

Name: Ashraf Mohammad Hasan Hadoush

Last degree University: Ph. D.

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EDUCATION

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| 2010 | Ph.D. | Applied Mechanics Department, University of Twente, The Netherlands.
<i>Dissertation:</i> Efficient simulation and process mechanics of incremental sheet forming |
| 2005 | M.Sc. | Computational Engineering, Ruhr University Bochum, Germany
<i>Thesis:</i> Calculation of martensitic twin structures determined by surface energy effects. |
| 2003 | B.Sc. Eng. | Mechanical Engineering, University of Jordan, Jordan
<i>Project:</i> Normal mode of beams with nonlinear boundary conditions using power series as approximate solution. |
| 1998 | Tawjihi | General Secondary Examination Certificate, Scientific stream, Amman, Jordan. |

EXPERIENCE

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| Aug 2015 – present | Assistant Professor | Mechanical Engineering, Palestine Technical University – Kadoorie, Palestine |
| 2019 | Expert | Evaluating Capacity Building proposals in the field of Higher Education,
The Education, Audiovisual and Culture Executive Agency – European Commission. |
| Oct 2012 – Aug 2015 | Postdoc researcher | Complex material response described by deformation gradient decomposition, Carnegie Mellon University in Qatar, Qatar |
| Feb 2011 – Sep 2012 | Lecturer (Ph. D.) | Teaching, Department of Mechanical Engineering, The Hashemite University, Jordan |
| Jun 2012 – Aug 2012 | Research exchange visit | Numerical algorithms for efficient simulation, Institute of Applied Mechanics – RWTH Aachen University, Germany. |

Jun 2010 – Aug 2010	Postdoc researcher	Implementation of numerical techniques, Mines ParisTech – Center of Material Forming, France.
Apr 2006 – May 2010	PhD researcher	Computational and process mechanics of incremental sheet forming, Department of Applied Mechanics – University of Twente, The Netherlands
Feb 2009 – Mar 2009	Research exchange visit	Implementation of solid shell element, Department of Mechanical Engineering – University of Aveiro, Portugal.
Apr 2004 – Mar 2006	Research assistant	Heat transfer modeling for ring rolling process, Chair of Production System – Ruhr University Bochum, Germany.

RESEARCH INTEREST/SKILLS

Computational mechanics, continuum mechanics, numerical algorithm, FEM.

PUBLICATIONS IN REFEREED JOURNALS

A. Hadoush, H. Demirkoparan and T.J. Pence (2017), Finite element analysis of internally balanced elastic materials, *Computer Methods in Applied Mechanics and Engineering*, vol. 322, pp. 373 – 395.

A. Hadoush, H. Demirkoparan and T.J. Pence (2016), Simple Shearing and Azimuthal Shearing of an Internally Balanced Compressible Elastic Material, *Int. J. Nonlinear Mechanics*, vol. 79, pp. 99 – 114.

A. Hadoush, H. Demirkoparan and T.J. Pence (2015), A constitutive model for an internally balanced compressible elastic material, *Mathematic and Mechanics of Solids*, vol. 22:3, pp. 372 – 400.

A. Hadoush and A.H. van den Boogaard (2012), Efficient implicit simulation of incremental sheet forming, *Int. J. for Numerical Methods in Engineering*, vol. 90:5, pp. 597 – 612.

A. Hadoush, A.H. van den Boogaard and W.C. Emmens (2011), A numerical investigation of the continuous bending under tension test, *J. of Materials Processing Technology*, vol. 211:12, pp. 1948 – 1956.

A. Hadoush (2011), On the Deformation Modes of Continuous Bending under Tension Test, *Jordan Journal of Mechanical and Industrial Engineering*, Vol. 5:6, pp. 553 – 557.

A. Hadoush and A.H. van den Boogaard (2009), Substructuring in the implicit simulation of single point incremental sheet forming, *Int. J. Material Forming*, vol. 2, pp. 181 – 189.

PUBLICATIONS IN CONFERENCE PRCEEDINGS

A. Hadoush, H. Demirkoparan and T.J. Pence, Straightening an annular cylindrical sector that is composed of an internally balanced compressible elastic material, ESMC, 2015

A. Hadoush, H. Demirkoparan and T.J. Pence, FE Formulation of Internal Mechanical Balance based on Multiplicative Decomposition of the Deformation Gradient, ACMFMS, 2014.

A. Hadoush, H. Demirkoparan and T.J. Pence, Modeling of Soft Materials via Multiplicative Decomposition of Deformation Gradient, USNCTAM, 2014.

A. Hadoush, H. Demirkoparan and T.J. Pence, Internally balanced solid response in compressible hyperelasticity described by a deformation gradient product decomposition, ICMM3, 2013.

A. Radermacher and S. Reese and A. Hadoush, Selective proper orthogonal decomposition model reduction for forming simulations, GAMM, 2013.

A. Hadoush, A. H. van den Boogaard, Efficient implicit simulation for incremental forming, IV European Congress on Computational Mechanics, 2010.

A. Hadoush and A.H. van den Boogaard, On the performance of substructuring implicit simulation of single point incremental forming, Esaform, 2009.

A. Hadoush and A.H. van den Boogaard, Time reduction in implicit single point incremental forming simulation by domain decomposition, Numisheet, 2008.

A. Hadoush and A.H. van den Boogaard, Time reduction in implicit single point incremental sheet forming simulation by refinement - derefinement, Esaform, 2008.

A. Hadoush, A.H. van den Boogaard and J. Huétink, Stable incremental deformation of a strip to high strain, Shemet, 2007.

AFFILIATIONS

2003 Member Engineers Association, Jordan and Palestine