

## LIST OF PUBLICATIONS

**Faculty: Prof. Prakash Jadhav**

**Department of Mechanical Engineering**

### JOURNAL PUBLICATIONS

**Prakash Jadhav**, Gruhalakshmi Yella, Anitha Azmeera, Mode II- delamination modeling in multi-directional laminates using cohesive zone methodology under static and dynamic loading, Materials Today Proceedings, 2023

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**Prakash Jadhav**, Modeling of mode 1 delamination behavior in laminated composite structures for aerospace applications, Materials Today Proceedings, 2022

**Prakash Jadhav** and Gruhalakshmi Yella, Hybrid joint interface in composite fan blade subjected to bird strike loading, Journal of Mechanical Engineering Science, 2022

**Prakash Jadhav**, Design methodologies for composite structures in aircraft engine, Advanced composites in aerospace engineering applications, Springer-Book chapter, 2022

**Prakash Jadhav**, Abradable coatings: Design through microstructure based models, Material Today Proceedings, 2022

**Prakash Jadhav**, Damage due to stress wave propagation in aircraft engine fan blade subjected to bird strike loading, Accepted for publication as a chapter in springer -Lecture notes in mechanical engineering, 2022

**Prakash Jadhav**, Wavy trailing edge feasibility for aircraft engine fan blade, Material Science Forum, 2022

**Prakash Jadhav**, Feasibility of composite compressor blade using sub element level bird strike test and analysis, Recent advances in applied mechanics, Springer -Lecture notes in mechanical engineering, 2022

**Prakash Jadhav**, Gruhalakshmi Yella, Design and optimization of hybrid interface joint in fan blade of aircraft engine, Material science and engineering, 2021

**Prakash Jadhav**, Gruhalakshmi Yella, Failure criteria for wavy edge in aerospace composites, Lecture notes in mechanical engineering, 2021

**Prakash Jadhav**, Gruhalakshmi Yella, Passive morphing in aerospace composites, Key engineering material, 2021

**Prakash Jadhav**, Gruhalakshmi Yella, Design and optimization of hybrid interface joint in composite fan blade, IOP Material science and engineering, 2021

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**Prakash Jadhav**, Effect of ply drop on Aerospace Composite Materials, *Key Engineering Materials*, June 2020, vol 847, pp 46-51, 2020

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Lay Menn Khoo, Raju Mantena and **Prakash Jadhav**, Structural Damage Assessment using Vibration Modal Analysis, *Structural Health Monitoring*, 2004, vol. 3(2), pp. 177-194

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**Jadhav, P.K** and P.Raju Mantena, Analytical and Experimental Assessment of Damage in Wooden Beams using Vibration Response Measurements, *ASME Early Career Technical Journal*, USA, June 2002, vol. 1, pp. 3.1-3.9

**Jadhav, Prakash**, Effect of Bi-axial Residual Stresses on the Micro-Indentation Behavior of Bulk Materials, *International Journal of Engineering and Technology*, April 2017, vol 9-2, pp 1139- 1147 SCOPUS

**Jadhav, Prakash**, Damage assessment in a wall structure using resonant frequencies and operating deflection shapes, *International Journal of Mechanical Engineering and Technology*, March 2017, vol 8-3, 97-107 SCOPUS.

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## **BOOK CHAPTERS**

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Feasibility of Composite Compressor Blade Using Sub-element Level Bird Strike Tests and Analysis, Recent Advances in Applied Mechanics (2022)

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## **CONFERENCE PROCEEDINGS**

Effect of Ply Drop in Aerospace Composite Structures, **P. Jadhav**, Key Engineering Materials, (2020)

Innovative designs of embedded foam inserts in aerospace composite structures, **P. Jadhav**, Materials Today: Proceedings, (2020)

Cohesive zone modeling to model delamination in composite structures under static and dynamic loading, **P. Jadhav**, Zheng Li, Sriram Prasad, Proceedings of SAMPE conference, California, (2016)

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Effect of Surface Preparation on Environmental Durability of Adhesive-Bonded Metallic Surfaces, **P. Jadhav**, D. Molligan, S. Andersen, J.W. Gillespie Jr. and R. Hathaway, *American Society for Composites*, Annual Technical Conference, Seattle, CD-ROM, Paper no 49, (2007)

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Computer Aided Design of Injection Molding Tool and Rapid Prototyping, *National Seminar on Developments in Tool Engineering*, **Jadhav, P.K.**, , Bombay, India, Feb (1999).

## **PATENTS**

Composite fan blade US 2013/0287588A1-Published 2013

Wind turbine rotor blade with fabric skin US 2014/0119937- Published 2014

Wind turbine blade tension fabric skin structure US9188102B2-Granted 2015

Hybrid turbine blade with multiple insert sections US9309772B2-Granted 2016

Composite compressor blade and method of assembling US2016/0130955A1 Granted 2019

Design and manufacturing of abradable coating for gas turbines, filed and published in Indian patent office, 2021.

Design of hybrid composite joint in fan blade and method of manufacturing- filed and published-Indian patent office, 2021.

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