

Prof. Kemal Levend Parnas

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: G-6177-2018

ScopusID: 6602339913

Yoksis Researcher ID: 163424

Biography

Dr. Levend Parnas joined TED University, the Department of Mechanical Engineering in 2015. Dr. Parnas before coming to TED University was a Professor in the Department of Mechanical Engineering at the Middle East Technical University where he has been a faculty member since 1992.

He completed his Ph.D. in School of Aerospace Engineering at Georgia Institute of Technology and his undergraduate studies in the Department of Mechanical Engineering at the Middle East Technical University. His research interests lie in the area of advanced composite structures and their applications in aerospace and automotive engineering. He has been involved with numerous research projects including design, production and testing of such structures such as advanced airplanes, helicopters, rockets, new generation cars, and sea vehicles. Recently, he has been interested in projects involving nano-structures.

Dr. Parnas has taught a number of undergraduate and graduate courses in the field of mechanics including statics, dynamics, strength of materials, material science, machine elements, and theory of elasticity. He prepared a senior level course on advanced composite structures.

In his limited spare time, Dr. Parnas enjoys mountaineering, hiking, squash, reading fiction and non-fiction.

Dr.Parnas has been appointed as Vice Rector of TED University on September, 10th, 2018.

Education Information

Doctorate, Georgia Insitute of Technology, United States Of America 1986 - 1991

Postgraduate, Georgia Insitute of Technology, United States Of America 1985 - 1986

Postgraduate, Middle East Technical University, Turkey 1982 - 1985

Undergraduate, Middle East Technical University, Mechanical Engineering, Turkey 1976 - 1981

Foreign Languages

English

Research Areas

Mechanical Engineering, Aeronautical and Space Engineering, Metallurgical and Materials Engineering

Academic Titles / Tasks

Professor, TED University, Faculty of Engineering, Department of Mechanical Engineering, 2015 - Continues

Professor, Middle East Technical University, Mechanical Engineering, 2003 - 2015

Associate Professor, Middle East Technical University, Mechanical Engineering, 1995 - 2003

Assistant Professor, Middle East Technical University, Mechanical Engineering, 1992 - 1995

Research Assistant PhD, Georgia Institute of Technology, Aerospace Engineering, 1991 - 1992

Research Assistant, Georgia Institute of Technology, Aerospace Engineering, 1986 - 1991

Academic and Administrative Experience

Vice Rector, TED University, Mechanical Engineering, 2018 - Continues

Faculty Member, Professor, TED University, Mechanical Engineering, 2015 - Continues

Head of Department, Mechanical Engineering, TED University, 2015 - 2019

Courses

Summer Practice I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017

Summer Practice II, Undergraduate, 2017 - 2018

Physics I, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016

Materials Science, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016

Physics II, Undergraduate, 2017 - 2018

Dynamics, Undergraduate, 2017 - 2018, 2015 - 2016

Mechanics of Materials, Undergraduate, 2016 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **High-speed observation of dynamic delamination failure in tapered composite laminates under tensile loading**
Bozkurt M. O., Ozen E. B., Yavuz B. O., Parnas K. L., ÇÖKER D.
Polymer Composites, vol.45, no.10, pp.9181-9195, 2024 (SCI-Expanded)
- II. **In-situ observation and numerical study of dynamic delamination in tapered composite laminates**
Dashatan S. H., Parnas K. L., ÇÖKER D., Bozkurt M. O., Ozen E. B.
Composite Structures, vol.312, 2023 (SCI-Expanded)
- III. **Characterization and simulation of electromagnetically induced preform resting (EIPR) process**
Poorzeinolabedin M., Parnas K. L.
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.115, no.1-2, pp.345-365, 2021 (SCI-Expanded)
- IV. **Flow correction control with electromagnetically induced preform resting process**
Poorzeinolabedin M., Parnas K. L.
Advances in Manufacturing, vol.7, no.2, pp.199-208, 2019 (SCI-Expanded)
- V. **Resin infusion under flexible tooling process and structural design optimization of the complex composite part**
Poorzeinolabedin M., Parnas K. L., Dashatan S. H.

Materials and Design, vol.64, pp.450-455, 2014 (SCI-Expanded)

- VI. **Effects of the type and rigidity of the retainer and the number of abutting teeth on stress distribution of telescopic-retained removable partial dentures**
Sahin V., Akaltan F., Parnas K. L.
Journal of Dental Sciences, vol.7, no.1, pp.7-13, 2012 (SCI-Expanded)
- VII. **Use of split-disk tests for the process parameters of filament wound epoxy composite tubes**
KAYNAK C., Erdiller E. S., Parnas K. L., Senel F.
Polymer Testing, vol.24, no.5, pp.648-655, 2005 (SCI-Expanded)
- VIII. **Optimum design of composite structures with curved fiber courses**
Parnas K. L., ORAL S., Ceyhan Ü.
Composites Science and Technology, vol.63, no.7, pp.1071-1082, 2003 (SCI-Expanded)
- IX. **Design of fiber-reinforced composite pressure vessels under various loading conditions**
Parnas K. L., Katirci N.
Composite Structures, vol.58, no.1, pp.83-95, 2002 (SCI-Expanded)
- X. **A natural tooth's stress distribution in occlusion with a dental implant**
Akpınar I., ANIL N., Parnas K. L.
Journal of Oral Rehabilitation, vol.27, no.6, pp.538-545, 2000 (SCI-Expanded)
- XI. **Strain gage methods for measurement of opening mode stress intensity factor**
Parnas K. L., Bilir Ö. G., Tezcan E.
Engineering Fracture Mechanics, vol.55, no.3, pp.485-492, 1996 (SCI-Expanded)
- XII. **Conical crack problem in semi-infinite media with stress-free boundary conditions**
Yahşi O., Parnas K. L.
International Journal of Fracture, vol.31, no.4, pp.291-301, 1986 (SCI-Expanded)

Articles Published in Other Journals

- I. **Design of fiber-reinforced composite pressure vessels under various loading conditions**
Parnas K. L., Katirci N.
American Society of Mechanical Engineers, Pressure Vessels and Piping Division (Publication) PVP, vol.399, pp.33-46, 2000 (Scopus)
- II. **A comparison of stress and strain distribution characteristics of two different rigid implant designs for distal-extension fixed prostheses**
Akpınar I., Demirel F., Parnas K. L., Sahin S.
Quintessence International, vol.27, no.1, pp.11-17, 1996 (Scopus)
- III. **Postbuckling and crippling of I-section composite stiffeners**
Parnas K. L., Armanios E. A., Sriram P., Rehfield L.
Journal of Aerospace Engineering, vol.8, no.1, pp.32-42, 1995 (Scopus)

Books & Book Chapters

- I. **Filament Winding**
Parnas K. L., Ardic S.
in: Handbook of Composite Fabrication, Guneri Akovali, Editor, iSmithers Rapra Publishing, Exeter, pp.103-126, 2001

Refereed Congress / Symposium Publications in Proceedings

- I. **parnas**

Yavuz B. O., Parnas K. L., Coker D.

ARF 2019 – 8. Asian-Australian Rotorcraft Forum, Ankara, Turkey, 30 October - 02 November 2019

- II. **ARF 2019 - 8.Asian-Australian Rotorcraft Forum**
Parnas K. L., Hosseinpour Dashatan S., Coker D.
- III. **Simulation of drop-weight impact test on composite laminates using finite element method**
Parnas K. L., Bozkurt O. M., Coker D.
- IV. **Tabakalı Kompozitlerde Düşük Hızlı Darbeye Bağlı Hasarın Sayısal Olarak İncelenmesi**
Parnas K. L., Bozkurt M. O., Coker D.
İzmir, Turkey
- V. **Simulation of Drop-Weight Impact Test on Composite Laminates using Finite Element Method**
Bozkurt M. O., Parnas K. L., ÇÖKER D.
1st International Workshop on Plasticity, Damage and Fracture of Engineering Materials, IWPDF 2019, Ankara, Turkey, 22 - 23 August 2019, vol.21, pp.206-214
- VI. **Simulation of impact induced damage process in a carbon/epoxy composite beam**
Bozkurt M. O., ÇÖKER D., Parnas K. L.
7th Asian/Australian Rotorcraft Forum, ARF 2018, Seogwipo City, Jeju Island, South Korea, 30 October - 01 November 2018
- VII. **Interlaminar tensile strength of different angle-ply CFRP composites**
Yavuz B. O., Parnas K. L., ÇÖKER D.
1st International Workshop on Plasticity, Damage and Fracture of Engineering Materials, IWPDF 2019, Ankara, Turkey, 22 - 23 August 2019, vol.21, pp.198-205
- VIII. **Delamination analysis of tapered composite laminates using cohesive elements**
Dashatan S. H., Parnas K. L., ÇÖKER D., Poorzeinolabedin M.
7th Asian/Australian Rotorcraft Forum, ARF 2018, Seogwipo City, Jeju Island, South Korea, 30 October - 01 November 2018
- IX. **Maximization of ultimate strength of unidirectional tapered composite structures considering different failure modes**
Çelik O., Parnas K. L.
58th AIAA/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference, 2017, Texas, United States Of America, 9 - 13 January 2017
- X. **Prediction of failure behavior of pin loaded glass fiber reinforced polymer straps**
Erdem M. E., Ergül B. P., Ulu Y., Tursun G., Parnas K. L.
29th Annual Technical Conference of the American Society for Composites, ASC 2014; 16th US-Japan Conference on Composite Materials; ASTM-D30 Meeting, California, United States Of America, 8 - 10 September 2014
- XI. **Effect of lay-up orientation on fracture toughness of CFRP laminates**
Yavuz B. O., Parnas K. L., ÇÖKER D.
7th Asian/Australian Rotorcraft Forum, ARF 2018, Seogwipo City, Jeju Island, South Korea, 30 October - 01 November 2018
- XII. **A three-dimensional model of the mandible using two-dimensional CT images**
Mutlu-Sağesen L., Toroslu R., Parnas K. L., Suca S.
23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, İstanbul, Turkey, 25 - 28 October 2001, vol.3, pp.2778-2781
- XIII. **Thermalization of a forward looking infrared system**
Bayar M., Parnas K. L., Dikici A., Colakoglu A., Farsakoglu O.
Proceedings of the 1999 Optomechanical Engineering and Vibration Control, Denver, CO, USA, 20 - 23 July 1999, vol.3786, pp.312-322
- XIV. **Analysis of filament wound tubes against torsion**
Parnas K. L., Akkas N.
NATO Advanced Research Workshop on Multilayered and Fibre-Reinforced Composites - Problems and Prospects, KIEV, Ukraine, 2 - 06 June 1997, vol.43, pp.489-496
- XV. **Stress field in postbuckled composite stiffeners loaded in compression**

Uda N., Parnas K. L., Armanios E. A.

Proceedings of the International Conference on Advanced Composite Materials, Wollongong, Australia, 15 - 19 February 1993, pp.315-321

XVI. Postbuckling analysis of composite stiffeners under uniaxial compression

Parnas K. L., Armanios E. A., Sriram P.

ASCE Engineering Mechanics Specialty Conference, Columbus, OH, USA, 20 - 22 May 1991, pp.937-942

XVII. Delamination analysis of tapered laminated composites under tensile loading

Armanios E. A., Parnas K. L.

Third Symposium on Composite Materials: Fatigue and Fracture, Lake Buena Vista, FL, USA, 6 - 07 November 1989, pp.340-358

Tasks In Event Organizations

PARNAS K. L., ARF 2019 - 8th Asian/Australian Rotorcraft Forum October 30 - November 2 , 2019, Ankara, Turkey, Kasım 2019

Awards

PARNAS K. L., Best paper in the international ARF 2019 conference, ARF 2019 Organizing committee, November 2019