

**DR. PRASHANT JINDAL, Ph.D., Assistant Professor**



**Date of Birth** 1<sup>st</sup> September 1979  
**Sex** Male  
**Mobile** +91-9878881230  
**Email** jindalp@pu.ac.in

**Present Employment** Assistant Professor, Mechanical Engineering Department, University Institute of Engineering & Technology (U.I.E.T.), Sector-25, Panjab University, Chandigarh-160014, INDIA.

**Research Interests** Mechanical characterization, nano-bio-composite materials, dental prosthesis & diagnostic devices, rapid prototyping

**Work Experience**

1) University Institute of Engineering & Technology (U.I.E.T.), P.U., Chandigarh – Assistant Professor (Sep, 2008 – Till Date)

Assistant Professor in UIET, P.U., Chandigarh

2) Perot Systems, Noida- Associate (June, 2006 – July, 2008)

Software Developer in Perot Systems, NOIDA

3) Chandigarh College of Engineering & Technology – Lecturer ( Feb, 2003 - July, 2003)

Teaching and research to engineering students.

Additional responsibility of a placement associate to coordinate all campus placements related activities in the college.

4) Larsen & Toubro Ltd. -Executive (Sep 2002 – December 2003)

Marketing Executive with Division of Construction Equipment machinery, Larsen & Toubro (L&T) Ltd.

## Academic Background

Examination/Degree	Institution	Year of Passing	% Marks
Ph.D.	Panjab University, Chandigarh	2014	-
M.E. (Mechanical)	Punjab Engineering College, Chandigarh	2006	79.6
B.E. (Mechanical)	Punjab Engineering College, Chandigarh	2002	70.7

## Research Projects

1. Principal Investigator for the sub-theme title-“Medical Devices and Restorative Technologies,” Design Innovation Centre *funded by MHRD, New Delhi, 2015 to 2018 (for \$225,000/-)*
2. Principal Investigator for the project title-“Development and characterization of polycarbonate and glass CNT with specific reference to energy absorption and pressure sensing characteristics,” *funded by ARMREB, DRDO, New Delhi, 2011 to 2015 (for \$ 22,500/-)*

## List of Books/Book chapters published

1. **Prashant Jindal**, “*High Strain Rate Behavior of Nanocomposites and Nanocoatings*,” SpringerBriefs in Materials, 2014, ISBN: 978-3-319-14480-1
2. **Prashant Jindal**, “*Dimensional measurements and Poisson’s ratio of Carbon Nanotubes*,” LAP LAMBERT Academic Publishing, 2014, ISBN: 978-3-659-56207-5
3. Saurav Gairola, Amrinder Pal Singh, **Prashant Jindal**, “*Review of Thermal Characterization of Polymer-Carbon Nanotubes*”, Processing and Fabrication of Advanced Materials: XXIII, Volume-1, ISBN:978-93-84588-17-5
4. **Prashant Jindal**, Aditya Chhibba, Navin Kumar, “*Dynamic Mechanical Analysis of PMMA/MWCNT composites*”, Nanotechnology: Novel Perspectives and Prospects, ISBN(13):978-93-392-2109-6

## List of publications in Journals

1. **P. Jindal**, R. N. Yadav, and N. Kumar, “Dynamic mechanical characterization of PC/MWCNT composites under variable temperature conditions,” *Iran. Polym. J.*, vol. 26, no. 6, pp. 445–452, 2017. (doi:10.1007/s13726-017-0533-1; IMPACT FACTOR- 1.68)

2. S. Bansal, N. Kumar, and **P. Jindal**, “Effect of MWCNT Composition on the Hardness of PP/MWCNT Composites,” *Mater. Today Proc.*, vol. 4, no. 2, pp. 3867–3871, 2017.
3. D. Kumar, N. Kumar, and **P. Jindal**, “Elastic Modulus Behavior of Multi-Walled Carbon Nano-Tubes / Polyurethane Composites using Nano- Indentation Techniques,” *Indian J. Sci. Technol.*, vol. 10, no. 17, pp. 1–4, 2017.
4. S. Kapoor, M. Goyal, and **P. Jindal**, “Effect of Multi-Walled Carbon Nanotubes ( MWCNT ) on Mechanical Properties of Acrylonitrile Butadiene Styrene ( ABS ) Nano-Composite,” *Indian J. Sci. Technol.*, vol. 10, no. 17, pp. 1–6, 2017.
5. V. Sharma, M. Goyal, and **P. Jindal**, “Preparation , Characterization and Study of Mechanical Properties of Graphene / ABS Nano- Composites,” *Indian J. Sci. Technol.*, vol. 10, no. 17, pp. 1–5, 2017.
6. **P. Jindal**, J. Jyoti, and N. Kumar, “Mechanical characterisation of ABS/MWCNT composites under static and dynamic loading conditions,” *J. Mech. Eng. Sci.*, vol. 10, no. 3, pp. 2288–2299, 2016.
7. N. Thakur, M. Juneja, and **P. Jindal**, “Tooth / Teeth Segmentation and modeling from X-ray / CT images : A Survey,” *Int. J. Control Theory Appl.*, vol. 10, no. 8, pp. 423–428, 2017.
8. M. Goyal, N. Goyal, H. Kaur, A. Gera, K. Minocha, and **P. Jindal**, “Fabrication and characterization of Low Density PolyEthylene(LDPE)/Multi Walled Carbon Nanotubes(MWCNTs) nano-composites,” *Perspect. Sci.*, vol. 8, pp. 3–5, 2016.
9. **P. Jindal**, J. Jyoti, and N. Kumar, “Mechanical characterisation of ABS/MWCNT composites under static and dynamic loading conditions,” *J. Mech. Eng. Sci.*, vol. 10, no. 3, pp. 2288–2299, 2016.
10. S. Bansal, N. Kumar, and **P. Jindal**, “Effect of MWCNT Composition on the Hardness of PP/MWCNT Composites,” *Mater. Today Proc.*, vol. 4, no. 2, pp. 3867–3871, 2017.
11. S. Singh, A. Kaur, and **P. Jindal**, “Mechanical Behaviour of MWCNT Reinforced Polymer Composites : A Review,” *Int. J. Sci. Res.*, vol. 4, no. 10, pp. 68–72, 2015.
12. **P. Jindal**, M. Sain, and N. Kumar, “Mechanical characterization of PMMA / MWCNT composites under static and dynamic loading conditions,” *Mater. Today Proc.*, vol. 2, no. 4–5, pp. 1364–1372, 2015.

13. S. Gairola, S. K. Pandey, S. S. Gupta, and **P. Jindal**, “Effect of MWCNT composition on the thermal conductivity behavior of PP /MWCNT composites,” *Int. J. Mech. Prod. Eng.*, vol. 3, no. 9, pp. 21–24, 2015.
14. **P. Jindal**, S. S. Gupta, S. Bansal, S. Gairola, S. K. Pandey, A. P. Singh, and R. Bhandari, “Thermal Expansion Behaviour of PMMA / MWCNT Composites,” *Int. J. Res. Mech. Eng. Technol.*, vol. 4, no. 2, pp. 62–64, 2014.
15. **P. Jindal**, M. Goyal, and N. Kumar, “Mechanical characterization of multiwalled carbon nanotubes-polycarbonate composites,” *Mater. Des.*, vol. 54, pp. 864–868, 2014 (<http://dx.doi.org/10.1016/j.matdes.2013.08.100>; **IMPACT FACTOR-3.50**)
16. **P. Jindal**, M. Goyal, and N. Kumar, “Role of carbon nanotubes in polycarbonate composites for modification in hardness,” *Int. J. Nanoelectron. Mater.*, vol. 7, no. 2, pp. 85–91, 2014.
17. S. Jandial and **P. Jindal**, “Review of Carbon Nanotubes/Poly (methyl methacrylate) Composite Fabrication and Mechanical Characterization Techniques,” *Int. J. Res. Advent Technol.*, vol. 1, no. 2, pp. 92–94, 2014.
18. A. Chhibba and **P. Jindal**, “Mechanical Characterization of Varying Deposits of MWCNTs on Glass Surfaces under High Strain Rate Loading,” *Int. J. Res. Advent Technol.*, vol. 2, no. 5, pp. 147–151, 2014.
19. A. Chauhan, A. Singla, N. Panwar, and **P. Jindal**, “CFD based thermo-hydrodynamic analysis of circular journal bearing,” *Int. J. Adv. Mech. Eng.*, vol. 4, no. 5, pp. 475–482, 2014.
20. A. Chauhan, A. Singla, A. Chhibba, and **P. Jindal**, “Static Load Measurement Using Multi Walled Carbon Nanotubes,” *Int. J. Adv. Mech. Eng.*, vol. 4, no. 5, pp. 483–487, 2014.
21. **P. Jindal**, S. Pande, P. Sharma, V. Mangla, A. Chaudhury, D. Patel, B. P. Singh, R. B. Mathur, and M. Goyal, “High strain rate behavior of multi-walled carbon nanotubes–polycarbonate composites,” *Compos. Part B Eng.*, vol. 45, no. 1, pp. 417–422, Feb. 2013. (<http://dx.doi.org/10.1016/j.compositesb.2012.06.018>; **IMPACT FACTOR – 2.98**)
22. **P. Jindal**, M. Goyal, and N. Kumar, “Modeling Composites of Multi-Walled Carbon Nanotubes in Polycarbonate,” *Int. J. Comput. Methods Eng. Sci. Mech.*, vol. 14, no. 6, pp. 542–551, Oct. 2013 (<http://dx.doi.org/10.1080/15502287.2013.826749>)
23. **P. Jindal**, M. Goyal, and N. Kumar, “Dynamic Impact Absorption Behaviour of Glass Coated with Carbon Nanotubes,” *J. Surf. Eng. Mater. Adv. Technol.*, vol. 3, no. October, pp. 257–261, 2013. (<http://dx.doi.org/10.4236/jsemat.2013.34034>)

24. **P. Jindal**, “Compressive Strain Behaviour under Different Strain Rates in Multi-Walled Carbon Nanotubes-Polycarbonate Composites,” *J. Mater. Sci. Eng.*, vol. 02, no. 01, pp. 2–4, 2013, (<http://dx.doi.org/10.4172/2169-0022.1000119>)
25. **P. Jindal** and V. K. Jindal, “Strains in axial and lateral directions in carbon nanotubes,” *J. Comput. Theor. Nanosci.*, vol. 3, no. 1, pp. 148–152, 2006.
26. **P. Jindal** and V. K. Jindal, “Model for compression of fullerenes and carbon nanotubes,” *Mol. Simul.*, vol. 31, no. 12, pp. 807–810, 2005.
27. I. S. Chopra, **P. Jindal**, and M. L. Sharma, “Production of Carbon Nanotubes using arc ignition of graphite in de-ionized water,” *Panjab Univ. Res. Journal(Science)*, vol. 55, pp. 39–41, 2005.

### **List of proceedings in Conferences**

1. **P. Jindal**, et al, “Conceptualization of design and selection of a spanner to unscrew the wheels of a vehicle more efficiently and speedily,” National Conference on Advances in Mechanical Engineering at P.U., Chandigarh, 20-21 May, 2011
2. **P. Jindal**, et al, “Design and Analysis of a Multi-headed multi-lever spanner to unscrew the wheels of a vehicle,” National Conference on Advances in Mechanical Engineering at P.U., Chandigarh, 20-21 May, 2011
3. **P. Jindal**, et al, “Shock compression of Fullerenes and Carbon Nanotubes,” The 25<sup>th</sup> International Symposium on shock waves-ISSW25 at IISc Bangalore, 17-22 July, 2005

### **Papers presented in Conferences**

1. “Storage Modulus variation for MWCNT/PC composites at different temperatures”, International Conference on Advanced Composite Materials(ACM 2015), Shanghai, China, 19-21 July, 2015
2. “Role of Carbon Nanotubes for pressure sensing applications”, Harnessing Engineering, Technology, and Innovation for Sustainable Growth (HETIS-2014), P.U. , Chandigarh, 19-20 September, 2014
3. “Dynamic and static mechanical strength of multi-walled carbon nanotubes polycarbonate composites”, 22nd Annual International Conference on Composites or Nano Engineering(ICCE-22), Malta, Europe, 13-19 July, 2014
4. “Modification of hardness of glass and polycarbonates by carbon nanotubes,” 4th Chandigarh Science Congress, CHASCON 2010 at P.U., Chandigarh, 19-20 March, 2010

5. “Elastic Behaviour of Polycarbonate based CNT composites under impact loading,” International Conference on Nano Sensors and Technology(ICNST-2010) at CSIO, Chandigarh, 28-30 October,2010.