Ajitanshu Vedrtnam

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Profile Summary

Education:

B.E (Mechanical Engineering), MBA (Marketing), M.E. (Manufacturing and Materials), GATE (Mechanical Engineering), Ph.D. (Applied Mechanics).

Teaching, Research and Supervision Experience:

16 years (14.5 years academic/research and 1.5 years industrial), Supervised 2 Ph.D. (ongoing), 2 Senior research fellows, 5 Research assistants, 24 Master thesis and many undergraduate theses.

Grant Received:

< INR 22 Million from projects funded by Department of Science and Technology, Government of India, IC Impact, Canada, European Union's Horizon 2020, IAAM, Sweden and various industries.

Fellowships Awarded:

Post Doc. Marie Curie Fellowship, European Union's Horizon 2020 University of Alcala, Spain.

Post Doc. Fellowship from Technion Israel Institute of Technology, Israel.

Post Doc. Fellowship from International Association of Advanced Materials, India.

Publication Summary:

85 Publications, 2 Books, h-index -11, i10-index- 12, SCI/SCIE indexed -33, Total impact factor 90+, No. of publications in Web of Science listed journals:

Q1 Journal	Q2 Journal	Q3 Journal	Q4 Journal	Total
15 (12 as first author, 13	9 (6 as first author, 9 as	11 (7 as first	5 (4 as first	40
as corresponding author)	corresponding author)	author)	author)	

²³ Conference Publications.

38 articles reviewed for 16 journals (13 Web of Science listed journals) from 2018 (Based on data available in Publons).

Keynote/ Expert/ Invited Talk:

Invited for 100+ important gatherings (Presented in 17 international Congress/STC/workshops)

Editorial experience:

Working as Editor in chief/Editor/Guest Editor/Editorial Board member of 16 peer reviewed journals.

Core Research Areas:

Composite Materials, Structural and Laminated Glasses, Construction Materials, Fire Technology, Design of Experiments, Low-cost Experimental Setup Development, Modelling and Simulation, Statistical Analysis, Material Science, Material Treatment and Characterization, Energy and Fuel, Mechanical and Civil Engineering.

Link for Research Gate Mendeley Scopus Google Scholar ORCID Publons Marie Curie Fellow

Detailed Profile

Employment history:

S.	Designation	Name and Address of	Period	of	Nature of Work
No.		the Employer	Employm	ent	
			From	To	
1.	GET and Assistant Manager	Birla Group	10/6/2003	20/7/2005	Administrative
2.	Lecturer (Mechanical)	ITM, Bhilwara	21/7/2005	2/8/2007	Academic
3.	Lecturer (Mechanical)	GLA Group of Institutes	9/8/2007	19/12/2007	Academic
4.	Asst. Prof. (Mechanical) & head, Placement Officer	Sobhasaria Engineering College	20/12/200 7	29/11/2008	Academic and Administrative
5.	Asst. Prof. (Mechanical) & head, Placement Officer	Panipat Institute of Engineering and technology	19/1/2009	14/7/ 2010	Academic and Administrative
6.	Asst. Prof.(Mechanical) & Placement officer	Dehradun Institute of Technology	15/7/2010	8/8/ 2011	Academic and Administrative
7.	Asst. Prof. & HOD (Mechanical)	Invertis University	18/8/11	Till Date (on leave)	Academic and Administrative
8.	Research Fellow	Technion – Israel Institute of Technology (Guangdong campus)	1/2/2019	9/1/2020	Research
9.	Post Doc. Marie Skłodowska-Curie Fellow	University of Alcala, Spain	22/1/2020	Till date	Research

Education:

Recipient of Got Energy Talent	(Get) Cofund	Marie	Skłodowska-Curie	grant	for	project	with
Universidad De Alcala, Madrid, S	Spain 2020						

Recipient of **Post doc Fellowship at Technion Israel institute of Technology, Israel** (for Guangdong Campus) 2019

Recipient of Research Fellowship from International Association of advanced Materials (IAAM), Sweden 2019

Degree	Year	University	Divn.	% of Marks
Ph.D.	Sept,	Moti Lal Nehru National Institute of Technology	-	9.25 CPI (course work)
	2019	(MNNIT), Allahabad, India		
M.E.	2011	National Institute of Technical Teachers Training	1st	74.6% (Secured highest
		and Research (NITTTR), Chandigarh, India		marks)
M.B.A	2005	U.P. Technical University, India	1st	68% (Secured 2 nd highest
				marks)
B.E.	2003	C.C.S University, India	1st	71% (Secured 2 nd highest
				marks)
12 th	1999	U.P. Board	1st	66%
10 th	1997	U.P. Board	1st	74%

Research/Consultancy Projects undertaken as PI/Co-PI:

Туре	Title of Project	Status	Duration	Amount of Grant (INR)	Sponsoring Agency/Role
Sponsored	Fabrication, testing and simulation of Glass-Polymer film laminated hybrid composite (Link <u>TEQIP Grant</u>)	Completed	1 Year	180000	TEQIP II (During P.hD.)
Sponsored	Improving Fire Safety of Structures Through the Development of Fire Retardant Laminated Glass Glazing (Link DST Grant)	Ongoing	2 Years	8000000	DST, Govt. of India & IC Impact, Canada as PI
Sponsored	Development of green cement based fire retardant composite and their performance evaluation in pre- and post-fire conditions using conventional and non-destructive methods (Link <u>EU Grant</u>)	Ongoing	2 Years	9850000	European Union's Horizon 2020 research and innovation programme as PI
Consultan cy	Analysis of Property Variation in Biaxially Oriented Polypropylene Film (CBSX30 EH) during Storage	Completed	1 year	50000	Max Specialty Ltd as PI
Sponsored	Cyber-Physical Framework for Fire Emergency Response in Green Buildings	Submitted	2 year	1700000	DST, Govt. of India & IC Impact, Canada as Co-PI
Sponsored	Analysis of thermo-mechanical performance of glass glazing during extreme temperature conditions for the development of fire retardant glass glazing	Submitted	2 year	3000000	DST, Govt. of India & NAVA, Poland as PI
Sponsored	Development of low-cost air filter for automobiles	Completed	1 year	100000	General reseach fund, Invertis University as PI
Sponsored	Strengthening biodegradable natural fiber composites for replacing plastic in commercial applications	Completed	1 year	200000	General reseach fund, Invertis University as PI
Ph.D.	Fabrication, characterization, and simulation studies on the mechanical, thermal, and acoustic behavior of laminated glass composites of different interlayers and thicknesses.	Completed			MNNIT Allahabad and MHRD, India.
M.E.	Experimental Investigation on Biaxially Oriented Polypropylene Film during Storage	Completed			NITTTR Chandigarh and MHRD, India

List of Publication

Journals

- [1] **Vedrtnam A.** Novel treatment methods for improving fatigue behavior of laminated glass. **Composite Part B**. 2019, 167:180-198 https://doi.org/10.1016/j.compositesb.2018.12.037 (Q1 Journal-web of science, SCI-Impact Factor 7.635) (Elsevier Journal)
- [2] **Vedrtnam A.** Novel method for improving fatigue behavior of carbon fiber reinforced epoxy composite. **Composite Part B.** 2019, 157: 305-321 https://doi.org/10.1016/j.compositesb.2018.08.062 (Q1 Journal-web of science, SCI-Impact Factor 7.635) (Elsevier Journal)
- [3] **Vedrtnam A,** Gunwant D. Modelling improved fatigue behavior of sugarcane fiber reinforced epoxy composite using novel treatment method. **Composite Part B** 175 (2019) 107089 https://doi.org/10.1016/j.compositesb.2019.107089 (Q1 Journal-web of science, SCI-Impact Factor 7.635) (Elsevier Journal)
- [4] Vedrtnam A, Bharti S, Chaturvedi S. Experimental study on mechanical behavior, biodegradability, and resistance to natural weathering and ultraviolet radiation of wood-plastic composites. Volume 176, 1 November 2019, 107282 Composite Part B (2019) https://doi.org/10.1016/j.compositesb.2019.107282 (Q1 Journal-web of science, SCI-Impact Factor 7.635) (Elsevier Journal)
- [5] Vedrtnam A, Sharma SP. Study on the performance of different nano-species used for surface modification of carbon fiber for interface strengthening. Composite Part A, 125 (2019) 105509 <u>10.1016/j.compositesa.2019.105509</u> (Q1 Journal-web of science, SCI-Impact Factor 6.444) (Elsevier Journal)
- [6] Vedrtnam A and Pawar SJ. Experimental and Simulation Studies on Bending Behavior of Laminated Glass with Polyvinyl Butyral and Ethyl Vinyl Acetate Inter-layers of Different Critical Thicknesses. Journal of Sandwich Structures and Materials 2/2019 https://doi.org/10.1177/1099636219830143 (online published) (Q1 Journal-web of science, SCI-Impact Factor 5.616)
- [7] Kumar A, Vedrtnam A. Energy-exergy analysis of biodiesel fuels produced from waste cooking oil and mustard oil. Fuel 02/2018; 214(15 February 2018):386-408., DOI:10.1016/j.fuel.2017.11.060 (Q1 Journal-web of science, SCI-Impact Factor 5.578) (Elsevier Journal)
- [8] A. Vedrtnam, C. Bedon, M.A. Youssef, M. Wamiq, A. Sabsabi, S. Chaturvedi. Experimental and Numerical Structural Assessment of Transparent and Tinted Glass during Fire Exposure. Construction and Building Materials, Volume 250, 30 July 2020, 118918 https://doi.org/10.1016/j.conbuildmat.2020.118918 (Elsevier Journal), (Q1 Journal-web of science, SCI –IF 4.685).
- [9] S. J. Yadav, A. Vedrtnam, D. Gunwant. Experimental and Numerical Study on Mechanical behavior and Resistance to Natural Weathering of Sugarcane Leave Reinforced Polymer Composite. Construction and Building Materials, 2020, 262, 120785 https://doi.org/10.1016/j.conbuildmat.2020.120785 (Elsevier Journal), (Q1 Journal-web of science, SCI –IF 4.685).
- [10] **Vedrtnam A** and Pawar SJ. Laminated Plate Theories and Fracture of Laminated Glass Plate- A Review. **Engineering Fracture Mechanics** 12/2017; 186:316-330.,

- DOI: <u>10.1016/j.engfracmech.2017.10.020</u> (SCI-Impact Factor 3.426) (Q1 Journalweb of science, Elsevier Journal)
- [11] Vedrtnam A, Pawar SJ. "Experimental and simulation study on fracture and adhesive strength of laminated glass with Polyvinyl Butyral and Ethyl Vinyl Acetate inter-layers". 190:461-470, 2018. Engineering Fracture Mechanics. https://doi.org/10.1016/j.engfracmech.2017.12.044 (Q1 Journal-web of science, SCI-Impact Factor 3.426) (Elsevier Journal)
- [12] **Vedrtnam A** and Pawar SJ. 2018 "Experimental and simulation study on bending cyclic fatigue behavior of laminated glass having Polyvinyl Butyral and Ethyl Vinyl Acetate inter-layers", **Fatigue Fract Eng Mater Struct**. 2018, 41(6):1437-1446. https://doi.org/10.1111/ffe.12788 (Q1 Journal-web of science, SCI-Impact Factor 3.031) (Wiley Publication)
- [13] **Vedrtnam A.** Novel method for improving fatigue behavior of laminated glass. **Fatigue Fract Eng Mater Struct**. 2018, 42 (2):504-517. DOI: <u>10.1111/ffe.12926</u> (**Q1 Journal-web of science, SCI-Impact Factor 3.031**) (Wiley Publication)
- [14] Kumar, S., Vedrtnam, A. & Pawar, S.J. Effect of wood dust type on mechanical properties, wear behavior, biodegradability, and resistance to natural weathering of wood-plastic composites. Front. Struct. Civ. Eng. (2019) 13: 1446. https://doi.org/10.1007/s11709-019-0568-9 (Q1 Journal-web of science, SCI-Impact Factor 1.680) (Springer Journal)
- [15] Vedrtnam A. Fabrication and characterization of cow dung- Polyvinyl Alcohol composite film. Composite Communications, 2018, 8:31-35 DOI https://doi.org/10.1016/j.coco.2018.03.004 (Q1 Journal-web of science, ESCI Indexed) (Elsevier Journal)
- [16] **Vedrtnam A,** Gunwant D. Improving fatigue behavior of cow-dung fiber reinforced epoxy composite using waste glass powder. 2019, https://doi.org/10.1088/2053-1591/ab3ac0 Mater. Res. Express, (Q2 Journal-web of science, SCI-Impact Factor 1.929) (IOP science Journal)
- [17] Saurav K and **Vedrtnam A**. Prediction of thermal history during laser metal deposition. **High Temperature Material Processes.** 2018, 22(1):47-62 (**Q2 Journal-web of science, SCI-Impact Factor 0.5**) DOI: 10.1615/HighTempMatProc.2018026699
- [18] Vedrtnam A and Pawar SJ. Experimental and simulation studies on flexural strength of laminated glass using ring-on-ring and three-point bending test. Proc IMechE Part C: J Mechanical Engineering Science, 232 (21): 3930-394, (2017), doi: 10.1177/0954406217744815. (Q2 Journal-web of science, SCI-Impact Factor 1.386) (Sage Publication)
- [19] **Vedrtnam A.** Comparative evaluation of novel thermo-chemical treatment methods for improved impact performance of laminated glass. **Proc IMechE Part C: J Mechanical Engineering Science.** 232(21): 3930-3941, 2018 https://doi.org/10.1177/0954406218771995 (**Q2 Journal-web of science, SCI-Impact Factor 1.386**) (Sage Publication)
- [20] **Vedrtnam A,** Dheeraj Sagar. Variation of Drag Coefficient, Wall Static Pressure, and Secondary Flow Over a Passenger Car. **International Journal of Automotive and Mechanical Engineering.** 15(1):5002-5021 March 2018 (**Q2 Journal-web of science, ESCI, SCOPUS Indexed**) DOI https://doi.org/10.15282/ijame.15.1.2018.9.0388

- [21] **Vedrtnam A** and Anuj Kumar, "Fabrication and wear characterization of Silicon Carbide and Copper reinforced Aluminum matrix composite", **Material Discovery** 2017, 9: 22. (**Q2 Journal-web of science, ESCI Indexed) DOI** https://doi.org/10.1016/j.md.2018.01.002 (**Elsevier Journal**)
- [22] **Vedrtnam A,** S. J. Pawar, and Rakesh Bhandari, "Ultrasonic Testing of Glass Fiber Reinforced Polypropylene Composites", International Journal of Mechanical Engineering and Technology (IJMET), 4(4):118 124 2013. (**Q2 Journal-web of science, SCOPUS Indexed**)
- [23] AKS Chauhan, **Vedrtnam A**, S Kumar. Effect of Sound Source Location and Sound Pressure Level in a typical classroom. REVISTA DE EDUCACION (accepted for publication) (**Q2 Journal-web of science, SCIE Indexed Impact Factor 0.66**)
- [24] Dheeraj Gunwant, Ajitanshu Vedrtnam, Sneh Gour, Ravi deval, Rohit Verma, Vikas Kumar, Harshit Upadhyaya, Shakti Sharma. COVID-19: Virology, Epidemiology, Diagnostics and Predictive modelling. (accepted for publication) (Q2 Journal-web of science, SCIE Indexed Impact Factor 0.66)
- [25] Vedrtnam A, Ankit Kumar and Gyanendra singh, Optimizing submerged arc welding process using response surface methodology, Defense Technology 2018, 14(3):204-212. (Q3 Journal-web of science, SCIE Indexed Impact Factor 2.637) DOI https://doi.org/10.1016/j.dt.2018.01.008 (Elsevier Journal)
- [26] **Vedrtnam A.** Experimental and simulation studies on delamination strength of Laminated Glass having Polyvinyl Butyral and Ethyl Vinyl Acetate Inter-layers of Different Critical Thicknesses. **Defense Technology**. 14(4), 2018, 313-317 (**Q3 Journal-web of science, SCIE Indexed Impact Factor 2.637) DOI** https://doi.org/10.1016/j.dt.2018.02.002 (**Elsevier Journal**)
- [27] Sudhanshu kumar, **Vedrtnam A**, Saurav kumar, "A review on acoustical properties measurement methods and a proposed novel method for acoustical characterization of laminated glass used in automotive applications" International Journal of Mechanical and Production Engineering Research and Development, ISSN (P): 2249-6890; ISSN (E): 2249-8001 2017, 7(4):275-290 DOI: 10.24247/ijmperdaug201728 (Q3 Journal-web of science, SCOPUS Indexed)
- [28] **Vedrtnam A** and Pawar SJ. Ring-on-ring testing of laminated glass with Polyvinyl Butyral and Ethyl Vinyl Acetate inter-layers of different critical thicknesses. **Journal of the Australian Ceramic Society.**, 2019 DOI: 10.1007/s41779-019-00309-7 (Q3 Journal-web of science, SCI-Impact Factor 0.692) (Springer Journal)
- [29] Gyanendra singh, Vedrtnam A, Shikhar gupta, "Fabrication and characterization of copper graphite composite material" International Journal of Mechanical and Production Engineering Research and Development, ISSN (P): 2249-6890; ISSN (E): 2249-8001 2017, 7(4):307-312 DOI: 10.24247/ijmperdaug201730. (Q3 Journal-web of science, SCOPUS Indexed)
- [30] Gyanendra singh, **Vedrtnam A**, Himanshu, "Fabrication and charecterisation of aluminum-graphite composite material" International Journal of Mechanical and Production Engineering Research and Development, ISSN (P): 2249-6890; ISSN (E): 2249-8001 2017, 7(4):313-320 DOI: 10.24247/ijmperdaug201731. (Q3 Journal-web of science, SCOPUS Indexed)
- [31] Vedrtnam A, Upadhyay M and Kalauni K. Experimental and simulation studies on heat transfer characteristics of Lab-Scale sensible heat storage system. International Journal of Energy for a Clean Environment. Volume 20, Issue 2, 167-193, 2019 10.1615/InterJEnerCleanEnv.2019025350 (Q3 Journal-web of science, ESCI Indexed)

- [32] Amit Kr. Singh Chauhan, **Vedrtnam A**, Ujjwala Pandey, and S. J. Pawar, "Mechanism of Heat and Mass Transfer in Sandwiched Fibrous Insulations Subjected to Moisture Absorption and Condensation", **International Journal of Engineering Research & Technology** 2013, 2(11):2793-2798 (**Q3 Journal-web of science, SCOPUS Indexed**)
- [33] **Vedrtnam A**, Gyanendra Singh, "Study and Analysis of Welding Process Parameters on Failure Load of Spot Welds of Stainless Steel" International Journal of Engineering Research & Technology, Vol. 2 Issue 7, July 2013 ISSN: 2278- 0181 (**Q3 Journal-web of science, SCOPUS Indexed**)
- [34] Gyanendra Singh, **Vedrtnam A**, "Study and Analysis of Welding Process Parameters On Failure Load Of Spot Welds Of Stainless Steel 304L Grade" **International Journal of Engineering Research & Technology**. Vol.2 Issue 7 (July 2013). ISSN: 2278-0181 (Q3 Journal-web of science, SCOPUS Indexed)
- [35] **Vedrtnam A**, S. J. Pawar, comparative evaluation and regression analysis of pvb, eva, and sg inter layered laminated glass hardness. **International Journal of Engineering Research & Technology**, ISSN: 2278-0181 Vol. 2 Issue 11, November 2013. (Q3 **Journal-web of science, SCOPUS Indexed**)
- [36] **Vedrtnam A** and Pawar SJ. Experimental and Simulation Studies on Fracture of Laminated Glass having Polyvinyl Butyral and Ethyl Vinyl Acetate Inter-layers of Different Critical Thicknesses due to Impact load. **Glass Technology: European Journal of Glass Science and Technology Part A** December 2017, **58** (6), 169–178. DOI: 10.13036/17533546.58.6.005 (Q4 Journal-web of science, SCI-Impact Factor 0.746)
- [37] **Vedrtnam A** and Pawar SJ. Experimental and Simulation Studies on Acoustical Characterization of Laminated Safety Glass. **Glass Technology: European Journal of Glass Science and Technology Part A** 2018, 59 (2):58-70(13) (**Q4 Journal-web of science, SCI-Impact Factor 0.746**) DOI https://doi.org/10.13036/17533546.59.2.008
- [38] **Vedrtnam A** and Pawar SJ. Laminated Glass: Classification, Characterization, and Future Perspectives. **Journal of Materials Education**, **2020**, **42** (2), **51-61**. (SCI-Impact Factor **0.5**)
- [39] Balendra chauhan, Vedrtnam A Virendra Singh. Designing Rear View Mirror of Car using CFD and Reverse Engineering, Journal of the Chinese Society of Mechanical Engineers. Vol.41, No.3 (2020) (Q4 Journal-web of science, SCI-Impact Factor 0.274)
- [40] **Vedrtnam A** and Dheeraj sagar, "Experimental and simulation studies on aerodynamic drag reduction over a passenger car", **Journal of Fluid mechanics research** 2019, 46(1):39-61 (**Q4 Journal-web of science, ESCI, SCOPUS Indexed**) DOI: 10.1615/InterJFluidMechRes.2018025171
- [41] **Vedrtnam A.** Effect of localized thermo-chemical treatment on bending strength of laminated glass. International Journal of Structural Glass and Advanced Materials Research. 2:107-124, 2018. DOI 10.3844/sgamrsp.2018.107.124.
- [42] **Vedrtnam A**: and SJ Pawar. Numerical Analysis of Impact Fracture of Laminated Glass A Review. **MOJ Civil Engineering** 12/2017; 3(5):0008., DOI:10.15406/mojce.2017.03.00086

- [43] **Vedrtnam A**, Chaturvedi SK. Optimizing machining processes used for high chromium steel. MOJ Civil Eng. 2019;5(3):68–76. DOI: 10.15406/mojce.2019.05.00158
- [44] Chauhan BVS, Singh VP, Sayyed I, **Vedrtnam A**. Flow pattern determination for circular staggered cylinders in cross flow using CFD. MOJ Civil Eng. 2019;5(4):82–95. DOI: 10.15406/mojce.2019.05.00160
- [45] Chauhan BVS, Singh VP, Sayyed I, Vedratnam A. Numerical Modelling on Flow Pattern Determination for Circular Staggered Cylinders in Crossflow. Invertis Journal of Science & Technology, 2019; 12(4): 115- 132 10.5958/2454-762X.2019.00021.0
- [46] Vedrtnam A, Chaturvedi SK. Optimizing Machining Process of E31 Steel for Improved Surface Roughness. Invertis Journal of Science & Technology, 2019; 12(4): 153-164 10.5958/2454-762X.2019.00024.6
- [47] Chaturvedi Shasihkant, Kumar Saurav, Vedrtnam A. Improving Bending Behaviour of Laminated Glass Using Novel Treatment Methods. Invertis Journal of Science & Technology, 2020; 13(1): 8-26. 10.5958/2454-762X.2020.00002.5
- [48] Chaturvedi S, **Vedrtnam A**, Kumar S and Gunwant D. Fabrication and Characterization of a Novel Cow Dung-Polymer Composite Packaging Film. Invertis Journal of Science & Technology, 2020; 13(2): 79- 87. 10.5958/2454-762X.2020.00008.6
- [49] **Vedrtnam A,** Saurav K, and Pawar SJ. "Experimental and simulation study on thermal characterization of laminated glass with Polyvinyl Butyral and Ethyl Vinyl Acetate interlayers of different critical thicknesses", **Construction and building materials**. (**Under Review**) SCI. (Elsevier Journal)
- [50] **Vedrtnam A,** Pawar SJ and Sagar D. Evaluating Abrasive Water Jet Machining as an alternative to conventional cutting methods of laminated glass. **Glass Technology: European Journal of Glass Science and Technology Part A (under review) SCI**
- [51] Sunil Dubey, **Vedrtnam A**, and Aman Kumar. Basics of Hexagonal ferrite and Spinel ferrite for Data Storage Applications: A review. **Materials Characterization (Under Review) SCI. (Elsevier Journal)**
- [52] Adnan khan, **Vedrtnam A**, Atif khan, Mohd Ashar. Experimental study for bending behaviour of LG with different types of interlayer and thickness. **International journal of engineering research** 2016 4(1):112-120. ISSN 2321-7758
- [53] **Vedrtnam A**, S. J. Pawar, and Ramesh Pandey, "Experimental Analysis of Property Variation in Biaxially Oriented Polypropylene Film (CBSX30 EH) during Storage", **Materials Science: An Indian Journal**, 2015, 14(1):1-8, ISSN: 0974 7486.
- [54] Adnan Khan, **Vedrtnam A**. Comprehensive review over the testing procedures, mathematical and software simulation for the analysis of laminated glass. International Journal of advance Research in Science & Engineering, ISSN: 2319-8354 Vol. 4, September–2015.
- [55] **Vedrtnam A.** Investigation of Property Variation in Cbsx40 Eh Bopp Film During Storehouse. **Materials Today: Proceedings**, accepted for publication.
- [56] **Vedrtnam A.** Technical studies of boosters in "golf": a review" International Journal of advance Research in Science & Engineering (IJARSE), ISSN: 2319-8354 Vol. 4, September 2015
- [57] **Vedrtnam A**, Dheeraj Sagar. Aerodynamic upgrades and cooling system abstraction of "engines" International Journal of advance technology in Engineering & Science, ISSN: 2348-7550 Vol. 3, September 2015.

- [58] Adnan Khan, **Vedrtnam A**, "Investigate the effect of machining hard turning process parameter on surface roughness of cr-mo alloy using Taguchi method" International Journal of Engineering Research-Online ISSN: 2321-7558 Vol. 3 Issue 6, November 2015.
- [59] Adnan Khan, **Vedrtnam A** Investigate the effect of wear on tic coated carbide cutting tool while machining cr-mo alloy using Taguchi method. International Journal of Engineering Science Invention Research & Development; 2 (7), 2016 e-ISSN: 2349-6185.
- [60] Gyanendra singh, **Vedrtnam A**, Dilbag Singh, "Fabrication of Al-SiC Metal Matrix Composite and Parametric Optimization on Electro Discharge Machine" International Journal of Mechanical and Industrial Technology, ISSN 2348-7593 (Online), Vol. 4, Issue 1, pp: 142-149.
- [61] Alok Pandey, **Vedrtnam A**, Mohit Dwivedi, "Natural Fibre Reinforcement Polymer Composites-A Review", International Journal of advance Research in Science & Engineering, Vol. 5, Issue 5, pp. 453-458 ISSN: 2319-8354

Books

- [62] **Vedrtnam A.** Bending behavior of laminated Glass. LL Publisher, Moldova, Europe, ISBN: 978-3-659-62145-1
- [63] **Vedrtnam A, Sagar D.** Aerodynamics of passenger cars. LL Publisher, Moldova, Europe, ISBN: 978-3-659-75724-2

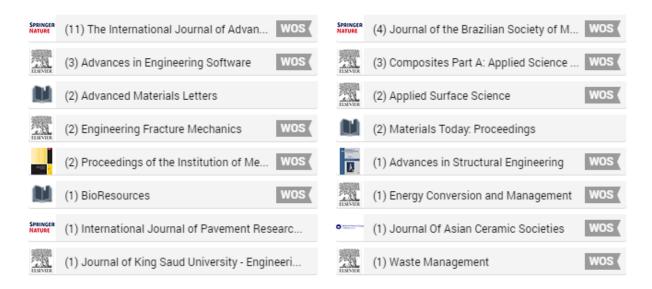
Conferences

- [64] **Vedrtnam A**. Development of ZIF-8-cellulose air filter for CO₂ capturing. World Congress on nano technology. Oct 17-18, 2019, Berlin, Germany.
- [65] Sabsabi A, Youssef MA, El-Fitiany S, **Vedrtnam A**, 2019, "Improving Fire Safety of Structures Through the Development of Fire-Retardant Laminated Glass Glazing: Research Progress", IC-IMPACTS conference, June 20, Vancouver, BC.
- [66] Kuehnen RT, Youssef MA, El-Fitiany S, **Vedrtnam A**, 2019, "Performance-based design of RC beams exposed to natural fire: a case study", 7th International Conference on Engineering Mechanics and Materials, June 12-15, Laval, QC.
- [67] **Vedrtnam A.** Development of ZIF-8-cellulose air filter for limiting exhaust emissions. 2nd edition of the Symposium on Translational Research and Innovation organized by the VBRI with the support of the International Association of Advanced Materials, Sweden on July 27, 2019.
- [68] **Vedrtnam A**, Arvind Kumar. Biodiesel production and energy input/output analysis using multi-cylinder diesel engine. 2nd International Conference on Gas, Oil and Petroleum Engineering. February 26-28, 2018 at Houston, USA.
- [69] **Vedrtnam A,** Gyanenda Singh, and S. J. Pawar, "Application of Taguchi Analysis for Variation for Properties of CBSX30 EH Thermal Film During Storage", National Conference on Frontiers in Mechanical Engineering, Mechanical Engineering Department, Maulana Azad National Institute of Technology, Bhopal (MP), August 29-31, 2013. (Publication).
- [70] **Vedrtnam A.** Development of cellulose based ZIF-8 filters for carbon capture. Symposium on Translational Research and Innovation organized by the VBRI with the support of International Association of Advanced Materials, Sweden on April 16, 2019.
- [71] **Vedrtnam A** and S. J. Pawar, "Comparative Evaluation and Regression Analysis of PVB, EVA, and SG Inter Layered Laminated Glass Hardness", 2nd International

- Conference on Recent Innovations In Science, Engineering And Management (ICRISEM), 22 November 2015. (Citation 4)
- [72] S. J. Pawar, and **Vedrtnam A**, "A Review on Composite Applications and Future Prospectus", International Summit on Textile and Nano Composite Materials and Student Technical Symposium (TEXIDO2K15) at Department of Textile Technology, Bannari Amman Institute of Technology, (BIT), Sathyamangalam-638401, Tamilnadu, INDIA, 21-22 Jan. 2015.
- [73] Adnan Khan, **Vedrtnam A** "comprehensive review over the testing procedures, mathematical and numarical simulation for the analysis of laminated glass" 2nd international Conference on Science technology and management at Delhi University, Delhi. 25th April 2015.
- [74] **Vedrtnam A**, "Cooling System of Engines-Technical Review" National Conference on Advancement in Engineering Materials at F.E.T, MJP Rohilkhand University, Bareilly on 24-25th Feb-2016.
- [75] Prashant kumar, **Vedrtnam A** "Aerodynamic upgrades and cooling system abstraction of "engines" international Conference on Science technology and management at Delhi University, Delhi. 25th April 2015.
- [76] **Vedrtnam A** "An Overview of Artificial Intelligence" 2nd IEEE National on Emerging Trends in in Engg & Technology on 8-9 February 2013 at Sonipat.
- [77] **Vedrtnam A** "Ultrasonic testing of e-Glass Fiber Reinforced BOPP Composites" IRAJ-International Conference on Recent Development in Mechanical and Industrial Engineering (IRAJ-ICRDMIE-2013) on 21st July, 2013 at Pune, India.
- [78] **Vedrtnam A** "Analysis of variation of properties of CBSX Thermal Film during storage" Proceedings bearing journal ISBN No. 978-81-923213-0-1.
- [79] **Vedrtnam A** "Analysis of variation of properties of CBSX Thermal Film during storage" National Conference on Recent advancement in engineering (NCRAES-2012) at SIIT, Jaipur. 10 Feb. 2012
- [80] **Vedrtnam A** "Robotics: Current application and future perspective" National Conference RTCIT at PIET, Panipat. 7-8 June 2010
- [81] **Vedrtnam A** "An expert system for job sequencing" National Conference RTCIT at PIET, Panipat. 7-8 June 2010
- [82] **Vedrtnam A** "Analysis of variation of properties of BOPP Film during storage" has been accepted for oral presentation in International conference at UOWD, Dubai. (not presented). Mar 28, 2012
- [83] **Vedrtnam A** "To study the effect of air flow rate on by-pass factor of cooling coil based on vapour compression cycle" been presented in 2nd IEEE National conference on Emerging Trends in Engg & Technology on 8-9 February 2013 at Sonipat.
- [84] **Vedrtnam A** "Glass Fiber Reinforced Polypropylene Composites: Fatigue and ultrasonic testing" has been accepted for presentation in the International conference at ICMIS- 13 at Thailand. (not presented). 22-24 Sep.
- [85] **Vedrtnam A,** "Technical Studies on Performance Boosters in Golf" National Conference on Recent Trends in Mechanical Engineering (RTME), Invertis University, 16-17 Oct 2015.
- [86] **Vedrtnam A**, Alok Pandey, Mohit Dwivedi, "Natural Fibre Reinforcement Polymer Composites-A Review", International Conference "Innovative Trends in Science, Engineering and Management" International Conference Centre YMCA, New Delhi (ICITSEM-16), 27 May 2016 IBSN: 978-81-932074-9-9.
- [87] **Vedrtnam A.** Ideology, Multiculturalism and Unity in Diversity: An Indian Perspective. Annual 2nd International conference on "Pluralism, Society and Management", Invertis University, Bareilly; 6/08/2017

Reviewer Summary (Varified) after 2018:

38 Manuscripts (Link Publons)



Editorial experience:

- Guest Editor, Special Issue Sustainable Structural Design for High-Performance Buildings and Infrastructures", Sustainability, MDPI. (Web of Science, SCIE indexed)
- Editor: International Journal of Structural Glass and Advanced Materials Research, Science Publisher.
- Editor in chief: Inveris Journal Science & Technology, Indian Journals.
- Editorial Board Member: Human Factors and Mechanical Engineering for Defense and Safety HMDS Springer publisher. (Web of Science, SCOPUS indexed)
- Editorial Board Member: Journal of Advanced Energy Conversion Materials (AECM).
- Editorial Board Member: Journal of Mineral, Metal and Material Engineering.
- Editorial Board Member: Mechanical Engineering Open Journal MEOAOJ.
- Editorial Board Member: Composite Materials and (Composite) Structures, CMS Techno-Press Publisher.
- Editorial Board Member: Current Mechanics and Advanced Materials (CMAM) Bentham Science Publishers.
- Editorial Board Member: Organic Polymer Material Research, bilingual Publisher.
- Editorial Board Member: SCIREA Journal of Physics SCIREA Publisher.
- Editorial Board Member: Journal of Mechanical and Manufacturing Process.
- Editorial Board Member: International Journal of Automobiles and Automobile Technologies.

Keynote/ Expert/ Invited Talk:

- Delivered the **Expert Talk** in TEQIP-III Sponsored STC "Hybrid Manufacturing Processes: Opportunities and Challenges" (HMPOC-20) on 7th July, 2020 at **NIT Jalandhar**.
- Delivered the **Keynote address** in the workshop on "Sustainability: Infrastructure and Environmetal issues" on 5th June, 2020 at **Rajasthan University.**

- Delivered an **Expert Talk** in workshop under Got Energy Talent on 1st June, 2020 organised under **European Union's Horizon 2020 research and innovation programme by University of Alcala and University of Ray Juan Carlos, Spain.**
- Delivered Expert Talk in TEQIP-III Sponsored workshop on "Mechanical Design Tools/Software and their Industrial Applications" at **MIT**, **Muzzafarpur** on 5th April 2019.
- Delivered Expert talk in International Conference on Gas, Oil and Petroleum Engineering (GOPE-2018) February 26-28, 2018 at **Houston, USA.**
- Delivered an Expert talk in the Composite Materials Congress organized by the International Association of Advanced Materials (IAAM), Sweden during 03 06 June 2018 at **Stockholm**, **Sweden**
- Invited for 7th Global Conference on Polymer and Composite Materials (PCM 2020) Xi'an, China July 12-15, 2020.
- Invited for 8th World Congress and Expo on Green Energy June 15-16, 2020, London, UK.
- Invited for International Conference on Mechanical and Automobile Engineering September 2-4, 2020, Munich, Germany.
- Invited for Smart Devices Symposium 2020 (SDS2020). March 17-19, 2020, Osaka, Japan.
- Invited for SCON World Convention on Waste Recycling and Reuse as a Speaker, March 05-06, 2020 at Tokyo, Japan.
- Invited for SCON World Congress on Optics, Photonics and Laser Technologies as an Invited Speaker, February 17-18, 2020 at Singapore.
- Invited for 12th World Congress and Expo on Recycling Berlin, Germany April 22-23, 2020.
- Invited for 10th Annual Congress of Nano Science and Technology-2020 (Nano S&T-2020) theme of Presenting Trends and Innovations for the Nano World, April 20-22, 2020 in Osaka, Japan. as the chair/speaker.
- Invited for International Conference on Applied Mechanics, Materials and Civil Engineering (ICAMMCE2020), September 20-21, 2020, Shanghai, China.
- Invited for International Conference On Carbon Nano Technology & Graphene (Graphene 2020), March 16-17, 2020 at Singapore.
- Invited for 7th International Conference on Pollution Control & Sustainable Environment happening in March 02-03, 2020 at Rome, Italy.
- Invited for Int'l Conference on Environmental Materials and Catalysis (CEMC 2020) March13-15,2020, Guilin, China.
- Invited for International Conference on Defence Technology (2020 ICDT) 20-24 April, 2020, Nanjing, China.
- Invited for the 6th World Congress of Smart Materials-2020, March11-13, 2020 Barcelona, Spain.
- Invited for SCON Global Summit on Environmental Science and Climate Change, June 02-03, 2020 at Barcelona, Spain.
- Invited for 8th Annual Conference of AnalytiX-2020, March 4-6, 2020 in Osaka, Japan.
- Invited for International congress on Advance Materials Sciences and Engineering (AMSE-2020), July 22-25, 2020 Austria.
- Invited for International conference on Smart Materials and Structures, March 19-20, 2020. Berlin, Germany.
- Invitation from World Congress on Earth Sciences, May 11-12, 2020, Paris, France.

- Invited for 5th International Conference and Expo on Ceramics and Composite Materials, June 03-04, 2019, **London, UK**.
- Invited for International Conference on Innovative Applied Energy (IAPE'19), 14-15 March, 2019, in St Cross College, **University of Oxford, United Kingdom.**
- Invited for 2nd International Conference on Tribology, 18-20 April 2018, Elite World Prestige Hotel **Taksim-Istanbul TURKEY**.
- Invited for 1st International Symposium on Mechanics, 9-12 July 2018 in Aberdeen, Scotland, United Kingdom.
- Invited for 5th World Congress and Expo on Green Energy, June 14-16, 2018 London, UK.
- Invited for Expert Talk at Beijing University of Technology, International Association of Applied Science and Technology (IAAST) September 21-22, 2018 Xi'an, China.
- Invited for 4th International Conference on Condensed Matter and Materials Physics, August 16-17, 2018 **London, UK.**
- Invited for 2nd Edition of Global Summit on Renewable Energy & Emerging Technologies. October 5-6, 2018 **Barcelona Spain.**
- Invited for 3rd International Conference on Design & Production Engineering. December 03-04, 2018 at **Valencia**, **Spain**.
- Invited for 4th International Conference on Pollution Control and Sustainable Environment in the month of July 26-28, 2018 in **Rome, Italy.**
- Invited for International Conference on New Energy and Future Energy System (NEFES 2018), Aug. 21st-24th, 2018 in **Shanghai**, **China**.
- Invited for 2nd World Congress on Mechanical and Mechatronics Engineering (WCMME-2019)" on April 15-17, 2019 at **Dubai, UAE**.
- Invited for **2019 International Conference on Wakes and Flow-Induced Vibrations** (ICWFIV19)" at International Convention Center(ICC) Jeju on September 17 ~ 21, 2019, in Jeju Island, Korea
- Invited for 29th International Workshop on Computational Mechanics of Materials (IWCMM29), to be held in Dubrovnik, Croatia, from September 15-18, 2019.
- Invited for 6th Global Conference on Polymer and Composite Materials (PCM 2019) in Bangkok (Thailand) on July 8-11, 2019.
- Invited for 8th International Conference on Fracture Fatigue and Wear at Bruges, Belgium from July 13-14, 2020.
- Invited for Materials Science and Engineering Conference which on Nov 18-19,2019 at Paris, France.
- Invited for 6th Annual Global Congress of Knowledge Economy-2019 (GCKE-2019 September 20-22, 2019 at Qingdao International Conference Center, Qingdao, China.
- Invited for 4th International Conference on Climate change and Environmental Disasters" during October 21-22, 2019 at Las Vegas, USA.

- Invited for rd International Congress and Expo on Condensed Matter Physics" on October 07-09, 2019 at Dubai, UAE.
- Invited for 3rd International Biotechnology Congress (IBC-2019), which will take place in Singapore on October 25-27, 2019.

Honours and awards:

- The reseach project, "Improving Fire Safety of Structures Through the Development of Fire Retardant Laminated Glass Glazing" was awarded as Featured Innovation by IC Impact, Canada.
- Awarded with Franklin Membership and honorary Rosalind Member of London Journals Press (Membership ID#LB8413) by London Journal Press (UK).
- Selected for the "International Research Award on New Science Inventions" under the category of "Best Research Award" during NESIN 2020 by
- Received Best Paper Award for the Article "Fabrication and Characterization of Copper Graphite Composite Material" by TJPRC's Review Board.
- Article, "Optimizing submerged arc welding process using response surface methodology" was listed as most popular article of **Defense Technology** in 2018 by **Elesvier.**
- Awarded with "Best Oral Presentation" in Composite Materials Congress organized by the International Association of Advanced Materials, Sweden during 03 06 June 2018 at Stockholm, Sweden.
- Awarded with "**Best Teacher** for year 2006" by Institute of Technology and Management, Bhilwara.

Thesis supervised:

S. No	Session	Course	Title of Thesis	Name of Student	Date of award
1	2013	M.Tech.	Study and Analysis of Welding Process Parameters on Failure Load of Spot Welds of Stainless Steel	Gyanendra Singh	June 2013
2	2013	M.Tech.	Fabrication of Al-SiC Metal Matrix Composite and Parametric Optimization on Electro Discharge Machine	Atul Sharma	June 2013
3	2015	M.Tech.	Modelling behaviour of Natural Fibre Reinforcement Polymer Composites	Alok Pandey	June 2015
4	2015	M.Tech.	Impact performance of laminated glass	Arun gangwar	June 2015
5	2015	M.Tech.	Acoustical behaviour of laminated glass	Naman Rastogi	June 2015
6	2016	M.Tech.	Bending behaviour of laminated glass	Md. Adnan Khan	June 2015
7	2016	M.Tech.	Fatigue behaviour of laminated glass	Harshit Bhatnager	June 2015

8	2016	M.Tech.	investigate the effect of wear on tic coated	Md. Waqar Khan	June 2016
			carbide cutting tool while machining cr-mo alloy using Taguchi method	Kiiaii	2010
9	2016	M.Tech.	Thermochemical treatment of laminated	Avneesh	June
			glass	Sharma	2016
10	2016	M.Tech.	Fabrication and characterization of Glass-	Monu Mishra	June
		<u> </u>	epoxy Composite		2016
11	2016	M.Tech	CFD analysis of RVM of passenger Car	Dheeraj	June
				Sagar	2016
12	2017	M.Tech.	Numerical modelling of laser metal	Saurav	June
		<u> </u>	deposition	Kumar	2017
13	2017	M.Tech.	Fabrication and Characterization of	Himanshu	June
		<u> </u>	Aluminum-Graphite Composite Material.	Sharma	2017
14	2017	M.Tech.	Biodiesel fuels production from waste cooking	Arvind	June
			oil and mustard oil and its performance analysis.	Madheshia	2017
15	2017	M.Tech.	Drag reduction by design modification in	Balendra	June
			passenger car	Chauhan	2017
16	2017	M.Tech.	Acoustical modelling of Laminated Glass	Soni Kumari	June
					2017
17	2018	M.Tech.	Fabrication and Characterization of	Sony Yadav	June
		<u> </u>	biodegradable polymer composites		2018
18	2018	M.Tech.	Fire retardant Cement Based composites	Ayush	June
4.0	2010	1.5	B 1	Rastogi	2018
19	2018	M.Tech.	Development of cellulose based ZIF-8	Amit Kumar	June
20	2010	NATE 1	filters for carbon capture.	C1. 1.1	2018
20	2018	M.Tech.	Radar Absorption using nano species	Shahbaz	June
			grafted on carbon nanotube surface.	Khan	2018
21	2019	M.Tech.	Fabrication, testing, and charectarization of	Sony Yadav	June
			biodegradable composites		2019
22	2019	M.Tech.	Improving fire retardancy of wood	Amit Kumar	June
					2019
23	2019	Ph.D.	Experimental and simulation studies on	Shashikant	Ongoing
			active ways of improving fire retardancy of	Chaturvedi	
			glass and laminated glass		
24	2019	SRF	Improving Fire Safety of Structures	Saurav	Ongoing
			Through the Development of Fire Retardant	Kumar	
			Laminated Glass Glazing		

Four ongoing M.Tech theses shall be awarded in August 2020*

Academic products:

- **Developed fire testing research laboratory** for construction materials using external funding.
- M. Tech. thesis supervised 24, MBA Project Guided 20, B.Tech. Project Guided 52.
- Organized National workshop on "Solar Energy Technology", September 2017.

- Design syllabus for diploma Production engineering, diploma Automobile engineering,
 M. Tech Production engineering.
- Developed Material Science, Strength of Material and Thermodynamics Laboratories.
- Organized National workshop on "Recent Trends of Applied and manufacturing Process",02-03 September 2016.
- Organized National workshop on 'Recent trends in Mechanical Engineering, Invertis University, in March 2015.
- Attended 5 days (1 week) workshop on Advances in Fluid Flow Control and Measurement Technique at Department of Mechanical & Industrial Engineering, IIT Roorkee (QIP sponsored), 2016
- Attended 5 days (1 week) workshop on Finite Element Methods for Engineering Applications at Department of Mechanical & Industrial Engineering, IIT Roorkee (QIP sponsored), 2017
- Attended 5 days (1 week) workshop on Aerodynamic and hydrodynamics in sports at MNNIT, Allahabad and scored highest grads in exam. (GIAN Sponsored), 2017
- Attended 5 days (1 week) workshop on Active Flow Control: Concepts and Applications at MNNIT, Allahabad and scored highest grads in exam. (GIAN Sponsored), 2018
- Attended "AICTE" Sponsored short term program on "Waste to valuables: different biological and thermos/hydro thermal approach" IIT, ROORKEE on July 15-19 2019.
- Cleared GATE 2008, 2004 exam.
- Always stood among toppers during academics.
- Knowledge of AUTO-CAD, COMSOL, MATLAB, ANSYS, MINITAB, DESIGN EXPERT, EXPERT HIGHSCORE, MS OFFICE etc.

Administrative Responsibilities handled:

- Acted as head of the mechanical engineering department for more than 7 years.
- Acted as Chairman, IQAC cell.
- Acted as placement In-charge and PDP trainer, Hostel Warden, Class In charge.
- Acted as head of Admission cell, and Convener, Cultural cell.
- Asst. Manager: Independently responsible for identifying opportunities globally, engaging in technical and commercial discussion, giving proposals to get the contract, coordinates across the organization with senior heads of departments to facilitate and finalize the workforce plan of the company, Responsible for recruiting efficient sales professionals and managing the network of dealers and distributors in India and abroad.
- Free-lancer recruiter for Novo IT consulting, and Irec Solution for bulk recruitment.

Personal profile:

Date of Birth: 08-Nov- 1982

Languages Known: English, Sanskrit, and Hindi.

Permanent Address: Ved Mandiram, Kuncha panda, Budaun, 243601, U.P., India.

Present Address: Departamento de Arquitectura, Escuela de Arquitectura -Universidad de Alcalá,

Calle Santa Úrsula 8, Alcalá de Henares, 28801-Madrid (Spain) **Hobbies:** Reading, browsing the Internet & playing chess.

Declaration:

I hereby declare that whatever has been stated above is true to the best of my knowledge, correct and nothing material has been concealed therefrom.

Ajitanshu Vedrtnam