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|---|---|---|
| **Faculty Name** | **Dr. Abhinav** |  |
| **Academic Designation** | **Assistant Professor** | |
| **Educational Qualification** | **Ph. D., M.Tech., BE** | |
| **Experience in Teaching & Industry** | **16 Yrs. & 1.5 Yrs.** | |
| **Date of Joining** | **12/01/2023** | |
| **Official Email ID** | **abhinav-me@dsatm.edu.in** | |
| **Employee ID** | **180690** | |

## Educational Details

1. Ph.D.- Plasma Sprayed Ceramic Composite Coatings, VTU- Belagavi
2. M. Tech -Product Design and Manufacturing, RVCE, Bangalore, VTU-Belagavi
3. B.E- Mechanical Engineering, VTU-Belagavi

## Professional Experience

**Institution**: Dayananda Sagar Academy of Technology and Management, Bengaluru -12/01/2023 till date

**Institution**: T. John Institute of Technology, Bengaluru.

**Industry**: Maval Pvt.Ltd. Consultant, Aurangabad, Maharashtra.

**Institution**: Alliance College of Engineering & Design, Alliance University, Bengaluru.

**Institution**: C.M.R. Institute of Technology, Bengaluru.

**Institution**: K.S. Institute of Technology, Bengaluru.

**Industry**: Endurance Technology Pvt. Ltd. (OEM),Aurangabad, Maharashtra.

## Publications

**2026**

1. Abhinav, Karthik SB, Abhijith N, & et al. (2026), Finite element analysis of stress concentration and buckling behaviour in composite panels with cutouts, Journal of Materials Science: Materials in Engineering (Springer-Q2) https://doi.org/10.1186/s40712-026-00458-1

**2025**

1. Avilasha, B. G., Abhinav T., Ramesh, B. T., & et al. (2025). Experiential and computational validation of bell crank lever topology optimization. *Journal of the Institution of Engineers Series C*. (Springer -India, Scopus-Q3)

https://doi.org/10.1007/s40032-025-01199-4

2. Ramesh, B. T., Maruthi, G. V., Abhinav, Malladad, S. K., Fernandes, L. J., Mujeebullakhan, G. M., & Banagar, A. R. (2025). Estimation of engineering properties for coconut shell powder reinforced 100% bio-degradable beeswax composites to replace wood materials. (Elsevier-Methods X, Scopus-Q2) https://doi.org/10.1016/j.mex.2025.103521
3. T. Prakash, Abhinav, G. Gnanakumar et al.(2025). DACNN-based predicting tensile strength of friction stir welded aluminium alloy joints. *International Journal of Machine Learning and Cybernetics,12*(1). (Springer -Scopus-Q2) https://doi.org/10.1007/s13042-024-02494-9
4. Abhinav, Manjunath, Soni et al. (2025). Exploring hybrid composite tribological behaviour: An insight into material characteristics and performance. *Journal of Materials and Engineering, 3*(1), 129–136. https://www.jme.aspur.rs/archive/v3/n1/10.php
5. Mohan Cherian, Jeevitha M, Abhinav, et al. (2025). Leveraging AI for predicting marketing and customer insights – An overview. *Journal of Informatics Education and Research, 5*(1). (ABDC) https://jier.org/index.php/journal/article/view/2050

**2024**

1. Jeevitha M, Abhinav et al. (2024). Understanding work-life balance and its impact on job satisfaction. *Journal of Informatics Education and Research, 4*(2). (ABDC) https://doi.org/10.52783/jier.v4i2.1086
2. Sharadha S , Abhinav. et al.(2024). Understanding the impact of employee wellness on employee engagement. *European Economic Letters, 14*(2). (ABDC) https://doi.org/10.52783/eel.v14i2.1597
3. Abhinav et al.(2024). Exploring the impact of work-life balance on hospital-based nurses: A comprehensive literature review. *Northern Economic Review, 15*(1). (ABDC)
4. Anil Kumar B. N., Prashanth Kumar.S , Abhinav et al. (2024). Investigating the impact of heat treatment on tensile properties of aluminum-B4C metal matrix mixtures. *Journal of Propulsion Technology, 45*(2). (Scopus-Q3) https://www.propulsiontechjournal.com/index.php/journal/article/view/5820
5. Abhinav, Jayatheertha H. S. (2024). Advancements in ceramic coatings: Enhancing corrosion protection and sustainability. *Journal of Propulsion Technology, 45*(2). (Scopus-Q3) https://www.propulsiontechjournal.com/index.php/journal/article/view/6742
6. N. Sreesudha, Abhinav, K.V. Manjunath, Gopal Chandra Sarkar (2024). Changing landscape of engineering with the introduction of artificial intelligence – An overview. *Journal of Propulsion Technology, 45*(4). (Scopus-Q3)
7. Durai J, C. Anil Kumar, Abhinav (2024). Influence of eco-friendly reinforcement additives on corrosion behaviour of Al7050 and its welded joints. *Journal of Propulsion Technology, 45*(2). (Scopus-Q3)
8. Praveen Kumar, Abhinav, et al. (2024). A study on investment analysis of leading FMCG companies and inter-firm comparison. *Journal of Informatics Education and Research, 4*(2). (ABDC) https://doi.org/10.52783/jier.v4i1.786
9. Abhinav, Sharadha. S. (2024). Leadership 4.0: Harnessing technology and humanity for effective management. *Journal of Informatics Education and Research, 4*(1). (ABDC) https://doi.org/10.52783/jier.v4i1.988

**2023**

1. Abhinav, M. Rajanish et al. (2023). Production of nano-antimony oxide-filled polymer-based glass fiber composites with enhanced interlaminar shear strength (ILSS). *European Chemical Bulletin, 12*(5). (Scopus-Q3)
2. K.V. Manjunath, Abhinav et al. (2023). Dynamic response of chemically glued natural and synthetic hybrid composites. *European Chemical Bulletin, 12*(5). (Scopus-Q3)
3. K.V. Manjunath, Abhinav et al. (2023). Investigations on the hygroscopic behavior on chemically glued composite laminates. *European Chemical Bulletin, 12*(S3). (Scopus-Q3)

4. M. Rajanish, N. V. Nanjundaradhya, Abhinav, et al. (2023). The effect of nano-sized zirconium oxide ($ZrO_2$) particles on the tensile behaviour of glass fiber reinforced polymer (GFRP) composites. *Journal of Propulsion Technology, 44*(3). (Scopus-Q3)
5. M.N. Gururaja, Abhinav, K. Mahesh Dutt, M. K. Harikeerthan (2023). A comprehensive review on mechanical, thermal, and dielectric properties across various fiber-reinforced systems. *Journal of Propulsion Technology, 44*(5). (Scopus-Q3)
6. Deepak Kumar B N, Mahesh Dutt K, Abhinav. (2023). Tribology of 3D printed polyethylene terephthalate glycol (PETG) and acrylonitrile butadiene styrene (ABS) polymer. *Journal of Propulsion Technology, 44*(3). (Scopus-Q3)
7. Abhinav, Sujith Kumar S.G., K. N. Vishwanath, Jayatheertha H. S. (2023). Optimizing flow conditions in baffled channels – A CFD simulation analysis. *Journal of Propulsion Technology, 44*(6). (Scopus-Q3)
8. Praveen Kumar Sinha, Abhinav, Rachana D, Roopa Ajwal(2023). An analytical study on exchange traded funds (ETFs) and its relationship with market movements. *Journal of Propulsion Technology, 44*(3). (Scopus-Q3)
9. Abhinav, Praveen Kumar Sinha, S. Bhargavi. (2023). Revitalizing India's education system: A pathway to national development – An overview. *Journal of Propulsion Technology, 44*(3). (Scopus-Q3)

**2021**

1. **Abhinav**, Rahul Ribeiro, Ranjana Jain. (2021). Modeling and characterization of AlSi S-7 steel using the Johnson–Cook model – An explicit analysis. *Materials Science and Engineering, IOP Science 1013*, 012007. (Scopus)
   DOI: 10.1088/1757-899X/1013/1/012007
   https://iopscience.iop.org/article/10.1088/1757-899X/1013/1/012007
2. **Abhinav**, Rahul Ribeiro, (2021). Thermodynamical investigations on a segmented and continuous baffled motionless mixer – A numerical study. *International Journal for Innovative Research in Multidisciplinary Field, 8*(6), *GIS Science Journal,* ISSN No: 1869-9391 (Scopus)
   DOI: 20.18001.GSJ.2021.V8I6.21.37310
   https://drive.google.com/file/d/1j8dmAygbL_mb6ato5lVmV4_HijIYeRZ9/view

**2020**

1. Abhinav, Rahul Ribeiro et al. (2020). Effect of lubrication on the wear resistance of plasma sprayed composite coatings ($Al_2O_3$ + $ZrO_2$·5CaO). *Tribology in Industry, 42*(1), 50–58. (Scopus-Q3). DOI: 10.24874/ti.2020.42.01.05
   https://www.tribology.rs/journals/2020/2020-1/2020-1-05.html
2. Abhinav, Rahul Ribeiro et al. (2020). Elasto-visco behaviour of Al7075-T6 using a numerical technique. *IOP SciNotes, 1*(2), 1–8. *(Scopus).* DOI 10.1088/2633-1357/ababe9
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3. Abhinav, N. Krishnamurthy et al. (2020). Characterization and abrasive wear investigations on special composite ($Al_2O_3$+$ZrO_2$·5CaO). *Materials Science and Engineering, 2274*(1), 030008.
   https://doi.org/10.1063/5.0022385
4. Abhinav, Adityakumar Anant Hegde et. al.,(2020). Role of shape factor in an integrated honeycomb structure for safe drive. *International Journal for Innovative Research in Multidisciplinary Field, 6*(5), 116–121,ISSN:2455-0620
   https://www.ijirmf.com/wp-content/uploads/IJIRMF202005025.pdf
5. Abhinav, Arun Kumar B et al. (2020). Topology optimization of mechanical bracket using finite element analysis. *International Journal for Innovative Research in Multidisciplinary Field, 6*(5), 43–47.
   https://www.ijirmf.com/wp-content/uploads/IJIRMF202006008.pdf
6. Abhinav, Jason Larson D'souza et al. (2020). Scientific outcomes on thermal barrier coating – A review. *International Journal for Innovative Research in Multidisciplinary Field, 6*(9), 67–71.
   https://www.ijirmf.com/wp-content/uploads/IJIRMF202009012.pdf

**2019**

1. Abhinav, N. Krishnamurthy, Rahul Ribeiro & Abhijeet Hugar T. (2019). Creep strength of $Al_2O_3$ + $ZrO_2$·5CaO subjected to thermal cyclic test. *Springer Nature Applied Sciences. (Scopus-Q2)* https://link.springer.com/article/10.1007/s42452-019-1307-5
2. Dillip Kumar Mohanta **Abhinav**, Ardhendu Mouli Mohanty, (2019). Mechanics of grain size and orientation on the machining of AISI S-7 steel grade using numerical technique. *International Journal of Recent Technology and Engineering, 9*(1). *https://www.ijeat.org/wp-content/uploads/papers/v9i1/A9536109119.pdf (Scopus)*
3. Abhinav, Indhudhar T et al. (2019). Computational fluid dynamics simulation study on isothermally heated surface applied air and water as a coolant medium. *International Journal of Recent Technology and Engineering, 8*(1). https://www.ijrte.org/wp-content/uploads/papers/v8i1/A1263058119.pdf
4. Abhinav, T.,N.Krishnamurthy et al. (2019). Thermochemical and thermomechanical study on composite coatings ($Al_2O_3$ + $ZrO_2$·5CaO). *International Journal of Recent Technology and Engineering, 8*(1C). *(SSRN-Elsevier-Scopus)* http://dx.doi.org/10.2139/ssrn.3511933
5. Abhinav, Bal Sasmita and K Kapiles(2019). Numerical analysis of composite coating ($Al_2O_3$ + $ZrO_2$·5CaO) applied on cast iron. *Materials Science and Engineering, 653*, 012022.(Scopus and WoS) DOI 10.1088/1757-899X/653/1/012022 https://iopscience.iop.org/article/10.1088/1757-899X/653/1/012022

**2018**

1. Abhinav, N. Krishnamurthy et al. (2018). Abrasive wear characteristics of alumina plus calcia stabilized zirconia ($Al_2O_3$ + $ZrO_2$·5CaO) applied to cast iron. *International Journal of Mechanical and Production Engineering Research and Development, 8*(4), 279–288. *(Scopus)*
2. Abhinav, T. (2018). Comparative corrosion studies on alumina plus calcia stabilized zirconia coatings applied to Al6061 and cast-iron substrates. *International Journal of Mechanical and Production Engineering Research and Development, 8*(4), 279–288. *(Scopus)*
3. Abhinav, T. (2018). An elucidation on adhesive strength of $Al_2O_3$ and $ZrO_2$·5CaO composite coating applied on Al-6061 and CI substrates. *International Journal of Mechanical and Production Engineering Research and Development, Special Issue*, 91–98. *(Scopus)*
4. Abhinav, T. (2018). Wear studies of $Al_2O_3$ + $ZrO_2$·5CaO composite coatings for tribological applications. *International Journal of Engineering & Technology (UAE), 7*(3.4), 73–79. *(Scopus)* https://doi.org/10.14419/ijet.v7i3.4.16750
5. Abhinav, T. (2018). Elucidation on abrasive wear of cast iron and alumina plus calcia stabilized zirconia composite coatings. *International Journal of Scientific & Engineering Research, 9*(5), 344–350.

**2017**

1. Abhinav, T, et al. (2017). Corrosion kinetics of $Al_2O_3$ + $ZrO_2$·5CaO coatings applied on gray cast iron substrate. *Ceramic International, 43*(17), 15708–15713. Science Direct-Elsevier (Scopus-SCI-Q1) https://doi.org/10.1016/j.ceramint.2017.08.131
2. Abhinav, T. (2017). Laboratory method to study the surface corrosion of $ZrO_2$·5CaO + $Al_2O_3$ coatings applied on gray cast iron substrate. *International Journal of Scientific & Engineering Research, 8*(5), 597–600.

**2016**

1. Abhinav, T. (2016). Investigations on ($ZrO_2$·5CaO + $Al_2O_3$) applied on Al-6061 and gray cast iron (CI) substrates. *International Journal of Scientific & Engineering Research, 7*(5), 932–938.
2. Abhinav, T. (2016). To study the effect of Tazheranite phase on hardness, applied calcia stabilized zirconia on Al-6061 and gray cast iron. *International Advanced Research Journal in Science, Engineering and Technology, 3*(5), 168–173.

**2015**

1. Abhinav, T. (2015). Characterization and mechanical behaviour of plasma sprayed ceramic coating – An overview. *International Journal of Informative & Futuristic Research, 2*(10), 3600–3604.

**Book Chapter Publications:**

1. Abhinav, T., Prajwal, D., & Kumar, P. (2020). Planing process on AISI S-1006, S-7, and S-4340 based on Johnson–Cook model using numerical technique. In A. Reddy, D. Marla, M. Simic, M. Favorskaya, & S. Satapathy (Eds.), *Intelligent manufacturing and energy sustainability* (Smart Innovation, Systems and Technologies, Vol. 169, pp. 15–25). (Springer-Scopus) https://doi.org/10.1007/978-981-15-1616-0_2

2. Abhinav, T., Kustagi, H. K., & Shankar, A. R. (2020). Adhesion strength of plasma sprayed coatings-A review. In A. Reddy, D. Marla, M. Simic, M. Favorskaya, & S. Satapathy (Eds.), *Intelligent manufacturing and energy sustainability* (Smart Innovation, Systems and Technologies, Vol. 169, pp. 83–91). (Springer-Scopus). https://doi.org/10.1007/978-981-15-1616-0_8

3. Abhinav, T. et al. (2019, April 26–27). Life span studies on functionally graded composite coatings. In *Proceedings of Alliance International Conference on Artificial Intelligence and Machine Learning (AICAAM)*, ISBN: 978-93-5361-299-3.

**Books Authored:**

1. Micro and Macro of Plasma Sprayed Ceramic Composite Coatings. Subtitle: A Scientific, Research Based, Experimental Studies, on Various Aspects of Functionally Graded Coatings. Lambert Academic Publication- (United Kingdom), ISBN: 978-620-0-46303-6.
2. The Indian Constitution-A ready reference Textbook as per VTU Syllabus, Shashwat Publication, India, ISBN: 978-81-19084-13-5.
3. Data Visualization using Python Programming-A Technical Guide for Beginners, Researchers and Data Analyst, Shashwat Publication, India, ISBN: 978-81-19084-72-2.
4. Unleash Your Power: From Ordinary to Extraordinary at Work-For Students, Teachers and Professionals, Shashwat Publication, India, ISBN: 978-81-19281-15-2.
5. From Idea to Reality: A Comprehensive Guide to 3D Printing- For Novice and Professionals, Shashwat Publication, India, ISBN: 978-81-19281-41-1
6. Concepts of Python Programming, For Novice and Students, Lambert Academic Publication- (United Kingdom), ISBN: 978-620-6-73932-6
7. Fundamentals of Python Programming, A Ready Reference Textbook As per VTU, Belagavi Syllabus, Shashwat Publication, India, ISBN: 978-81-19517-30-5
8. Practical Aspects of Composite Materials using Abaqus software, Lambert Academic Publication-(United Kingdom), ISBN: 978-6206784371
9. Principles of Fatigue Analysis with hands-on-exercise using Abaqus Software- International Publication- ISBN-10: 6207447093, ISBN-13: 978-6207447091
10. Engineering Analysis Using Abaqus Software: Empowering Skill to Engineers, Shashwat Publication, India ISBN:9789360871642
11. Mechanics of Material Using Ansys Workbench with Numerical Validation, Lap Lambert Academic Publication- (United Kingdom), ISBN: 978-620-7-47791-3

12. Automation Using Arduino: Learn, Build and Innovate, Shashwat Publication, India ISBN:9789360875480
13. Simulating Engineering Ideas using Abaqus Software: For Researchers and Engineers, Shashwat Publication, India ISBN:9789360879761
14 Structural Analysis using Ansys Workbench –How Engineers Do? - With Numerical Validation, Shashwat Publication, India ISBN:978-93-6087-082-9.
15. Structural Buckling: A Practical Approach with Abaqus Software, Shashwat Publication, India ISBN: 978-93-6087-051-5.
16.Composite Design and Analysis using Abaqus Software: Research with Composite, Shashwat Publication, India ISBN: 978-93-7462-618-4.
17. Structural Analysis Using Abaqus Software, Lap Lambert Academic Publication-(United Kingdom), ISBN 13: 978-6209403521, ISBN 10:6209403522
18. Fundamentals on Electric Vehicles and Heat Transfer Management: With hands-on exercise using Ansys-Fluent CFD, Shashwat Publication, ISBN-13: 978-9374621394
19.Architecture and Urban Farming: Designing Sustainable Cities,Shashwat Publication ,ISBN : 978-93-7462-205-6

**Book Edited :**

Rural and Urban Education in India Addressing the Educational Differences and Challenges, Shashwat Publication, India, ISBN: 9789360874759

**International Conferences (Oral Presentation):**

1. Hot Corrosion Kinetics of Alumina plus 8% Yttria-Stabilized Zirconia Functionally Graded Composite Coatings Applied on Cast Iron Substrate, Structural Integrity at Multiple Length Scales, Organized by Indian Structural Integrity Society (InSIS) and IIT Bombay, 18th to 20th December 2020.
2. Experimental Investigations on Ceramic Composites ($Al_2O_3$+$ZrO_2$5CaO) For High Temperature Application, Advanced Material and Processes for Defense Applications (ADMAT) 2019, Organized by DRDO/DMRL and ASM, Hyderabad, 23rd to 25th September 2019.
3. Characterization and Abrasive Wear Investigations on Special Composite ($Al_2O_3$+$ZrO_2$5CaO), Advances in Material Research (ICAMR), Ramaiah University of Applied Science, Bengaluru, 25th to 27th July 2019.
4. Life Span Studies on Functionally Graded Composite Coatings, International Conference on Artificial Intelligence and Machine Learning (AICAAM), Alliance University, Bengaluru, 26th to 27th April 2019.
5. Planing Process on AISI S-1006, S-7 and S-4340, based on Johnson-Cook Model Using Numerical Technique, Proceedings of the International Conference on Intelligent Manufacturing and Energy Sustainability- (ICIMES-2019), MRCET, Hyderabad, 21st to 22nd June 2019.
6. Adhesion Strength of Plasma Sprayed Coatings-A Review, International Conference on Intelligent Manufacturing and Energy Sustainability- (ICIMES-2019), MRCET, Hyderabad, 21st to 22nd June 2019.
7. Numerical Analysis of Composite Coating ($Al_2O_3$+$ZrO_2$ 5CaO) applied on Cast Iron, Internal conferences on Advances in Materials and Manufacturing Engineering ICAMME, KIIT, Odisha, 15th to17th March 2019.
8.Thermochemical and Thermomechanical Study on Composite Coatings ($Al_2O_3$+$ZrO_2$5CaO), Second International Conference on Emerging Trends in Science and Technology for Engineering Systems, (ICETSE), SJCIT, Bengaluru,17th to 18th May 2019.
9. Abrasive Wear Studies on Special Composite ($Al_2O_3$+$ZrO_2$ 5CaO) for Tribological Applications, 2nd International Conference on Structural Integrity and Exhibition, SICE- 2018, Organized by DRDO/DMRL and Indian Structural Integrity Society, Hyderabad, 25th to 27thJuly 2018.
10. An elucidation on adhesive strength of $Al_2O_3$ and $ZrO_2$ 5CaO composite Coating Applied

on Al-6061 & CI substrates. International Conference on Emerging Trends in Mechanical Sciences (ICEMS),Malla Reddy College of Engineering & Technology Hyderabad, 22nd to 23rd June 2018.
11. Muffle Furnace Thermal Cyclic Durability of $Al_2O_3$+$ZrO_2$5CaO Applied to Cast Iron Substrate, International Conference on Applied Engineering Sciences and Management (ICAEM), K.S. School of Engineering and Management, Bengaluru,12th to 13th October 2018.
12.Protective Composite Coatings ($Al_2O_3$+$ZrO_2$ 5CaO) an Add-on to Al6061 Alloy, International Conference on Innovation and Challenges in Science and Technology (ICICST) at Don Bosco Institute of Technology, Bengaluru,19th to 23rd December 2019.
13. Finite Element Analysis of ALSI S-7 Steel Using the Johnson Cook Model, International Conference on Futuristic Trends in Mechanical Engineering (ICOFTIME2020) at Presidency University, Bengaluru, India, on 11th to 12th September 2020 in Association with UCSI University, Kuala Lumpur, Malaysia.

**National Conferences Oral Presentation:**

1. Tribology of Alumina plus Calcia Stabilized Zirconia composite coatings, National Conference on Topical Transcend in Mechanical Technology (TTMT), SJB Institute of Technology, Bengaluru, 9th May-2018.
2. Comparative corrosion studies on Alumina plus Calcia stabilized Zirconia coatings Applied to Al-6061 and CI substrates, National Conference on Material Science and Application (MSA), SJB Institute of Technology, Bengaluru, 9th May-2018.
3. Salt fog spray corrosion (SFSC) study on $Al_2O_3$+$ZrO_2$5CaO composite functionally Graded coating on Al-6061 and Gray Cast Iron Substrate, National Conference on Current Developments & Its Applications in Mechanical Engineering (NCCDAME), K.S Institute of Technology, Bengaluru, 10th and 12th May-2017.
4. Laboratory method to study the surface corrosion of $Al_2O_3$+$ZrO_2$5CaO, National Conference on Current advances in Science and Technology (NCCAST), K.S Institute of Technology, Bengaluru, 10th and 12th May-2017.
5. Thermal Spray Coatings evaluation techniques on Al-6061 and Gray cast Iron (GCI) Substrates, for the National Conference on Advances in Mechanical Engineering (NCAME). K.S. School of Engineering and Management, Bengaluru, 29th April-2016.
6. Characterization and mechanical behavior of plasma sprayed ceramic coating- An Overview, Recent Trends in Materials Chemistry and Engineering (RTMCE), RNS Institute of Technology, Bengaluru, 29th & 30th, Sep.2011, Page No.181.
7. Plasma sprayed thermal barrier coatings used as liner in IC Engines, Recent Advances in Chemical and Environmental Science, Sri Bhagwan Mahaveer Jain College, Jain University, Bengaluru,28th -29th December 2011, Page No.20.
8. Smart Materials, K.L.E Society's College of Engineering and Technology, Belgaum, Karnataka, 6th and 7th May 2005.
9. Role of Surface Roughness and Coating Thickness in the Salt Fog Corrosion Study of Composite Coatings ($Al_2O_3$+$ZrO_2$5CaO), International Conference on Advances in Materials, Ceramics and Engineering Sciences, held on 17th and 18th January 2020 at Dayanand Sagar College of Engineering, Bengaluru.
10. Honeycomb Structure an Add-On to Car Doors- Designed for Safe Drive, International Conference on Advances in Materials, Ceramics and Engineering Sciences-2020 held on 17th and 18th January 2020 at Dayanand Sagar College of Engineering, Bengaluru.

## Intellectual Property Rights (Design Registration and Utility Patent)

1. Industrial Predictive Maintenance Analysing Device, Application No 404345-001 (Design patent Status-Granted)
2. Wandering Cow Controlling Device for Road Safety, Application No 391070-001, (Design patent Status-Granted)
3. Robotic Device for Dental surgery Assistance, Application No 394826-001, (Design patent Status-Granted)
4. Uranium Removal Water Cleaning Device, Application No 395655-001 (Design patent Status-Granted)
5. Smart conveyor belt for sorting product based on size , Application No 401792-001 (Status-Granted)
6. Delivery AI-Robotic, Application No 406402-001 (Design patent Status-Granted)
7. Precision Dental Inspection Device, Application No 410868-001.( Design patent Status-Granted)
8. Ocean Oil Spillage Cleanup Device, Application No 415459-001(Design patent Status-Granted)
9. Smart Safety Helmet with Locator, Application No 410544-001(Design patent Status- Granted)
10. Wave Current Power Generation, Application No 419421-001(Design patent Status- Granted)
11. Legal Document Organizer, Application No 421993-001 (Design patent Status-Granted)
12. Replacing Bearing Materials for better heat, Tribological and Mechanical Properties, Application No 202341066233. Filing Date 03/10/2023, Publication Date: 20/10/2023(Process patent Status-Published)
13. Big Data and Machine Learning Based Approach for Wireless Network Optimization, Application No.202241069834.Date of Filing: 03/12/2022, Publication date :09/12/2022 (Utility patent Status-Published)
14. Fabrication and Performance evaluation of Nanotechnology integrated next generation Automobile Radiator, Application No.202341036425, DOF: 25.05.2023 Patent Application Published, Journal Number- 35/2023, Journal Date: 01/09/2023, Indian Patent Office (Utility patent Status-Published)
15. Solar-Powered Car Parking Device, Application No 422308-001 (Design patent Status-Granted)
16. Therapeutic Neck Flexion Device, Application No. 427337-001(Design patent Status-Granted)
17. Solar Site Analyzer, Application No.439785-001(Design patent Status-Granted)
18. Hotel Hygiene Maintaining Machine, Application No.: 449767-001(Design patent Status-Granted)
19. Vibration Tracking Ai-Device, Application No.: 461782-001 (Design patent Status-Granted)
20. Turbine Blade Health Monitoring Device, Application No.: 472822-001(Design patent Status- Granted)
21. Material Defects Detecting Portable Device, Application No.: 468897-001 (Design patent Status-Granted)
22. Energy-Efficient Façade System with Gyroscopic Sun-Shading Mechanisms for Passive Climate Control, Application No.:202541107679. Date of Filing: 06/11/2025, Publication Date: 28/11/2025 (Utility patent Status-Published)
23. Autonomous AI-Integrated Agricultural Robot for Adaptive Multi-Stage Farming Operations, Application No.:202541098060, Date of Filing: 11/10/2025, Publication Date: 07/11/2025 (Utility patent Status-Published)
24. Health Diagnosing Scanner, Application No.: 490549-001, (Design patent Status- Granted)
25. Adaptive Multi Model Therapeutic System for Chronic Venous Inefficiency with Real Time Hemodynamic Monitoring, Application No.:202541122314. Date of Filing: 05/12/2025, Publication Date:02/01/2026 (Utility patent Status-Published)
26. Adaptive In-Pipe Leakage Detection and Internal Repair Device for Municipal Pipelines. Application No.:202641035631, Date of Filing: 24/03/2026, Publication Date:03/04/2026 (Utility patent Status-Published)
27. Modular Pedal-Powered Agricultural Multi-Tool System with Torque Amplification and Quick-Swap Interfaces. Application No.:202641013387. Date of Filing: 07/02/2026 Publication Date: 20/02/2026 (Utility patent Status-Published)
28. Portable Gravity-Powered Generator for Off-Grid Electrical Supply in Emergency and Disaster Zones. Application No.:202641000559. Date of Filing:03/01/2026 Publication Date: 30/01/2026 (Utility patent Status-Published)
29. Portable Vertical Farming Unit, Application No.:495050-001, (Design patent Status- Granted)

30. Load-Adaptive Mechanical Energy Harvester for Pathways with Modular Utility Interfaces, Application No:202641021574, Date of Filing: 24/02/2026, Publication Date: 06/03/2026 (Utility patent Status-Published)

**Govt.Copyrights Grants:**

(1) Device Wave Current power generation Device (Diary Number: 19080/2024-CO/L):Status-Granted
(2) Legal Document Organizer Scanner (Diary Number: 21423/2024-CO/L): Status-Granted
(3) Solar-Powered Car Parking Device (Diary Number:21447/2024-CO/L):Status-Granted
(4) Therapeutic Neck Flexion Device (Diary Number: 26063/2024-CO/L): Status-Granted
(5) Solar Site Analyzer Robot (Diary Number: 38704/2024-CO/L): Status-Granted
(6) Hotel Hygiene Machine (Diary Number: 9792/2025-CO/L): Status-Granted
(7) Turbine Blade Health Monitoring Device, (Diary Number: LD-37097/2025-CO) Status- Granted)
(8) Portable Vertical Farming Unit, (Diary Number: LD-12113/2026-CO) Status-Granted.
But not limited to.

## Awards and Appreciations

1.Completed 60+ MOOC Courses from Coursera, Udemy, and Globally Recognized Universities
2.Completed 20+ Industry-Oriented Courses
3.Received the Best Paper Presentation Award at International Conferences on Three Occasions
4.Research Excellence Award (Institute of Scholars (InSc) Ministry of MSME, Govt. of India, Unit of SPDL, UK and ISO 9001:2015 Certified
5.Excellence in Technical Reviewing-International Journal
6. Editor and Reviewer for Scopus-, Web of Science (WoS)-, and ABDC-indexed journals, including Elsevier and Springer publications
7.Session Chair-International Conferences
8.Kaizen Award -Industry
9.Manthan Southeast Asia Award, Delhi
10.Best Professional Performer (Research & Academics)
11.Academic excellence (100% Result, VTU.)
12. Appreciation by Society for Space Education Research and Development, Bengaluru (but not limited to)

## Academic Activity and Exposure

1. SEEL-VTU Coordinator
2. NIRF-Research Coordinator
3. Served as an NBA Coordinator
4. Served as an IQAC Committee Member
5. Department Placement Coordinator
6. Served as a BOS member
7. Served as DCS-VTU & External Examiner-Panel member-Ph.D. (RUAS)
8. International Conference Coordinator
9. Delivered Technical Talks and Hands-On Workshops

## Faculty Development Activity/Workshops

1.Participated in Two days National Seminar on Advances in Material and Manufacturing 18$^{th}$and 19$^{th}$ June 2020 at Chennai Institute of Technology, Chennai.

2. Participated workshop on “Electric Vehicle Technology” on 10$^{th}$ & 11$^{th}$ January 2020, jointly organized by the institution of Engineering Technology (IET) and Alliance University, Bengaluru.

3. Participated in the “Outcome based Education” Faculty Development Program”, Workshop on 17$^{th}$ and 18$^{th}$ January 2019 at Alliance University, Bengaluru.

4. Participated in the "Green Energy and Sustainable Development", workshop on 21st June 2019 at Alliance University, Bengaluru.
5. Participated in the "10th Annual Conference of Karnataka Science and Technology Academy", jointly organized by KSTA and Reva University 18th and 19th Jan 2018.
6. Participated in the workshop on "National Programme on Technology Enhanced Learning", (IIT) - Madras and Alliance University, Bengaluru, 5th Sep.2015.
7. Participated in the Faculty Development Programme on "Ansys Solutions for General Mechanical Engineering Problems" organized by the Department of Mechanical Engineering, K.S. Institute of Technology, Bengaluru, 23rd to 27th Feb. 2015.
8.Participated in the workshop on "Modeling and Simulation of Multiscale Systems", Organized by the Department of Chemistry, CMR. Institute of Technology, Bengaluru, 9th and 10th July 2015.
9.Participated in the symposium on "Recent Trends in Advanced Materials and Nanotechnology", organized by the Department of Physics, CMR. Institute of Technology,Bengaluru, 23rd Jan 2015.
10.Participated in the Faculty Development Programme on "Introduction to Scientific Programming Using MATLAB", organized by the Department of Mechanical Engineering,CMR. Institute of Technology, Bengaluru, 22nd Jan 2015.
11.Participated in National workshop on "LaTex", Sri Bhagwan Mahaveer Jain College Jain University, Bengaluru,12th to 13th December 2013.
12.Participated in the Faculty Development Programme on "Teaching and Learning- practices, Research Methodology and Writing Project Proposals" organized by K.S. Institute of Technology, Bengaluru, 24th to 25th Jan.2011.
13.Participated in National Seminar on "Trends in Engineering Materials", organized by K.S.Institute of Technology, Bengaluru, 5th and 6th Dec.2011.
14. Participated in the National workshop on "Progress in Renewable Energy Sources, Organized by the Department of Mechanical Engineering, STJ Institute of Technology, Ranebennur and in association with Karnataka Renewable Energy Development Ltd.(KREDL), Govt. of Karnataka, 17th and 18th March 2006.
15.Atmanirbhar Bharat: Turn Crisis into an Opportunity" Organized by the Department of Management Studies, VTU Belagavi in association with Scientists & Engineering Wing, R.E. & R.F. of Prajapita Brahma Kumaris, Ishwariya Vishw Vidyalaya, Belagavi on 20th & 21stAugust 2020.
16.TEQIP-III sponsored One Week Workshop on "Vision Scenario and Future Pathways towards Sustainable Development" under TEQIP-III at Gaya College of Engineering, Gaya,(Bihar) India from October 5th – 10th, 2020.
17.Fundamentals of Strength of Materials Knowledge 4.0, Technical Webinar Series,Organized by Chennai Institute of Technology, Chennai, along with IIT Madras on 29th April 2020.
18.Introduction to Image Quality Measures, Knowledge 4.0, Technical Webinar Series, Organized by Chennai Institute of Technology, Chennai, along with IIT Madras on 13th May 2020.
19.Additive Manufacturing (3D Printing) with some Business Cases, Knowledge 4.0, Technical Webinar Series, Organized by Chennai Institute of Technology, Chennai Along With Netherlands Industrial experts on 14th May 2020.
20.Industry 4.0, Knowledge 4.0, Technical Webinar Series, Organized by Chennai Institute of Technology, Chennai along with ACE Micromatic Group of Bengaluru, on 15th May 2020.
21.Blockchain Technology, Knowledge 4.0, Technical Webinar Series, Organized by Chennai Institute of Technology, Chennai along with Print2 Block Tech Pvt. Ltd, on 15th May 2020.
22.Technical Webinar on "Insight to Industry 4.0" Organized by S.A. Engineering College, Chennai, India on 29th May 2020.
23.Workshop on Computational Fluid Dynamics, Organized by Skill Lync on 2nd June 2020.
24.Workshop on Practical Approach towards Structural Analysis Using CAE, Organized by Skill Lync on 1st June 2020.
25.Workshop on Engineering Calculations using Math Cad, Organized by Skill Lync on 12st June 2020.
26.Co-Po Attainment Computation and Outcome Analysis by InPods Ed-Tech Organized by Alliance University on 30th June 2020.

27.Attended webinar on “DELNET Networked Resources and Services”, Organized Jointly with Alliance University, Bengaluru on 24rt December 2020.
28.International Workshop on Design and Manufacturing of Composites for Engineering Applications held at Indian Institute of Technology Mandi, Mandi, Himachal Pradesh during 01st to 05th February 2021.
29.Participated in Five Days-TEQIP -III Sponsored on Design of Experiments using Taguchi Technique at regional College of Education Research and Technology, Jaipur. From 26th to 30th Jan 2021.
30. Participated & completed AICTE Training and Learning (ATAL) Academy Online FDP on"Product Design" from 2021-1-4 to 2021-1-8 at College of Engineering Trivandrum.
31.Participated & successfully completed an online session on creating web app and Centralized app using apk conducted by Multicloud4U Academy at Alliance University on 24th Feb 2021.
32.Participated five days Faculty Development Program on Electric, Hybrid Electric Vehicles and charging Infrastructure, organized by the department of Electrical and Electronics Engineering, Don Bosco Institute of Technology, Bengaluru from 6th to 10th April 2021.
33.Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Novel Materials" from 2021-2-8 to 2021-2-12 at National Institute of Technology Patna.
34.Participated in the International webinar on Current status of Li-Ion Battery Technology, organized by the department of Chemistry, Don Bosco Institute of Technology, Bengaluru from 5th June 2021.
35.Participated in the webinar on Recent trends and career Opportunities in RF Engineering and charging Infrastructure, organized by the department of Chemistry, Don Bosco Institute of Technology, Bengaluru from 7th June 2021.
36.Participated & completed AICTE Training and Learning (ATAL) Academy Online FDP on“Advancements in Computational Fluid Dynamics using, FLUIDYN" from 2021-06-07 to 2021-06-11 at Alliance University.
37.Participated & completed AICTE Training and Learning (ATAL) Academy Online FDP On Engineering Modeling and Simulation using CFD" from 2021-06-21 to 2021-06-25 at National Institute of Technology, Jamshedpur.
38. Pparticipated in IP Awareness (NIPAM)/Training program under Certified by Government of India,Ministery of Commerse and Industry.
39. One-Week Workshop on "Recent Advances in Design, Manufacturing & Testing of Composites" organized by Department of Mechanical Engineering, Chaitanya Bharathi Institute of Technology (A) in collaboration with Advanced Systems Laboratory (ASL), DRDO, and Indian Society for Advancement of Materials and Process Engineering (ISAMPE), Hyderabad Chapter held from 06/01/2025 to 11/01/2025.
**But not limited to.**

## Contact Details

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