

## CURRICULUM VITAE

### **MOHD NASIR TAMIN**

CEng, MIMarEST  
Member IEEE



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Faculty of Mechanical Engineering,  
Universiti Teknologi Malaysia,  
81310 UTM Skudai, Johor,  
MALAYSIA.

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Fax: +60-7- 5557096

*Personal Information:*

Date of birth: 01 December 1961

Age: 53 years

Sex: Male

Height: 5 feet 8 inches

Marital Status: Married (with 2 daughters age 28 and 22 years)

*Academic Background:*

April 1997 Ph.D. Mechanical Engineering and Applied Mechanics  
University of Rhode Island, Kingston, Rhode Island, USA  
Dissertation: Fatigue Damage Mechanisms of SiC/Ti Metal Matrix Composites

December 1987 M.Sc. Mechanical Engineering  
Washington State University, Pullman, Washington, USA  
Thesis: Elasto-Plastic Finite Element Analysis and Numerical Study of a  
Compact Tension Specimen

March 1984 B.Sc. Mechanical Engineering  
Northrop University, Inglewood, California, USA  
Dean's list

*Professional Experience:*

2006 Professor  
Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM)

2006 Head and Founder, Computational Solid Mechanics Laboratory (CSMLab), UTM

2005 – 2007 Head  
Department of Materials Engineering, Faculty of Mechanical Engineering, UTM

2004 - 2006 Director, Center for Composite (PUSKOM), UTM

2000 – 2005 Head  
Department of Applied Mechanics, Faculty of Mechanical Engineering, UTM

1999 - 2006 Associate Professor  
Department of Applied Mechanics, Faculty of Mechanical Engineering, UTM

1996 – 1999 Lecturer  
Department of Applied Mechanics, Faculty of Mechanical Engineering, UTM

1992 – 1996 Research Assistant  
Department of Mechanical Engineering, University of Rhode Island, USA.

1984 - 1992 Assistant Lecturer  
Department of Mechanics and Design, Faculty of Mechanical Engineering, UTM

*Professional Training Participated (Engineering):*

Fracture Mechanics Methodology  
4 days, Applied Research Corporation, Singapore, 1990

Universal Testing Machines – Operation and Maintenance  
5 days, DARTEC Limited, London, UK, 1999

Aircraft Durability and Damage Tolerance Assessment  
10 days, Southwest Research Institute, USA, 2000

MATLAB, SIMULINK and MATLAB Toolboxer for Designing Intelligent Systems  
3 days, TEKBAK Australia Pty Ltd., Australia, 2004

Surface Mount Technology  
Flextronics *Tech@Campus* Workshop  
9 days, Shah Alam, Malaysia, 2007

The Finite Element Method – An Advanced Course  
3 days, J.N. Reddy, Ironix-Continuing Education, February 2010

The Five Disciplines of Innovation  
3 days, SRI International, April 2010

Advanced Composites Aircraft Structures – Detecting Structural Damage and Solution for Repair  
3 days, Advanced Composite Training, 23-25 July 2012, Singapore.

*Research Experience:*

**Field 1: Mechanics of Advanced Composites**

Projects: 1. Fatigue Crack Growth Mechanisms in Titanium Metal Matrix Composites  
Duration: 1992 – 1997 – USAF Office of Scientific Research Project  
Role: Researcher

2. Development and Performance Evaluation of SiC/Al Metal Matrix Composites for Automotive Engine Applications  
Duration: 1999-2003 – IRPA Grants  
Role: Project Leader

3. Unified Methodology for Damage Assessment of Structural Composites  
Duration: 2011 – 2013 – Tier-1 RUG Grant  
Role: Project Leader

4. Design and Construction of Efficient Body Structure for Electric Vehicle  
Duration: 2011 – 2014 – Flagship RUG Grant (On-going)  
Role: Project Leader

**Field 2:****Characterization of Advanced Materials and Applications**

1. Fatigue Characterization of Cast Ti-Al Intermetallic Alloys for Aircraft and Automotive Engine Applications

Duration: 1999 – 2003 – IRPA Grants

Role: Project Leader

2. Natural Gas Compressor – Design and Development

Duration: 2003 – 2008 – IRPA Grant

Role: Researcher (on Stress analysis and fatigue life prediction)

3. Performance Characterization of Advanced Alloys for High-Temperature Recuperators Applications in Improved Efficiency Microturbines

Duration: 2007-2009 - eScienceFund

Role: Project Leader

4. Damage and Fracture Mechanics-Based Design Methodology

Duration: 2009-2012 - TechnoFund

Role: Project Leader

5. Damage Mechanics-Based Fatigue Design Methodology for Structural Components

Duration: 2009-2013 - Libya's People's Bureau Fund

Role: Project Leader - Fellowship Project Supervisor

6. Moisture-Induced Oxidation-Creep Mechanisms of Austenitic Stainless Steel Foils at Elevated Temperatures

Duration: 2012-2014 – FRGS Grant (on-going)

Role: Project Leader

7. Methodology for Fatigue Life Improvement of Steel Cables and Wire Ropes

Duration: 2013-2015 – Contract Research, KISWIRE Sdn. Bhd. (on-going)

Role: Project Leader

8. New Field of Study in Fracture Mechanics based on Combination of Fractal Mathematics and Probabilistic Theory

Duration: 2013-2016 – FRGS Grant (on-going)

Role: Project Leader

**Field 3:****Reliability of Microelectronic Components / Computational Solid Mechanics**

Projects:

1. Deformation Characteristics of Flip Chips Due to Thermal Cycling

2. Thermal Resistance of Interface Materials for Electronic Applications

Duration: 2001 - 2003 – INTEL Collaboration

Role: Project Leader

3. Studies of Thermal Shock Stress to Electronic Packaging Failures

Duration: 2003-2005 – INTEL Fellowship Grant

Role: Project Leader - Fellowship Project Supervisor

4. Methodology for Assessment of Plastic/Organic Package Failure Under Thermo-mechanical Loading Conditions

Duration: 2003-2005 – INTEL Research Grant

Role: Project Leader

5. Low CTE Substrate to Improve Warp and Solder Joint Reliability (Intel-UTM-USM collaboration)

Duration: 2003-2005 – INTEL Research Grant

Role: Project Leader

6. Predictive Methodology for Crack Initiation and Propagation in Interconnect Materials  
Duration: 2005-2007 – INTEL Research Grant  
Role: Project Leader
7. A New Technique for Predicting Damage in Advanced Interconnect Materials for Microelectronic Applications  
Duration: 2007-2009 - eScienceFund  
Role: Project Leader
8. Evaluation of Fracture Mechanics-based Model for Lead-free Solder Interconnects  
Duration: 2007-2009 – INTEL Research Grant  
Role: Project Leader
9. Microstructure-Based Cohesive Damage Model for Fatigue of Solder Interconnects  
Duration: 2009-2011 – INTEL Research Grant  
Role: Project Leader
10. Simulation of Low Cycle Fatigue Behavior of Pb-free Solder Interconnects using Cohesive Zone Model  
Duration: 2009-2011 - INTEL Fellowship Grant  
Role: Project Leader - Fellowship Project Supervisor
11. Temperature- and Rate-Dependent Parameters for Damage-based Fatigue Models of Pb-free Solders  
Duration: 2011-2014 - INTEL Innovation Grant (on-going)  
Role: Project Leader
12. Damage Mechanics-based Methodology for Reliability Assessment of Through-Silicon Via (TSV) Interconnects  
Duration: 2013-2015 – CREST Funding with INTEL Matching Grant (on-going)  
Role: Project Leader

*Consultation & Services:*

Reports on:

Fatigue Testing of Structural Steel to “FATIGUE-BS 4449: 1998” Specification  
Antara Steel Sdn. Bhd., Pasir Gudang, Johor, 1998

Tensile Tests of Spot-Welded Plates  
Oriental Assemblers Sdn. Bhd., Tampoi, Johor, 1999

Failure Investigation on Battenfeld Extruder Screw  
Industrial Resins (Malaysia) Sdn. Bhd., Tampoi, Johor, 1999

Failure Analysis on Hydraulic Leveling Cylinder of Mobile Aerial Platform PR 012  
Malaysia Shipyard and Engineering Sdn. Bhd., Pasir Gudang, Johor, 1999  
(for Department of Health and Safety of Workers, Malaysia)

Failure Analysis of Torsion Spring  
Micro-Fine Technology Sdn. Bhd., Johor Bahru, Johor, 2002

Tension Tests of Copper Wire Samples  
Hitachi Cable (Johor) Sdn. Bhd., Senai, Johor, 2003

Failure Analysis of Passenger Hoist  
(for Department of Occupational Safety and Health, Johor, 2003)

Static and Dynamic Analysis of Towing Vehicle Installation Kits (TVIK)  
MMC Defense Sdn. Bhd., Nilai, Seremban, 2004

Finite Element Analysis of a Double Deck Roof Structure  
Protank Technologies Sdn. Bhd., Petaling Jaya, Selangor, 2004

Tension Tests of Metallic Foil Samples  
Folding Fatigue Tests of Metallic Foil Samples  
Muhibbah Engineering (M) Bhd., Klang, Selangor, 2004

Pull-out Test on Printer Rod Assemblies  
Innovalues Technologies Sdn. Bhd., Pasir Gudang, Johor, 2004

Finite Element Analysis of Dome Roof Structure  
Protank Technologies Sdn. Bhd., Petaling Jaya, Selangor, 2005

Rollover Test Simulation in Accordance to UNECE Regulation 66 Imposed by the Malaysian Government  
For the Association of Coach Builders, Malaysia and Department of Transportation, Malaysia, July 2008.

Finite Element Analysis of Welded Nozzle-on-Plate Structures  
Protank Technologies Sdn. Bhd., Petaling Jaya, Selangor, 2010

Failure Analysis (Fatigue) of a Centrifugal Pump Shaft  
Total Dynamics Engineering Sdn. Bhd., Port Dickson, Negeri Sembilan, Dec. 2010

Finite Element Analysis of Steam Valve  
PETRONAS Gas Bhd., Malaysia, June 2012

Finite Element Simulation of Swivel-Castor Bracket Assembly  
CPT Engineering Sdn. Bhd., Kuala Lumpur, December 2013

#### *Short Courses Delivered*

Introduction to Fatigue,  
30-31 July, 2007, Business Advanced Technology Center, UTM City Campus, Kuala Lumpur, Malaysia.

6-7 August, 2007, In-house training for Philip Morris (M) Sdn. Bhd., Seremban, Malaysia.

Materials, Load and the Ocean Environment, 30 Dec 2008 – 02 Jan 2009  
Fundamentals and Applications of Finite Element Method, 30-31 Jan & 06 Feb 2009  
Engineering Materials for Oil and Gas Installations, 22 May 2009  
Welding Design and Processes, 23 May 2009  
Workshop for Finite Element Analysis Design Project, Feb 2010  
(These courses are part of Certificate in Offshore Structure Design Program for Malaysia Marine & Heavy Engineering (MMHE) organized by S.P.A.C.E. UTM)

Introduction to Finite Element Method for Engineering Applications,  
22 Jan 2010, 03 Nov 2012, 24 Nov 2014  
(Biennial, 1-day free short course open to students, staff and industry. Organized by Postgraduate Students Society and Graduate School, UTM)

Workshop on Finite Element Simulation: Getting Started with Abaqus FEA Software,  
17-19 Nov 2012

Workshop and Seminar on Mechanical Testing of Materials, 26-28 Oct 2009 and 4-5 Sept 2011 for instructors of polytechnics, Malaysia.

Engineering Failure Analysis, 23<sup>rd</sup> Oct. 2010, Organized by Institute of Engineers Malaysia (Southern Branch).

Workshop on Advanced Green Technology

*CWP8 – Composite Research & Development Program*

Introduction to Research Methodology, 19 May 2012, Center for Composites (CfC), UTM

Introduction to FEM with Applications to Structural Composites, 8 May 2012, CfC, UTM

Research Methodology (Selected Modules)

Data Gathering and Analysis, 03 Dec 2007, 29 Jan 2009 and 06 Aug 2012, 08 Nov 2014

Development of a Research Proposal, 29-30 July 2013

Fracture and Damage Mechanics of Materials

3-5 June 2013, Faculty of Mechanical Engineering, Universiti Malaysia Pahang.

*Honors and Awards:*

University excellence Award 2013

Universiti Teknologi Malaysia, Malaysia

Visiting Professor

Institut Supérieur de l'Automobile et des Transport, Nevers, France

1-30 June 2012

Visiting Professor

College of Engineering, Dongguk University, Seoul, Korea

6-13 Mac 2012

Visiting Professor

Faculty of Mechanical Engineering, UTeM Melaka

July 2008-June 2010

University Excellence Award 2009

Universiti Teknologi Malaysia, Malaysia

Visiting Professor

Institut Supérieur de l'Automobile et des Transport, Nevers, France

9 May – 10 June 2008

Contract Research Award 2008

Universiti Teknologi Malaysia

University Excellence Award 2005

Universiti Teknologi Malaysia, Malaysia

1999 Sophia Lecturing-Research Award

Sophia University, Tokyo, Japan.

University Excellence Award 1998

Universiti Teknologi Malaysia, Malaysia

*Invited Lectures:*

Finite Element Analysis (FEA) and its Challenges, *Professional Discussion Program*, Advanced Computing Laboratory, ACL, Universiti Teknologi Malaysia, 1991.

Mechanics of Fatigue Crack Bridging in SiC<sub>i</sub>/Ti MMC, *Durability by Design Seminar*, Universiti Malaya, Kuala Lumpur, 6 Nov. 2003.

Evolution of Stress and Strain States in a Solder Joint During Thermal Cycling, *INTEL-University Research Seminar*, INTEL Technology, Penang, 2003.

Modeling of Sn-Pb Solder Joints in a Surface Mount Assembly Using Elastic-Viscoplastic and Unified Inelastic Strain Theories, *4<sup>th</sup> Simulating Reality Conference*, MSC Software Inc., Kuala Lumpur, 13 Sept. 2005.

New Composite Substrates for Electronics Applications, *Polymer and Rubber Institute of Malaysia, PRIM*, Universiti Teknologi Malaysia, Sept. 2005.

Numerical Experiments in the Evolution of Engineering Products – Opportunities and Challenges, *Syarahana Perdana Profesor (Inaugural Talk)*, Universiti Teknologi Malaysia, 14 Feb. 2007.

Addressing Reliability Issues in Electronics Packaging Through Numerical Modeling, *Keynote Lecture, Conference on Manufacturing and Electronics Technology (COMET)*, 26-27 Jan 2008, Johor Bahru, Malaysia.

UNECE R66 – Rollover Test Using Computer Simulation, SAE Technical Talk, 20 Aug 2008, Kuala Lumpur.

Numerical Modeling of Damage and Fracture in Engineering Materials and Structures – Opportunities and Challenges, *Keynote Lecture, 8<sup>th</sup> Int'l Conf. on Fracture and Strength of Solids (FEOFS2010)*, 7-9 June 2010, Kuala Lumpur.

Damage and Failure Process in Sheet Metal Components: Modeling Aspects, *Technical Seminar, Faculty of Engineering and Built Environment, Universiti Kebangsaan Malaysia*, 8 Oct. 2010.

Materials Integrity: Assessment and Prediction, *Keynote Lecture, 5<sup>th</sup> National Seminar on Structural Integrity*, 3-4 Nov. 2010, Kuala Lumpur.

Finite Element Simulation of Spot Welded Joint Failure Process, *Invited Paper, 2011 South East Asia Abaqus Users' Conference*, 20 – 21 October 2011, SINGAPORE

Simulation of Materials Damage and Fracture in CFRP Composites for Structural Applications, *Invited Paper, SAMPE ASIA 2012 Conference and Exposition*, 21-23 February 2012, Kuala Lumpur.

Simulation of Sheet Metal Deformation Processes - Issues and Challenges, *Keynote Address, ICADME 2012*, 27-28 February 2012, Penang, MALAYSIA.

Computational Engineering in the Development of Advanced Lightweight Vehicle Structure – Issues and Challenges, *Invited Paper, NATDES 2012*, 14-15 May 2012, Shah Alam, Malaysia

Assessment of Material Damage during Sheet Metal Deformation and Failure Process, *Keynote Address, 9<sup>th</sup> Intl. Conf on Fracture and Strength of Solids (FEOFS)*, 9-13 June 2013, Jeju Island, Korea.

Assessment of Progressive Failure Processes in Fiber-reinforced Polymer Composite Laminates, *Plenary Address, The Bi-annual International Conference on Experimental Solid Mechanics and Dynamics (X-MECH2014)*, 18-19 Feb 2014, Tehran, Iran.

Classical and Damage-based Models for Reliability Prediction of Solder Joints in BGA Packages, *Invited Talk, First International Seminar on Nanotechnology 2014*, 23 Feb 2014, Nanotechnology Center, Urmia University, Urmia, Iran.

*Conferences:*

Executive President / General Chair

8<sup>th</sup> International Conference on Fracture and Strength of Solids  
7-9 June 2010, Kuala Lumpur, <http://www.feofs2010.com>  
Far East Oceanic and Fracture Society (FEOFS), Japan

Special Session Organizer

SS4-Damage and Fracture of Composite Materials and Structures  
4<sup>th</sup> International Conference on Advanced Computational Engineering and Experimenting (ACE-X)  
8-9 July 2010, Paris, France, <http://www.ace-x2010.com>

Technical Committee Member

34<sup>th</sup> International Electronics Manufacturing Technology Conference  
30 Nov – 02 Dec. 2010, Melaka, Malaysia, <http://ewh.ieee.org/r10/malaysia/cpmt/iemt.htm>

Technical Committee Member

35<sup>th</sup> International Electronics Manufacturing Technology Conference  
6-8 Nov. 2012, Ipoh, Perak, Malaysia, <http://ewh.ieee.org/r10/malaysia/cpmt/iemt.htm>

Special Session Organizer

SS12- Deformation, Damage and Fracture of Fibrous Composites  
7<sup>th</sup> International Conference on Advanced Computational Engineering and Experimenting (ACE-X2013)  
1-4 July 2013, Madrid, Spain, <http://www.acex-conference.com/2013/>

Special Session Organizer

Session on Computational Solid Mechanics  
Intl. Materials, Industrial and Manufacturing Engineering Conference (MIMEC 2013),  
4-6 December 2013, Johor Bahru, Malaysia, <http://www.utm.my/mimec/committee/sessions-developers/>

General Chair

36<sup>th</sup> International Electronics Manufacturing Technology Conference  
11-13 Nov. 2014, Johor Bahru, Johor, Malaysia, <http://ewh.ieee.org/r10/malaysia/cpmt/iemt.htm>

*International Academic Activities:*

Doctoral Join-Supervision Program:

“Mechanics of Damage and Fracture Process in Unidirectional CFRP Composite Laminates,”  
Ph.D. candidate: Fethma M Nor, Dongguk University, Seoul, Korea.  
Completed (2012)

“Moisture Absorption Characteristics and Effects on Mechanical Behavior of CFRP Composite Laminates,”

Ph.D. Candidate: Wong King Jye, *Institut Supérieur de l'Automobile et des Transport (ISAT)*,  
University of Burgundy, Nevers, France.  
Completed (2013)

Research Discussion:

Organizer, UTM-KOREA University Research Discussion and Visit  
12 December 2013, UTM

## **JOURNAL PUBLICATIONS:**

### **1994-1995:**

1. M.N. Tamin, D. Zheng and H. Ghonem, "Time-Dependent Behavior of Continuous Fiber-Reinforced Metal Matrix Composites: Modeling and Applications," *J.Composites Technology & Research*, Vol. 16, No. 4, October 1994, pp. 314-322.
2. M. Tamin, D. Zheng and H. Ghonem, "Evolution of Internal States in Titanium Metal Matrix Composites Subjected to Cyclic and Creep Loading Conditions," *Advances in Fatigue Lifetime Predictive Techniques*, ASTM STP, Montral, Quebec, 1994.
3. M.N. Tamin and H. Ghonem, "Fracture Criterion for Bridging Fibers in Titanium Metal Matrix Composites at Elevated Temperature," *Durability of Composite Materials*, R.C. Wetherhold, ed., ASME, NY, MD-Vol. 51, 1995, pp. 51-58.
4. M.N. Tamin, D.J. Osborne and H. Ghonem, "Influence of Interfacial Properties on Fiber Debonding in Titanium Metal Matrix Composites," *Fatigue and Fracture at Elevated Temperature*, A. Nagar and S. Mall, eds., ASME, NY, AD-Vol. 50, 1995, pp. 121-134.

### **1996-2000:**

5. M.N. Tamin and H. Ghonem, "Evolution of Bridging Fiber Stress in Titanium Metal Matrix Composites at Elevated Temperature," *Advances in Fatigue Lifetime Predictive Techniques*, 3<sup>rd</sup> Vol. ASTM STP 1292, M.R. Mitchell and R.W. Landgraf, eds., ASTM, Philadelphia, PA, 1996, pp. 24-38.
6. M.N.Tamin and H. Ghonem, "Fatigue Damage Mechanisms of Bridging Fibers in Titanium Metal Matrix Composites," *J. Engineering Materials and Technology, Transactions of the ASME*, Vol. 122, Oct. 2000, pp. 370-375.

### **2001-2005:**

7. S. Hamada, H. Hamada, H. Suzuki, M.N. Tamin and A. Nozue, "Microstructure and Environment-Dependent Fatigue Crack Propagation Properties of Ti-48Al Intermetallics," *J. Materials Science and Engineering*, vol. 37, 2002, pp. 1107-1113.

### **2006-2010:**

8. M.N. Tamin, Y.B. Liew, A.N.R. Wagiman and L. W. Keat, "Solder Joint Fatigue in a Surface-Mount Assembly Subjected to Mechanical Loading," *IEEE Transaction on Components and Packaging Technologies*, Vol. 30, No. 4, Dec 2007, pp. 824-829.
9. I. Sudin. M.N. Tamin, V.C. Venkatesh, T.T. Mon, "Evaluation of a Material Flow Stress Model Adopted in Finite Element Modelling of Metal Cutting," *International Journal for Manufacturing Science & Technology*, Vol. 9, 2007, pp. 67-73.
- 10.M.N. Tamin, I. Sudin and T.T. Mon, "Thermal-Mechanical Responses of Ti-6Al-4V During Orthogonal Cutting Process," *Defect and Diffusion Forum*, Vols. 273-276, 2008, pp. 673-678.
- 11.M.N. Tamin, F.M. Nor and W.K. Loh, "Hybrid Experimental-Computational Approach for Solder/IMC Interface Shear Strength Determination in Solder Joints," *IEEE Transaction on Components and Packaging Technologies*, Vol. 33(3), 2010, pp. 614-620.

### **2011-2015**

12. S.S.R. Kolor, A. Abdul-Latif and M.N. Tamin, "Mechanics of Composite Delamination under Flexural Loading," *Key Engineering Materials*, Vols. 462-463, 2011, pp. 726-731.

13. N.M. Shaffiar, Z.B. Lai and M.N. Tamin, "Damage Mechanics Model for Solder/Intermetallics Interface Fracture Process in Solder Joints," *Key Engineering Materials*, Vols. 462-463, 2011, pp. 1409-1414.
14. M.A. Khattak, M.A. Khan and M.N. Tamin, "Effects of Thermal Aging on Ductile-to-Brittle Transition Temperature Behavior of Welded A516 Steel," *Key Engineering Materials*, Vols. 462-463, 2011, pp.1379-1384.
15. H. Osman and M.N. Tamin, "Creep Deformation Characteristics of Austenitic Stainless Steel Foils," *Key Engineering Materials*, Vols. 462-463, 2011, pp.906-911.
16. A.A. Borhana, A.T. Mohamad, A. Abdul-Latif, Z. Ahmad, A. Ayob and M.N. Tamin, "Ductile Failure Prediction of Spot Welded Lap Joint," *Applied Mechanics and Materials*, vol. 165, 2012, pp. 285-289.
17. S.S.R. Kolor, H. Hussin and M.N. Tamin, "Mode-I Fracture Characterization of CFRP Laminated Composites," *Key Engineering Materials II*, vol. 488-489, 2012, pp. 552-556.
18. H.O. Ali and M.N. Tamin, "Modified Monkman-Grant Relationship for Austenitic Stainless Steel Foils," *Journal of Nuclear Materials*, vol. 433, 2013, pp. 74-79.  
<http://dx.doi.org/10.1016/j.jnucmat.2012.08.048>
19. Y. Prawoto and M.N. Tamin, "A New Direction in Computational Fracture Mechanics in Materials Science: Will the Combination of Probabilistic and Fractal Fracture Mechanics Become Mainstream?" *Computational Materials Science*, vol. 69, 2013, pp. 197-203.
20. H. Borhana, H.O. Ali and M.N. Tamin, "Large Strain Shear Compression Test of Sheet Metal Specimens," *Experimental Mechanics*, May 2013.  
<http://dx.doi.org/10.1007/s11340-013-9763-0>
21. F.M. Nor, H.Y. Lee, J.Y. Lim, M.N. Tamin and D. Kurniawan, "Effect of Starter Defect to  $G_{IIC}$  of Unidirectional CFRP Composite," *Applied Mechanics and Materials*, vol. 493, 2014, pp. 773-776.
22. R. Alipour, S. Izman and M.N. Tamin, "Document Estimation of Charge Mass for High Speed Forming of Circular Plates using Energy Method," *Advanced Materials Research*, vol. 845, 2014, pp. 803-808.
23. H.O. Ali, A.A. Borhana and M.N. Tamin, "Material Parameters for Creep-Rupture of Austenitic Stainless Steel Foils," *J. Materials Engineering and Performance*, vol. 23(8), 2014, pp. 2858-2863.
24. K.J. Wong, X.J. Gong, S. Aivazzadeh and M.N. Tamin, "R-curve Modelling of Mode I Delamination in Multidirectional Carbon/Epoxy Composite Laminates," *Applied Mechanics and Materials*, vol. 606, 2014, pp. 159-163.
25. M. Johar, M.S.E. Kosnan and M.N. Tamin, "Cyclic Cohesive Zone Model for Simulation of Fatigue Failure Process in Adhesive Joints," *Applied Mechanics and Materials*, vol. 606, 2014, pp. 217-221.
26. M.M. Noh, F. Mozafari, M.A. Khattak and M.N. Tamin, "Effect of Pitting Corrosion on Strength of AISI 410 Stainless Steel Compressor Blades," *Applied Mechanics and Materials*, vol. 606, 2014, pp. 227-231.

## **PROCEEDING AND CONFERENCE PUBLICATIONS:**

### **1991-1995:**

1. M.N. Tamin, D. Zheng and H. Ghonem, "Time Dependent Stress Analysis of Thermal Cyclic Loading in Titanium Metal Matrix Composites," Proc. 7<sup>th</sup> NASA Thermomechanical Fatigue Workshop, NASA Lewis Research Center, Dec. 3-4, 1992.
2. M. Tamin, D. Zheng and H. Ghonem, "Axial Residual Stresses in Continuous Fiber Reinforced Metal Matrix Composites Under the Thermal Cyclic Loadings," Proc. 7<sup>th</sup> Thermomechanical Fatigue Workshop, NASA Lewis Research Center, Dec. 3-4, 1992.
3. M Tamin, D. Zheng and H. Ghonem, "Micromechanical Modeling of Time Dependent Behavior in Fiber Reinforced Metal Matrix Composites," Proc. FATIGUE 93, Montreal, Canada, 1993.
4. M.N. Tamin and H. Ghonem, "Inelastic Deformation of Continuous Fiber Reinforced Metal Matrix Composites Under Cyclic Thermal and Creep Loading," Proc. Symp. On Damage Mechanics in Composites, ASME Winter Annual Meeting, Chicago, Nov. 13-18, 1994.
5. T. Zhang, M.N. Tamin and H. Ghonem, "Analysis of Time-Dependent Fatigue Crack Tip in Titanium Metal Matrix Composites," ASME Winter Annual Meeting, Chicago, Nov. 12-17, 1995.

### **1996-2000:**

6. M.N. Tamin, D. J. Osborne and H. Ghonem, "Processing-Related Interface Properties in Titanium Metal Matrix Composites," Proc. First Int. Conf. On Ceramic and Metal Matrix Composites, CMMC 96, M. Fuentes, J.M. Martinez-Esnaola and A.M. Daniel, eds., Trans Tech Publications, Switzerland, 1996, pp. 639-650.
7. M.N. Tamin and H. Ghonem, "A Fatigue-Creep Interaction in Titanium Metal Matrix Composites," Proc. 19<sup>th</sup> Int. Congress on Theoretical and Applied Mechanics, ICTAM 96, Kyoto, Japan, Aug. 25-31, 1996.
8. M.N. Tamin and H. Ghonem, "A Criterion for the Fracture of Bridging Fibers in Metal Matrix Composites," Proc. Int. Conf. on Ceramic and Metal Matrix Composites, CMMC 96, San Sebastian, Spain, 9-12 Sept. 1996.
9. M.N. Tamin, D.J. Osborne and H. Ghonem, "A Fiber/Matrix Interface Cracking in Metal Matrix Composites at Elevated Temperature," Proc. 5<sup>th</sup> Int. Symp. On Processing and Fabrication of Advanced Materials, TMS/ASM Fall Meeting, Cincinnati, OH, Oct. 6-10, 1996.
10. D.J. Osborne, M.N. Tamin and H. Ghonem, "A Link Between Processing and Damage Response in Metal Matrix Composites," Proc. Int. Mechanical Engineering Congress and Exposition: ASME Winter Annual Meeting, Symp. On Application on Metallic Materials in Advanced Engineering Systems and Emerging Technologies, Atlanta, GA, Nov. 17-22, 1996.
11. M.N. Tamin and H. Ghonem, "A Fiber Damage Mechanisms in Titanium Metal Matrix Composites," Proc. Int. Conf. on Fatigue of Composites, Societe Francaise de Metallurgie et de Materiaux, Paris, France, Jun 3-5, 1997.
12. M.N. Tamin and H. Ghonem, "Interphase Debonding Strength of Ti-MMC Using Localized Damage Approach," Proc. 5<sup>th</sup> Int. Conf. on Localized Damage, Bologna, Italy, June 8-10, 1998.
13. M.N. Tamin and H. Ghonem, "Fatigue Strength of SCS-6 Bridging Fibers in Titanium Metal Matrix Composites," Proc. Sixth Int. Conf. On Processing and Fabrication of Advanced Materials, K.A. Khor, T.S. Srivatsan and J.J. Moore, eds., IOM Communications Ltd., UK, 1998, pp. 691-702.

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15. M.N. Tamin and H. Ghonem, "Fatigue Damage Mechanisms of Bridging Fibers in Titanium Metal Matrix Composites," Proc. Intl. Mechanical Engineering Congress and Exposition, Symposium on Durability and Damage Tolerance of Composite Materials and Structures, ASME, Nashville, TN, Nov. 14-19, 1999.
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