

DR. PRASHANT JINDAL(Ph.D.)

Commonwealth Rutherford Fellow,

TARE DST-SERB Fellow,

Associate Professor,

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International/National Awards

- Commonwealth Rutherford Post-Doctoral Fellow, Nottingham Trent University, Nottingham, United Kingdom (2018)
- Platinum Award at CII Most Innovative Low Cost Automation (MILCA) Academia Awards (2020)
- TARE(Teacher Associateship for Research Excellence)Fellow, DST-SERB by Govt. of India(2022)

Research Interests

Mechanical characterization, rapid prototyping, nano-bio-composite materials, dental/ facial prosthesis & diagnostic medical devices,

Work Experience

Institution/Company	Designation	Period
University Institute of Engineering & Technology (UIET), Panjab University(PU), Chandigarh, INDIA	Associate Professor	(Sep, 2021 onwards)
University Institute of Engineering & Technology (UIET), Panjab University(PU), Chandigarh, INDIA	Assistant Professor(Grade-3)	(Sep, 2018- Sep, 2021)
Nottingham Trent University (NTU),	Commonwealth Rutherford	(March, 2018- Dec-

Nottingham, United Kingdom	Post Doc Fellow	2018)
University Institute of Engineering & Technology (UIET), Panjab University(PU), Chandigarh, INDIA	Assistant Professor(Grade-2)	(Sep, 2013- Sep, 2018)
University Institute of Engineering & Technology (UIET), Panjab University(PU), Chandigarh, INDIA	Assistant Professor(Grade-1)	(Sep, 2008- Sep, 2013)
Perot Systems, Noida, India	Software Developer	(June, 2006 – July, 2008)
Chandigarh College of Engineering & Technology, Chandigarh, India	Lecturer	(Feb, 2003 - July, 2003)
Larsen & Toubro Ltd, Bengaluru, India	Marketing Executive	(Sep, 2002 – Dec, 2003)

Academic Background

Examination/Degree	Institution	Year of Passing	% Marks
Ph.D.(Faculty of Engineering & Technology) <i>(Title- 'Evaluation of dynamic and static strength of carbon nanotubes based composites and coated materials')</i>	Panjab University, Chandigarh	2014	-
M.E. (Masters in Mechanical Engineering)	Punjab Engineering College, Chandigarh	2006	79.6
B.E. (Bachelor of Mechanical Engineering)	Punjab Engineering College, Chandigarh	2002	70.7

Patents

1. Granted Indian Patent No.371489, Application No. 202011028427, Filing Date- 03/07/2020. Title of the Invention-WEARABLE APPARATUS FOR DETERMINING GONIOMETRIC READINGS OF A BODY PORTION OF A SUBJECT
2. Published Indian Patent Journal No. 53/2021, Application No. 202111051825 A, Filing Date-11/11/2021. Title of the Invention- IOT BASED HUMAN BITE FORCE MEASUREMENT APPARATUS AND METHOD
3. Published Indian Patent Journal No. 27/2022, Application No. 202211030357 A, Filing Date-26/05/2022. Title of the Invention- ACTIVE TRANSRADIAL BIONIC PROSTHETIC ARM

Funded research Projects

1. Principal Investigator for the project title-“ Designing and Fabrication of an Active Transradial Bionic Prosthetic Arm,*funded under Science and Engineering Research Board(SERB), Govt. of India, 2022 to 2025(for USD 43,000/- ₹35,00,000/-)*
2. Principal Investigator for the project title-“ Heat transfer optimization for Li-ion battery packs for enhanced performance of BTMS *funded under Nottingham Trent University(UK)-PU R&D partnership, 2021 to 2022(for 7000 GBP ₹7,00,000/-)*
3. Co-Investigator for the project title-Designing of craniofacial implants using clinically relevant materials, funded under *Nottingham Trent University(UK)-PU R&D partnership, 2021 to 2022(for 6500 GBP ₹6,50,000/-)*
4. Co-Investigator for the project title-“Centre for Bio-mechanical engineering and medical devices,” Fund for Improvement of S&T(FIST)*funded by DST, New Delhi, 2020 to 2024 (for USD 193,000/-₹123,00,000/-)*
5. Principal Investigator for the sub-theme title-“Medical Devices and Restorative Technologies,” Design Innovation Centre*funded by MHRD, New Delhi, 2015 to 2026 (for USD 225,000/-₹150,00,000/-)*
6. 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 USD 22,500/- ₹15,00,000/-)*

Startups under Grant-in Aid Scheme

1. Mentor for startup title-“Motion Sensing Glove” *funded by AICTE, New Delhi, 2020-2022(for USD 5,500/-₹4,00,000/-)*
2. Mentor for startup title-“Filament Wire Extrusion Machine” *funded by AICTE, New Delhi, 2020-2022(for USD7,500/-₹5,50,000/-)*

List of publications in Journals

1. **P. Jindal**, S.S.S. Bharadwaja, S. Ratra, Chaitanya, V. Gupta, P. Breedon, Y. Reinwald, & M. Juneja. “Designing cranial fixture shapes and topologies for optimizing PEEK implant thickness in cranioplasty.”*Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications.* <https://doi.org/10.1177/14644207231155761>, 2023(**IMPACT FACTOR- 2.66**)

2. **P. Jindal**, Chaitanya, S.S.S. Bharadwaja, S. Rattrra, V. Gupta, P. Breedon, Y. Reinwald, & M. Juneja. “Optimizing cranial implant and fixture design using different materials in cranioplasty.” *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, 237(1), 107–121. <https://doi.org/10.1177/14644207221104875>, 2023(**IMPACT FACTOR-2.66**)
3. M. Juneja, S.K. Saini, R. Acharjee, S. Kaul, N. Thakur & **P. Jindal**. “PC-SNet for automated detection of prostate cancer in multiparametric-magnetic resonance imaging.” *International Journal of Imaging Systems and Technology*, 32(6), 1861–1879. <https://doi.org/https://doi.org/10.1002/ima.22744>, 2022(**IMPACT FACTOR- 2.17**)
4. **P.Jindal**, A. Bhattacharya, M. Singh, D. Pareek, J. Watson, R. O’connor, P. Breedon, Y. Reinwald and M. Juneja, “Unilateral cranial defect bone reconstruction utilising 3D design and manufacturing,”*Transactions on Additive Manufacturing Meets Medicine* Trans. AMMM, vol. 4, Issue 1, pp 655-655. 2022
5. M. Juneja, J.S. Minhas, N. Singla, S. Thakur, N. Thakur and **P. Jindal**, “Fused framework for glaucoma diagnosis using Optical Coherence Tomography (OCT) images,”*Expert Systems with Applications*, vol. 201, 117202. 2022(**IMPACT FACTOR- 8.66**)
6. **P. Jindal**, P. Sharma, M. Kundu, S. Singh, D. K. Shukla, V. J. Pawar, Y. Wei and P. Breedon, “Computational Fluid Dynamics (CFD) analysis of Graphene Nanoplatelets for the cooling of a multiple tier Li-ion battery pack.” *Thermal Science and Engineering Progress*, vol. 31. 2022
7. M. Juneja, J. Chawla, G. Dhingra, I. Bansal, S. Sharma, P. Goyal, G. Lehl, A. Gupta and **P. Jindal**, “Analysis of additive manufacturing techniques used for maxillofacial corrective surgeries.”*Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, 0(0), 09544062221081992, 2022(**IMPACT FACTOR- 1.76**)
8. M. Juneja, S. Thakur, A. Uniyal, A. Wani, N. Thakur and **P. Jindal**, “Deep learning-based classification network for glaucoma in retinal images.”*Computers and Electrical Engineering*, 101, 108009, 2022(**IMPACT FACTOR- 3.81**)
9. M. Juneja, J.S. Minhas, N. Singla, S. Thakur, N. Thakur and **P. Jindal**, “Fused framework for glaucoma diagnosis using Optical Coherence Tomography (OCT) images.”*Expert Systems with Applications*, 201, 117202, 2022(**IMPACT FACTOR- 8.66**)
10. A. Dhawan and **P. Jindal**, “Mechanical behavior of carboxylic functionalized graphene reinforced polyurethane nanocomposites under static and dynamic

- loading,” *Polymer Composites* vol. 42, no. 9, pp. 4911–4922, 2021.(**IMPACT FACTOR- 3.17**)
11. M. Juneja, S. Joshi, N. Singla, S. Ahuja, S. Kaur Saini, N. Thakur and **P. Jindal** “Denoising of computed tomography using bilateral median based autoencoder network,” *International Journal of Imaging Systems and Technology*, vol. 32, Issue 3, pp 935-955, 2022(**IMPACT FACTOR- 2.00**)
 12. M. Juneja, S. Kaur Saini, S. Kaul, R. Acharjee, N. Thakur, and **P. Jindal**, “Denoising of magnetic resonance imaging using Bayes shrinkage based fused wavelet transform and autoencoder based deep learning approach,” *Biomedical Signal Processing and Control*, vol. 69, p. 102844, 2021.(**IMPACT FACTOR- 3.88**)
 13. D. Kumar, S. A. Bansal, N. Kumar, and **P. Jindal**, “Two-step synthesis of polyurethane/multi-walled carbon nanotubes polymer composite to achieve high percentage particle reinforcement for mechanical applications,” *Journal of Composite Materials*, vo. 55(21) pp.2877-2855, 2021.(**IMPACT FACTOR- 2.59**)
 14. P. Gupta, S. Kumari, A. Gupta, A. K. Sinha, and **P. Jindal**, “Effect of heat treatment on mechanical properties of 3D printed polylactic acid parts,” *Materials Testing* vol. 63, no. 1, pp. 73–78, 2021.(**IMPACT FACTOR- 1.59**)
 15. M. Juneja, P.Garg, R. Kaur, P. Manocha, S. Batra, P. Singh, S. Singh and **P. Jindal** “A review on cephalometric landmark detection techniques,” *Biomedical Signal Processing and Control*, vol. 66, p. 102486, 2021.(**IMPACT FACTOR- 3.88**)
 16. A.Dhawan and **P. Jindal**, “A review on use of polyurethane in Lighter than Air systems,” *Materials Today: Proceedings* vol. 43, pp. 746–752, 2021.
 17. A. Dhawan and **P. Jindal**, “Thermal characterization of carboxylic functionalized graphene reinforced polyurethane nanocomposite,” *Materials Today: Proceedings* vol. 28, pp. 1679-1682, 2020.
 18. **P. Jindal**, F. Worcester, F. L. Siena, C. Forbes, M. Juneja and P. Breedon “Mechanical behaviour of 3D printed vs thermoformed clear dental aligner materials under non-linear compressive loading using FEM.” *Journal of the Mechanical Behavior of Biomedical Materials*, vol. 112, p.10405, 2020(**IMPACT FACTOR- 3.90**)
 19. **P. Jindal**, M. Juneja, D. Bajaj, F. L. Siena, and P. Breedon, “Effects of post curing conditions on the mechanical properties of 3D printed clear dental aligners,” *Rapid Prototyping Journal*, vol. 26, no. 8, pp. 1337–1344, Jan. 2020. (**IMPACT FACTOR- 4.40**)

20. M. Juneja, R.Singla, S.K. Saini, R. Kaur, D. Bajaj and **P. Jindal**, “OCLU-NET for occlusal classification of 3D dental models,” *Machine Vision and Applications*, vol. 31, no. 6 p. 52, 2020. **(IMPACT FACTOR- 2.13)**
21. M. Juneja, S. Thakur, A. Wani, A. Uniyal, N. Thakur, and **P. Jindal**, “DC-Gnet for detection of glaucoma in retinal fundus imaging,” *Machine Vision and Applications*, vol. 123, p. 31:34, 2020.**(IMPACT FACTOR- 2.01)**
22. S. Kapoor, M. Goyal, and **P. Jindal**, “Effect of functionalized multi-walled carbon nanotubes on thermal and mechanical properties of acrylonitrile butadiene styrene nanocomposite,” *Journal of Polymer Research* , vol. 27, no. 2, p. 40, Jan. 2020.**(IMPACT FACTOR-3.09)**
23. A. Thakur, A. Manna, S. Samir, and **P. Jindal**, “Polymer nanocomposite reinforced with selectively synthesized coiled carbon nanofibers,” *Composite Interfaces*, vol. 27, no. 2, pp. 215–226, 2020**(IMPACT FACTOR- 2.95)**
24. S. Kapoor, M. Goyal, and **P. Jindal**, "Enhanced thermal, static and dynamic mechanical properties of multi-walled carbon nanotubes reinforced Acrylonitrile Butadiene Styrene nanocomposite." *Journal of Thermoplastic Composite Materials*, vol. 35, no. 2, pp. 216–280, Nov. 2019.**(IMPACT FACTOR-3.33)**
25. D. Kumar and P. Jindal, “Tensile, torsional and bending behavior of multi-walled carbon nanotube reinforced polyurethane composites,” *International Journal of Plastics Technology*, vol. 23, no. 2, pp. 177–187, 2019.
26. **P. Jindal**, M. Juneja, F.L. Siena, D. Bajaj, and P. Breedon, “Mechanical and geometrical properties of thermoformed and 3D printed clear dental aligners”, *American Journal of Orthodontics & Dentofacial Orthopedics*, vol. 156, no. 5, pp. 694–701, 2019 **(IMPACT FACTOR- 2.65)**
27. D. Kumar and **P. Jindal**, “Effect of multi-walled carbon nanotubes on thermal stability of polyurethane nanocomposites,” *Materials Research Express*, vol. 6, no. 10, p. 105336, Aug. 2019.**(IMPACT FACTOR- 1.62)**
28. M. Juneja, S.Singh, N. Agarwal, S. Bali, S. Gupta, N. Thakur and **P. Jindal**, “Automated detection of Glaucoma using deep learning convolution network (G-net),” *Multimedia Tools and Applications*, vol. 79 no.21 pp. 15531-15553Apr. 2019. **(IMPACT FACTOR- 2.76)**
29. **P. Jindal**, F. Worcester, K. Walia, A. Gupta, and P. Breedon, “Finite element analysis of titanium alloy-graphene based mandible plate,” *Computer methods in biomechanics and biomedical engineering*, vol. 22, no. 3, pp. 324–330, 2019. **(IMPACT FACTOR- 1.76)**

30. **P. Jindal**, F. Worcester, A. Gupta, and P. Breedon, "Efficiency of nanoparticle reinforcement using finite element analysis of titanium alloy mandible plate," *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, vol.233, no.3, pp.309-317, 2019. **(IMPACT FACTOR- 1.62)**
31. D. K. Gill, K. Walia, A. Rawat, D. Bajaj, V. K. Gupta, A. Gupta, M. Juneja, R. Tuli, and **P. Jindal**, "3D modelling and printing of craniofacial implant template," *Rapid Prototyping Journal* p. RPJ-12-2017-0257, Vol.25, No.2, pp.397-403, 2019 **(IMPACT FACTOR- 4.40)**
32. M. Juneja, N. Thakur, D. Kumar, A. Gupta, B. Bajwa, and **P. Jindal**, "Accuracy in dental surgical guide fabrication using different 3-D printing techniques," *Additive Manufacturing*, vol. 22, no. August 2018, pp. 243–255, 2018. **(IMPACT FACTOR- 10.9)**
33. S. Arora, G. Saini, L. Singhal, P. Uniyal, N. Kumar, and **P. Jindal**, "Effect of Manufacturing Processes on Creep Modulus, Strain Rate and Residual Stress of Polymers," *Journal on Material Science* , vol. 5, no. 4, pp. 47–54, 2018.
34. D. Kumar, N. Kumar, and **P. Jindal**, "Effect of MWCNTs on damping behaviour of Polyurethane based nano-composites," *Materials Today: Proceedings.*, vol. 5, no. 2, pp. 5636–5640, 2018.
35. D. Bajaj, I. Madhav, M. Juneja, R. Tuli, and **P. Jindal**, "Methodology for Stress Measurement by Transparent Dental Aligners using Strain Gauge," *World Journal of Dentistry*, vol. 9, no. 1, pp. 13–18, 2018.
36. H. P. Singh, A. Chauhan, and **P. Jindal**, "Fabrication of Al2024/MWCNT Composite," *Res. J. Eng. Technol.*, vol. 8, no. 3, pp. 191–194, 2017.
37. **P. Jindal**, R. N. Yadav, and N. Kumar, "Dynamic mechanical characterization of PC/MWCNT composites under variable temperature conditions," *Iranian Polymer Journal*, vol. 26, no. 6, pp. 445–452, 2017**(IMPACT FACTOR- 1.89)**
38. K. Kulshrestha, B. Thakur, Y. P. Verma, and **P. Jindal**, "Development of Small Pressure Sensing Unit using Nano-Materials," *Materials Today: Proceedings.*, vol. 4, no. 9, pp. 10422–10426, Jan. 2017.
39. N. Thakur, N. Chaudhary, M. Juneja, and **P. Jindal**, "Modeling and Printing of Successive Misaligned Teeth Stages," *World Journal of Dentistry*, vol. 8, no. 4, pp. 309–314, 2017.
40. S. Bansal, N. Kumar, and **P. Jindal**, "Effect of MWCNT Composition on the Hardness of PP/MWCNT Composites," *Materials Today: Proceedings.*, vol. 4, no. 2, pp. 3867–3871, 2017.

41. D. Kumar, N. Kumar, and **P. Jindal**, "Elastic Modulus Behavior of Multi-Walled Carbon Nano-Tubes / Polyurethane Composites using Nano- Indentation Techniques," *Indian Journal of Science and Technology*, vol. 10, no. 17, pp. 1–4, 2017.
42. 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 Journal of Science and Technology*, vol. 10, no. 17, pp. 1–6, 2017.
43. V. Sharma, M. Goyal, and **P. Jindal**, "Preparation , Characterization and Study of Mechanical Properties of Graphene / ABS Nano- Composites," *Indian Journal of Science and Technology*, vol. 10, no. 17, pp. 1–5, 2017.
44. N. Thakur, M. Juneja, and **P. Jindal**, "Tooth / Teeth Segmentation and modeling from X-ray / CT images : A Survey," *International Journal of Control Theory and Applications*, vol. 10, no. 8, pp. 423–428, 2017.
45. 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," *Perspectives in Science*, vol. 8, pp. 3–5, 2016.
46. **P. Jindal**, J. Jyoti, and N. Kumar, "Mechanical characterisation of ABS/MWCNT composites under static and dynamic loading conditions," *Journal of Mechanical Engineering and Sciences (JMES)*, vol. 10, no. 3, pp. 2288–2299, 2016.
47. S. Singh, A. Kaur, and **P. Jindal**, "Mechanical Behaviour of MWCNT Reinforced Polymer Composites : A Review," *International Journal of Scientific Research*, vol. 4, no. 10, pp. 68–72, 2015.
48. **P. Jindal**, M. Sain, and N. Kumar, "Mechanical characterization of PMMA / MWCNT composites under static and dynamic loading conditions," *Materials Today: Proceedings*, vol. 2, no. 4–5, pp. 1364–1372, 2015.
49. S. Gairola, S. K. Pandey, S. S. Gupta, and **P. Jindal**, "Effect of MWCNT composition on the thermal conductivity behavior of PP /MWCNT composites," *International Journal of Mechanical And Production Engineering*, vol. 3, no. 9, pp. 21–24, 2015.
50. **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," *International Journal of Research in Mechanical Engineering &Technology* , vol. 4, no. 2, pp. 62–64, 2014.
51. **P. Jindal**, M. Goyal, and N. Kumar, "Mechanical characterization of multiwalled carbon nanotubes-polycarbonate composites," *Materials & Design*, vol. 54, pp. 864–868, 2014(**IMPACT FACTOR- 7.99**)

52. **P. Jindal**, M. Goyal, and N. Kumar, "Role of carbon nanotubes in polycarbonate composites for modification in hardness," *International Journal of Nanoelectronics and Materials.*, vol. 7, no. 2, pp. 85–91, 2014.
53. S. Jandial and **P. Jindal**, "Review of Carbon Nanotubes/Poly (methyl methacrylate) Composite Fabrication and Mechanical Characterization Techniques," *International Journal of Research in Advent Technology.*, vol. 1, no. 2, pp. 92–94, 2014.
54. A. Chhibba and **P. Jindal**, "Mechanical Characterization of Varying Deposits of MWCNTs on Glass Surfaces under High Strain Rate Loading," *International Journal of Research in Advent Technology*, vol. 2, no. 5, pp. 147–151, 2014.
55. A. Chauhan, A. Singla, N. Panwar, and **P. Jindal**, "CFD based thermo-hydrodynamic analysis of circular journal bearing," *International Journal of Advanced Mechanical Engineering*, vol. 4, no. 5, pp. 475–482, 2014.
56. A. Chauhan, A. Singla, A. Chhibba, and **P. Jindal**, "Static Load Measurement Using Multi Walled Carbon Nanotubes," *International Journal of Advanced Mechanical Engineering*, vol. 4, no. 5, pp. 483–487, 2014.
57. **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," *Composites Part B: Engineering*, vol. 45, no. 1, pp. 417–422, Feb. 2013(**IMPACT FACTOR – 9.08**)
58. **P. Jindal**, M. Goyal, and N. Kumar, "Modeling Composites of Multi-Walled Carbon Nanotubes in Polycarbonate," *International Journal for Computational Methods in Engineering Science and Mechanics*, vol. 14, no. 6, pp. 542–551, Oct. 2013
59. **P. Jindal**, M. Goyal, and N. Kumar, "Dynamic Impact Absorption Behaviour of Glass Coated with Carbon Nanotubes," *Journal of Surface Engineered Materials and Advanced Technology*, vol. 3, no. October, pp. 257–261, 2013.
60. **P. Jindal**, "Compressive Strain Behaviour under Different Strain Rates in Multi-Walled Carbon Nanotubes-Polycarbonate Composites," *Journal of Material Science & Engineering*, vol. 02, no. 01, pp. 2–4, 2013
61. **P. Jindal** and V. K. Jindal, "Strains in axial and lateral directions in carbon nanotubes," *Journal of Computational and Theoretical Nanoscience.*, vol. 3, no. 1, pp. 148–152, 2006.
62. **P. Jindal** and V. K. Jindal, "Model for compression of fullerenes and carbon nanotubes," *Molecular Simulation*, vol. 31, no. 12, pp. 807–810, 2005.(**IMPACT FACTOR–2.18**)

63. I. S. Chopra, **P. Jindal**, and M. L. Sharma, "Production of Carbon Nanotubes using arc ignition of graphite in de-ionized water," *Panjab University Research Journal(Science)*, vol. 55, pp. 39–41, 2005.

List of Books/Book chapters published

1. K. A.Singh, D. Kumar&**P. Jindal**, Influence of Graphene on Mechanical Behavior of EVA Composite at Low Strain Rate Loading. in *Advances in Materials Science and Engineering*,(Springer) 2020, 261–270 ISBN: 978-981-16-0908-4
2. D. Kumar&**P. Jindal**, Evaluation of Creep and Compressive Behavior of MWCNTs Reinforced Polyurethane Composites. in *Advances in Materials Science and Engineering*,(Springer)2020, 71–82 ISBN: 978-981-16-0908-4
3. D. Bajaj, A. Rawat, D. K. Gill, M. Juneja, and **P. Jindal**, "Efficacy of Softwares for Generation of Dental Aligners," in *Proceedings of 2nd International Conference on Communication, Computing and Networking, 2019*,(Springer)pp. 783–794. ISBN:9789811312175
4. A. Rawat, D. K. Gill, D. Bajaj, M. Juneja, A. Gupta, and **P. Jindal**, "Craniofacial Model Generation Using CAD/CAM Software," in *Proceedings of 2nd International Conference on Communication, Computing and Networking*,(Springer) 2019, pp. 795–803. ISBN:9789811312175
5. D. K. Gill, D. Bajaj, A. Rawat, Y. G. Mittal, M. Juneja, and **P. Jindal**, "Dimensional Accuracy of Surgical Guides Fabricated from Different Materials Using 3D Printer," in *Proceedings of 2nd International Conference on Communication, Computing and Networking, 2019*, ,(Springer)pp. 805–813. ISBN:9789811312175
6. **P. Jindal**, "*High Strain Rate Behavior of Nanocomposites and Nanocoatings*," SpringerBriefs in Materials, 2014, ISBN:978-3-319-14480-1
7. **P. Jindal**, "*Dimensional measurements and Poisson's ratio of Carbon Nanotubes*," LAP LAMBERT Academic Publishing, 2014,ISBN: 978-3-659-56207-5
8. Saurav Gairola, Amrinder Pal Singh, **P. Jindal**, "*Review of Thermal Characterization of Polymer-Carbon Nanotubes*", Processing and Fabrication of Advanced Materials: XXIII, Volume-1,2013, ISBN:978-93-84588-17-5
9. **P. Jindal**, Aditya Chhibba, Navin Kumar, "*Dynamic Mechanical Analysis of PMMA/MWCNT composites*", Nanotechnology: Novel Perspectives and Prospects,(TMH), 2013, ISBN(13):978-93-392-2109-6

Consultancies

1. Consultant for 3D printing and 5G in medical device applications for AMTRON(PSU), Assam
2. Service consultancy facility at Design Innovation Centre, Panjab University for 3D printing
3. Service consultancy facility at Design Innovation Centre, Panjab University for material testing

International talks and lectures

1. “Unilateral cranial defect bone reconstruction using 3D designing and manufacturing”, International conference on Additive Manufacturing Meets Medicince-AMMM2022, Lubeck, Germany, 13-15, September, 2022
2. “3D printing and its applications”, ATAL One week workshop on 3D printing and Design, at UIET, Panjab University, Chandigarh, INDIA, 25-20 Nov, 2019
3. “Effects of variable temperature conditions and loading frequency on mechanical properties of MWCNT/PC composites”, International Conference on Advanced Nanotechnology and Nanomaterials, Dubai, UAE, 20-21, Nov, 2019
4. “Innovative devices in the area of medical applications,” Technology Day, Panjab University, Chandigarh, INDIA, 3, June, 2019
5. “3D Printing for Medical Applications,” Indian Institute of Technology(IIT), Ropar, INDIA, 15, Jan, 2019
6. “3D Modeling and printing for biomedical devices and restorative materials”, INM, Leibniz Institute for New Materials, Saarbrucken, Germany, 3-5, Sep,2018
7. “Mechanical characterization of PC/MWCNT composites under variable temperature conditions”, 26th Annual International Conference on Composites or Nano Engineering(ICCE-26), Paris, France, 15-21 July, 2018
8. “Storage Modulus variation for MWCNT/PC composites at different temperatures”, International Conference on Advanced Composite Materials(ACM 2015), Shanghai, China, 19-21 July, 2015

9. “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
10. “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
11. “Modification of hardness of glass and polycarbonates by carbon nanotubes,” 4th Chandigarh Science Congress, CHASCON 2010 at P.U., Chandigarh, 19-20 March,2010

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 25th International Symposium on shock waves-ISSW25 at IISc Bangalore, 17-22 July,2005

Workshops/Conferences organized

1. ‘International Conference on Aspects of Materials Science and Engineering (ICAMSE-2020)’, 29-30 May-2020 at UIET, Panjab University, Chandigarh, INDIA
2. ‘StartUp and Incubation Workshop in Medical Devices and Restorative Engineering’, 8-12 July-2019 at UIET, Panjab University, Chandigarh, INDIA
3. ‘3D Modeling and Printing Skill Development Workshop’, 21-23 Sep-2017 at UIET, Panjab University, Chandigarh, INDIA
4. ‘Innovation Contest’, 18-19 Sep-2017 at UIET, Panjab University, Chandigarh, INDIA
5. DIC workshop on Innovative Approach to Materials Research(IAMR-2016), 21-14 December-2016 at PEC University of Technology, (Formerly Punjab Engineering College) Chandigarh, India