

Dr. Nitin Kumar Jain

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Qualifications:

- **Ph.D.**, Maulana Azad National Institute of Technology, Bhopal, declared July 04, 2009.
- **M. Tech** in Applied Mechanics, Indian Institute of Technology, Delhi, 2003.
- **B. E. (Mechanical)**, Bhilai Institute of Technology, Durg affiliated with Pt. Ravishankar Shukla University Raipur, 2001.

Areas of Interest:

- Solid Mechanics, Stress Analysis, Finite Element Analysis
- Composite Structures Analysis

Papers Published:

(a) Published in International Journals:

1. Jain NK, Kapuria S, Alam N. 2D piezo-elasticity and zigzag theory solutions for vibration of initially stressed hybrid beams. **Journal of Vibration and Acoustic (ASME)** 2005; 127:116-124.
2. Jain NK, Kapuria S, Dumeer PC. Assessment of zigzag theory for static loading, buckling, free and forced response of composite and sandwich beams. **Composite Structure** 2004; 64:317-327.
3. Jain NK, Mittal ND. Finite element analysis for stress concentration and deflection in isotropic, orthotropic and laminated composite plates with central circular hole under transverse static loading. **Materials Science and Engineering: A** 2008; 498:115-124.
4. Jain NK, Mittal ND. Effect of fibre orientation on stress concentration factor in a laminate with central circular hole under transverse static loading. **Indian Journal of Engineering & Materials Sciences** 2008; 15(6):452-458.

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5. Jain NK, Mittal ND. Finite element analysis for stress concentration and deflection in isotropic and orthotropic rectangular plates with central circular hole under loading at boundary of hole in transverse direction. **International Journal of Mechanical Engineering and Materials Sciences** (Accepted for the publication).

(b) International Conference :

1. Jain NK, Mittal ND, Tiwari A. Finite element analysis for the reduction of stress concentration factor of rectangular plate with circular hole at centre under in-plane loading using auxiliary holes around main hole, notches on sides and by changing nature of loads. **14th ISME, International Conference on Mechanical Engineering in Knowledge Age, Delhi College of Engineering, Delhi, December 12-14, 2005:179-185.**
2. Jain NK, Mittal ND, Singh M. Stress and deflection analysis of rectangular plate with circular hole at centre under transverse loading by finite element method with different boundary conditions. **50th Congress of ISTAM (An International Meet), IIT Kharagpur, December 14-17, 2005.**
3. Jain NK, Mittal ND. Finite element analysis for effect of fibre orientation on stress concentration factor in a laminated composite plate with central hole under inplane static loading. **2nd International Congress on Computational Mechanics and Simulation, IIT Guwahati, December 08-10, 2006:187-192.**
4. Jain NK, Mittal ND. Finite element analysis for sensitivity of stress concentration factor with respect to elastic constants in an orthotropic composite plate with a central hole due to in plane static loading. **51st Congress of ISTAM (An International Meet), College of Engineering, Visakhapatnam, December 18-21, 2006:177-182.**
5. Jain NK, Mittal ND. The effect of elastic constants on stress concentration factor in a unidirectional tensile laminate with a central circular hole. **Second International Conference on Recent Advances in Composite Materials (ICRACM- 2007), Banaras Hindu University, Varanasi, February 20-23, 2007:108-114.**
6. Jain NK, Mittal ND. Analysis for stress concentration and deflection in isotropic and orthotropic rectangular plates with central circular hole under transverse static loading. **52nd Congress of ISTAM (An International Meet), B.N.M. Institute of Technology, Bangalore, December 14-17, 2007.**

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7. Jain NK, Mittal ND. Finite element analysis for stress concentration and deflection in isotropic and orthotropic rectangular plates with central circular hole under loading at boundary of hole in transverse direction. **International and INCCOM-6 Conference on Future Trends in Composite Materials and Processing, IIT Kanpur, December 12-14, 2007:816-822.**
8. Jain NK, Mittal ND. The optimize design of a square simply supported isotropic plate with central circular hole for reduction of stress concentration subjected to transverse static loading. **International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM), IIT Kharagpur, December 27-29, 2007/046:01-08.**

Work Experience:

1. **Lecturer**, Department of Applied Mechanics, National Institute of technology, Raipur (**February 2009 to till date**).
2. **Assistant Professor**, Department of Mechanical Engineering, Sagar Institute of Research and Technology, Bhopal (**January 2008 to February 2009**).
3. **Research Scholar**, Department of Applied Mechanics, MANIT, Bhopal, (**February 2005 to January 2008**).
4. **Lecturer**, Department of Mechanical Engineering, Shree Institute of Science and Technology, Bhopal (**January 2003 to January 2005**).

Conferences Conducted:

1. Organized the **National Conference on Applied Engineering and Sciences**, October 24, 2008, Sagar Institute of Research and Technology, Bhopal
