April, 2015)
- [C18] **P.A. Gourgiotis** and A. Piccolroaz (2014) The mode II crack propagation problem in couple-stress elasticity. *EUROMECH Colloquium 563 – Generalized continua and their application to the design of composites and metamaterials* (Cisterna di Latina, Italy; March 17-24, 2014).
- [C17] **P.A. Gourgiotis** and A. Piccolroaz (2013) The effect of couple-stresses in the mode II steady-state crack propagation problem. *6<sup>th</sup> International Symposium on Defect and Material Mechanics – ISDMM2013* (Nantes, France; July 1-3, 2013).
- [C16] K.P. Baxevanakis, **P.A. Gourgiotis** and H.G. Georgiadis (2013) Interaction of cracks with dislocations in couple-stress elasticity. *10<sup>th</sup> HSTAM International Congress on Mechanics* (Crete, Greece; May 25-27, 2013).
- [C15] T. Zisis, **P.A. Gourgiotis**, K.P. Baxevanakis and H.G. Georgiadis (2013) Plane strain contact problems in couple-stress elasticity. *10<sup>th</sup> HSTAM International Congress on Mechanics* (Crete, Greece; May 25-27, 2013).
- [C14] **P.A. Gourgiotis**, H.G. Georgiadis and D.S. Anagnostou (2013) Finite fields in stress concentration problems treated by gradient elasticity. *10<sup>th</sup> HSTAM International Congress on Mechanics* (Crete, Greece; May 25-27, 2013).

- [C13] **P.A. Gourgiotis** and H.G. Georgiadis (2012) Cracks under concentrated and distributed loadings in materials governed by couple-stress elasticity. *12<sup>th</sup> International Conference on Computational & Experimental Engineering and Sciences – ICCES’12* (Crete, Greece; April 30-May 4, 2012).
- [C12] **P.A. Gourgiotis** and H.G. Georgiadis (2011) Energy release rates for cracks and notches in couple-stress elasticity. *5<sup>th</sup> International Symposium on Defect and Material Mechanics – ISDMM2011* (Seville, Spain; June 27 – July 1, 2011).
- [C11] H.G. Georgiadis and **P.A. Gourgiotis** (2011) Full-field solutions for crack problems in couple-stress and gradient elasticity, *2<sup>nd</sup> International Conference of Engineering Against Fracture* (Mykonos, Greece; June 22-24, 2011).
- [C10] H.G. Georgiadis and **P.A. Gourgiotis** (2010) Notch and crack problems in couple-stress elasticity. *7<sup>th</sup> German-Greek-Polish Symposium on Advances in Applied Mechanics* (Poznan, Poland; 19-22 September 2010).
- [C9] H.G. Georgiadis and **P.A. Gourgiotis** (2010) Notch and crack problems in couple-stress elasticity. *9<sup>th</sup> HSTAM International Congress on Mechanics* (Limassol, Cyprus; 12-14 July 2010).
- [C8] **P.A. Gourgiotis** and H.G. Georgiadis (2010) Crack problems in the theories of couple-stress elasticity and strain-gradient elasticity. *1<sup>st</sup> Greek and Greek-Ukrainian Conference on Fracture Mechanics of Materials* (Xanthi, Greece; 20-24 October, 2010).
- [C7] H.G. Georgiadis and **P.A. Gourgiotis** (2009) Full-field solutions for crack problems in the Toupin-Mindlin gradient elasticity and in couple-stress elasticity. *EUROMECH-Colloquium 510: Mechanics of Generalized Continua: A hundred years after the Cosserats* (Paris, France; 13-16 May, 2009)
- [C6] H.G. Georgiadis and **P.A. Gourgiotis** (2009) Crack problems in dipolar gradient elasticity. *4<sup>th</sup> International Symposium on Defect and Material Mechanics – ISDMM2009* (Trento, Italy; July 6-9, 2009).
- [C5] **P.A. Gourgiotis** and H.G. Georgiadis (2009) The elastic notch problem for microstructured materials in dipolar gradient elasticity. *3<sup>rd</sup> Conference on Generalized Continuum Theories* (Thessaloniki, Greece; 1-3 May, 2009).
- [C4] **P.A. Gourgiotis** and H.G. Georgiadis (2008) Integral equation solution of plane-strain crack problems in gradient elasticity. *2<sup>nd</sup> Conference on Generalized Continuum Theories* (Ioannina, Greece; May 1-3, 2008).
- [C3] **P.A. Gourgiotis** and H.G. Georgiadis (2008) An analytical / numerical approach based on integral equations for crack problems of gradient elasticity. *8<sup>th</sup> World Congress on Computational Mechanics* (Venice, Italy; 30 June - 4 July, 2008).
- [C2] **P.A. Gourgiotis** and H.G. Georgiadis (2007) An approach based on distributed dislocations and disclinations for crack problems in couple-stress elasticity. *8<sup>th</sup> HSTAM International Congress on Mechanics* (Patras, Greece; July 12-14, 2007).



- [C1] **P.A. Gourgiotis** and H.G. Georgiadis (2007) Distributed dislocation approach for cracks in couple-stress elasticity. *3<sup>rd</sup> International Symposium on Defect and Material Mechanics – ISDMM2007* (Assuois, France; 25-29 March, 2007)

## Επίβλεψη Εργασιών

- 2020 - Σήμερα **Π. Κουκούλη**, Υποψήφια Διδάκτωρ. *Προβλήματα ατελειών και επαφών σε φλεξο-ηλεκτρικά υλικά*. Τμήμα Πολιτικών Μηχανικών, Πανεπιστήμιο Θεσσαλίας [Επιβλέπων: Π. Γουργιώτης]
- 2016 - 2019 **Yanpeng Gong**, PhD Thesis: *The isogeometric boundary element method and its application in thermal barrier coatings of aeroengine turbine blade*. Durham University [Co-Advisor: P.A. Gourgiotis]
- 2018- 2020 **J.A. Marquez Ruiz** MSc Thesis: *Enriched BEM for hydrocarbons recovery*. Durham University [Co-Advisor: P.A. Gourgiotis]
- 2019 - 2020 **R. Schofield**: MSc Thesis: *Functionally graded thin films modelled by couple stress elasticity*. Durham University [Advisor: P.A. Gourgiotis]
- 2020 - Σήμερα 5 Διπλωματικές Εργασίες στο Τμήμα Πολιτικών Μηχανικών, Π.Θ.
- 2016 - 2020 12 Διπλωματικές Εργασίες [MEng/BEng] στο Department of Engineering, Durham University, UK.

## Ακαδημαϊκές Διακρίσεις

- 2018 **Ιταλική Υψηλότητα για Αναπληρωτή Καθηγητή (Εθνικός Διαγωνισμός)** - *Abilitazione Scientifica Nazionale, Scienza delle Costruzioni - Bando D.D. 1532/2016, Settore Concorsuale 08/b2*.
- 2009 **Θωμαΐδειο Βραβείο** για την επιστημονική εργασία: 'Plane-strain crack problems in microstructured solids governed by dipolar gradient elasticity', P.A. Gourgiotis and H.G. Georgiadis, *Journal of the Mechanics and Physics of Solids* 57, 1898–1920 (2009).
- 2008 **Θωμαΐδειο Βραβείο** για την επιστημονική εργασία: 'An approach based on distributed dislocations and disclinations for crack problems in couple-stress elasticity', P.A. Gourgiotis and H.G. Georgiadis, *International Journal of Solids and Structures* 45, 5521–5539 (2008)

## Υποτροφίες

- 2006-2008 **Υποτροφία Περικλή Σ. Θεοχάρη** για την εκπόνηση της Διδακτορικής Διατριβής.
- 2004-2007 **Υποτροφία Ιδρύματος Κρατικών Υποτροφιών (ΙΚΥ)** για την εκπόνηση της Διδακτορικής Διατριβής.

## Συμμετοχή σε Ερευνητικά Προγράμματα

- 01/11/2014 – [UNITN FP7-PEOPLE-IDEAS-ERC-2013-AdG] ERC Advanced Grant  
01/9/2016 “Instabilities and nonlocal multiscale modelling of materials”. ERC-2013-ADG-340561-INSTABILITIES, University of Trento, Italy – [Επ. Υπεύθυνος: [Prof. D. Bigoni](#)]
- 01/11/2012 – [UNITN FP7-PEOPLE-2011-IAPP] Marie Curie IAPP “Modelling and optimal  
01/11/2014 design of ceramic structures with defects and imperfect interfaces”. IAP-GA-2011-286110-INTERCER2, University of Trento, Italy – [Επ. Υπεύθυνος: [Prof. D. Bigoni](#)]
- 01/02/2011 – Ίδρυμα Κρατικών Υποτροφιών (ΙΚΥ): “Διάδοση Κυμάτων στα πλαίσια  
01/02/2012 Θεωριών Βαθμίδα Ελαστικότητα”. Τομέας Μηχανικής, Ε.Μ.Π.
- 1/12/2010 – [ΠΕΒΕ 2010] «Δυναμικά Προβλήματα Ρωγμών και Επαφών στα πλαίσια  
31/05/2012 Γενικευμένων θεωριών Συνεχούς Μέσου και Θερμο-Μηχανικής», Πρόγραμμα Βασικής Έρευνας ΠΕΒΕ 2010, Ε.Μ.Π. (Κωδικός Προγράμματος 65/1843) – [Επ. Υπεύθυνος [Καθ. Χ. Γεωργιάδης](#)]
- 05/10/2008 – [ΠΕΒΕ 2008] “Προβλήματα Ρωγμών, Επαφών και Διάδοσης Κυμάτων στα  
04/04/2010 πλαίσια της θεωρίας Βαθμίδας Ελαστικότητας”. Πρόγραμμα Βασικής Έρευνας ΠΕΒΕ 2008, Ε.Μ.Π. (Κωδικός Προγράμματος 65/1695) – [Επ. Υπεύθυνος [Καθ. Χ. Γεωργιάδης](#)]
- 01/01/2005 – [ΛΕΥΚΙΠΠΟΣ 2005] «Μηχανική Θραύσεων και Εξαρμώσεων σε Υλικά με  
01/10/2007 Μικροδομή», Πρόγραμμα Βασικής Έρευνας ΛΕΥΚΙΠΠΟΣ, Ε.Μ.Π. (Κωδικός Προγράμματος 65/1496) – Επ. Υπεύθυνος [Καθ. Χ. Γεωργιάδης](#)]
- 01/10/2005 – [ΠΥΘΑΓΟΡΑΣ II / ΕΠΕΑΕΚ II] «Εφαρμογή της Θεωρίας Βαθμίδας για την  
31/12/2005 επίλυση Προβλημάτων Συνοριακών Τιμών με χρήση Αναλυτικών Μεθόδων και Μικτών, Προσαρμοστικών Πεπερασμένων Στοιχείων», ΠΥΘΑΓΟΡΑΣ II / ΕΠΕΑΕΚ II, Ε.Μ.Π. (Κωδικός Προγράμματος 68/843) – [Επ. Υπεύθυνος [Καθ. Γ. Τσαμασφύρος](#)]
- 01/03/2007 –  
21/12/2007

## Κριτής σε Επιστημονικά Περιοδικά

Proceedings of the Royal Society A ■ International Journal of Solids and Structures ■ European Journal of Mechanics - A/Solids ■ Journal of Elasticity ■ Journal of Thermodynamics ■ Applied Mathematical Modelling ■ International Journal of Soil Dynamics and Earthquake Engineering ■ Quarterly Journal of Mechanics and Applied Mathematics ■ Journal of Applied Physics ■ Mechanics Research Communications ■ Mathematics and Mechanics of Solids ■ International Journal of Thermal Sciences ■ Mathematical Methods in Applied Sciences ■ Journal of Engineering Mathematics ■ Archives of Mechanics ■ Meccanica ■ Journal of Mechanics of Materials and Structures ■ Journal of Earth System Science ■ Journal of the European Ceramic Society ■ Waves in Random and Complex Media.

## Λοιπές Ακαδημαϊκές Δραστηριότητες

- Εξωτερικός εξεταστής (external examiner) σε 1 διδακτορική διατριβή (University of Strathclyde, 2018)
- Review Editor for *Frontiers in Mechanical Engineering: Solid and Structural Mechanics* (Journal)
- Review Editor for *Frontiers in Materials: Metamaterials* (Journal)

## Μέλος σε Επιστημονικούς Συλλόγους

- European Mechanics Society (EUROMECH)
- Τεχνικό Επιμελητήριο Ελλάδας (ΤΕΕ)
- Σύλλογος Πολιτικών Μηχανικών Ελλάδος (ΣΠΜΕ)
- Ελληνική Εταιρία Θεωρητικής και Εφαρμοσμένης Μηχανικής (ΕΕΘΕΜ)
- Istituto Nazionale di Alta Matematica (INdAM, Italy).