

LIST OF PUBLICATIONS:

International Journals (SCI/ESCI/SCIE/SCOPUS/WoS)

1. S. Prasad, S. Babu, A. A. Ahmed, A. M. Kolhe, S. R. Raju, and **B. Sridhar Babu**, "Experimental investigation on performance of cryogenic, MQL and nano-coolant machining environment in turning of Inconel 718," *Industrial Lubrication and Tribology*, vol. 77, no. 3, pp. 1–12, Jun. 2025. doi: <https://doi.org/10.1108/ILT-02-2024-0065> (SCI / Scopus)
2. S. V. S. Prasad, P. Kumar, S. Narasimha Kumar, R. Raman Goud, and **B. Sridhar Babu**, "Tribological, mechanical and corrosion analysis of magnesium-based nanocomposites for biodegradable implant applications," *Materialwissenschaft und Werkstofftechnik*, vol. 56, no. 12, pp. 1–12, Dec. 2025. doi: <https://doi.org/10.1002/mawe.202400312> (SCI / Scopus)
3. Y. S. Narayan, K. J. Prakash, M. H. Reddy, and **B. Sridhar Babu**, "Surface integrity studies in microhole drilling of titanium beta-C alloy using micro-EDM," *Journal of the Mechanical Behavior of Materials*, vol. 34, no. 1, p. 20240024, Feb. 2025. doi: <https://doi.org/10.1515/jmbm-2024-0024> (Scopus / WoS)
4. A. Zade, **B. Sridhar Babu**, and R. R. P. Kuppaswamy, "Process optimization using cuckoo search algorithm for the manufacturing of resin transfer moulded composite parts," *Archives of Metallurgy and Materials*, 2024. doi: <https://doi.org/10.24425/amm.2024.151432> (SCI)
5. R. R. P. Kuppaswamy, A. Zade, and **B. Sridhar Babu**, "Evaluation of peel ply effectiveness in controlling mould release agent contamination of epoxy/carbon fibre composite laminate surfaces," *Archives of Metallurgy and Materials*, 2024. doi: <https://doi.org/10.24425/amm.2024.151430> (SCI)
6. I. S. N. V. R. Prasanth *et al.*, and **B. Sridhar Babu**, "An exploratory study of the surface integrity of various FRP composites in face milling operation," *Archives of Metallurgy and Materials*, 2024. doi: <https://doi.org/10.24425/amm.2024.151431> (SCI)
7. G. Narender *et al.*, and **B. Sridhar Babu**, "Orientation influence on tensile strain hardening in forged plates of AA2014 aluminium alloy," *Archives of Metallurgy and Materials*, vol. 69, no. 4, pp. 1585–1591, 2024. doi: <https://doi.org/10.24425/amm.2024.151429> (SCI)
8. K. Kumar, M. Harinatha Reddy, and **B. Sridhar Babu**, "State-of-the-art on advancements in carbon-phenolic and carbon-elastomeric ablatives," *Polymers*, vol. 16, no. 11, p. 1461, 2024. doi: <https://doi.org/10.3390/polym16111461> (SCI, IF $\approx$ 4+)
9. **B. Sridhar Babu**, A. Kumara swamy, and K. Kumar, "Effect of macro, micro and nano loads on the indentation behaviour of Ti-6Al-4V and Haynes 242 alloys," *International Journal of Automotive and Mechanical Engineering*, vol. 19, no. 2, pp. 9816–9822, 2022. doi: <https://doi.org/10.15282/ijame.19.2.2022.15.0757> (Scopus, IF $\approx$ 0.33)
10. V. Harinadh and **B. Sridhar Babu**, "Thermal and residual stress distributions in Inconel 625 butt-welded plates," *Advances in Materials Science and Engineering*, 2021. doi: <https://doi.org/10.1155/2021/3948129> (SCI, IF $\approx$ 1.75)
11. V. Harinadh, **B. Sridhar Babu**, and P. Ferro, "Effect of heat input on distortions and residual stresses in dissimilar welded joints," *Advances in Materials Science and Engineering*, 2021. doi: <https://doi.org/10.1155/2021/1028461> (SCI, IF $\approx$ 2.09)
12. Y. Balram, **B. Sridhar Babu**, and G. V. Ramana, "Comparison of metallurgical and mechanical properties of dissimilar joints of AISI 316 and Monel 400," *The International Journal of Advanced Manufacturing Technology*, 2020. doi: <https://doi.org/10.1007/s00170-020-05562-w> (SCI, IF $\approx$ 2.99)
13. S. Satheesh Kumar, **B. Sridhar Babu**, and K. Tirupathi, "Comparison of ductile, flexural, impact and hardness attributes," *Intelligent Manufacturing and Energy Sustainability*, Springer, 2020. doi: https://doi.org/10.1007/978-981-15-1616-0_62 (Scopus)
14. S. Satheesh Kumar and **B. Sridhar Babu**, "Dataset on tribological characterization of composites," *Data in Brief*, 2020. doi: <https://doi.org/10.1016/j.dib.2020.105662> (ESCI, Scopus, IF $\approx$ 1.5)
15. **B. Sridhar Babu** and K. Kumar, "Temperature dependence of indentation behavior of Ti-6Al-4V alloy," *Biointerface Research in Applied Chemistry*, 2020. doi: <https://doi.org/10.33263/BRIAC96.629234> (Scopus, WoS, IF $\approx$ 1.5)

16. S. Marichamy *et al.*, and **B. Sridhar Babu**, "Optimization of abrasive water jet machining parameters," *FME Transactions*, 2019. doi: <https://doi.org/10.5937/fmet1901116M> (SCIE, Scopus, IF≈1)
17. S. Marichamy and **B. Sridhar Babu**, "Effects of graphite particles in titanium MMC," *Lecture Notes in Mechanical Engineering*, 2019. doi: <https://doi.org/10.1007/978-981-32-9931-3-26> (Scopus)
18. **B. Sridhar Babu**, A. Kumaraswamy, and B. Anjaneya Prasad, "Elasto-plastic deformation behavior of alloys," *Transactions of the Indian Institute of Metals*, 2015. doi: <https://doi.org/10.1007/S12666-015-0550-8> (SCIE, Scopus, IF≈1.4)
19. **B. Sridhar Babu**, A. Kumaraswamy, and B. Anjaneya Prasad, "Effect of indentation size and strain rate," *Transactions of the Indian Institute of Metals*, 2014. doi: <https://doi.org/10.1007/S12666-014-0438-Z> (SCIE, Scopus, IF≈1.4)
20. **B. Sridhar Babu**, A. Kumaraswamy, and B. Anjaneya Prasad, "Investigation of elasto-plastic deformation behavior," *Transactions of the Indian Institute of Metals*, 2015. doi: <https://doi.org/10.1007/S12666-015-0550-8> (SCIE, Scopus)
21. **B. Sridhar Babu**, A. Kumaraswamy, and B. Anjaneya Prasad, "Numerical analysis of friction effects in nanoindentation," *Procedia Engineering*, 2013. doi: <https://doi.org/10.1016/j.proeng.2013.09.182> (Scopus)
22. **B. Sridhar Babu** and M. Srinivas, "A critical review on additive manufacturing," *Materials Today: Proceedings*, 2017. doi: <https://doi.org/10.1016/j.matpr.2017.07.258> (Scopus)
23. **B. Sridhar Babu** and A. Kumaraswamy, "Evaluation of flow curve for SS304," *ARP Journal of Engineering and Applied Sciences*, 2011. (Scopus)
24. **B. Sridhar Babu** and Senthilkumar, "Comparative modeling on surface roughness for roller burnishing," *International Journal of Mechanical and Production Engineering Research and Development*, 2018. doi: <https://doi.org/10.24247/ijmperdfeb2018> (Scopus)
25. A. N. S. Ranganayakulu and **B. Sridhar Babu**, "Experimental development of pultrusion moulds," *Materials Today: Proceedings*, 2019. doi: <https://doi.org/10.1016/j.matpr.2019.07.612> (Scopus)
26. **B. Sridhar Babu**, "Thermal stress analysis of AISI 316 weldments," *Materials Today: Proceedings*, 2019. doi: <https://doi.org/10.1016/j.matpr.2019.06.695> (Scopus)
27. S. Avinash and **B. Sridhar Babu**, "Multi-response optimization of pulse TIG welding parameters," *Materials Today: Proceedings*, 2019. doi: <https://doi.org/10.1016/j.matpr.2019.07.211> (Scopus)
28. Y. Balram *et al.*, and **B. Sridhar Babu**, "Effect of filler wires on weld strength," *Materials Today: Proceedings*, 2019. doi: <https://doi.org/10.1016/j.matpr.2019.06.759> (Scopus)
29. **B. Sridhar Babu** and G. V. Ramana, "Residual stress analysis of dissimilar weldments," *Materials Today: Proceedings*, 2019. doi: <https://doi.org/10.1016/j.matpr.2019.07.639> (Scopus)
30. **B. Sridhar Babu** and V. Srikanth, "Numerical analysis on indentation behavior of Ti-6Al-4V," *Materials Today: Proceedings*, 2019. doi: <https://doi.org/10.1016/j.matpr.2019.08.139> (Scopus)
31. M. A. Ali Baig, Azeem, and **B. Sridhar Babu**, "Porous cylinder subjected to conjugate heat transfer – Part II," *AIP Conference Proceedings*, 2019. doi: <https://doi.org/10.1063/1.5141242> (Scopus)
32. M. A. Ali Baig, Azeem, and **B. Sridhar Babu**, "Porous cylinder subjected to conjugate heat transfer – Part II," *AIP Conference Proceedings*, 2019. doi: <https://doi.org/10.1063/1.5141240> (Scopus)
33. **B. Sridhar Babu**, "Design and demonstration of manual operated pedalo water boat," *AIP Conference Proceedings*, 2019. doi: <https://doi.org/10.1063/1.5141267> (Scopus)
34. S. Chikesh Ranjan and **B. Sridhar Babu**, "Design and fabrication of quadcopter with solar power source," *AIP Conference Proceedings*, 2019. doi: <https://doi.org/10.1063/1.5141174> (Scopus)

INTERNATIONAL JOURNAL PAPERS (PEERREVIEWED):

1. T. Vijay Kumar, **B. Sridhar Babu**, and R. Jalla, "Experimental and theoretical study on effect of welding speed and tool pin profiles on aluminum friction stir welded butt joints," *International Journal of Research in Engineering & Advanced Technology*, vol. 1, no. 4, Aug.–Sept. 2013.
2. Y. Balram, **B. Sridhar Babu**, V. Harinadh, and K. Chandrasekhar, "Prediction of residual stresses and distortion in GTAW process – A review," *International Journal of Advance Research and Innovative Ideas in Education*, vol. 2, no. 2, Apr. 2017.
3. **B. Sridhar Babu**, A. Kumaraswamy, and B. Anjaneya Prasad, "Relevance of nanoindentation experiments in materials research – A review," *Advanced Materials Manufacturing & Characterization*, vol. 3, no. 1, 2013.

4. P. Shravan Kumar and **B. Sridhar Babu**, "Development and analysis of connecting rod from 3D scanned data using reverse engineering technique," *International Journal of Research in Engineering & Advanced Technology*, vol. 2, no. 1, Feb.-Mar. 2014.
5. M. Priyadarsini, **B. Sridhar Babu**, and R. Jalla, "Non-destructive evaluation of elasto-plastic properties of Inconel alloy through microindentation," *International Journal of Research in Engineering & Advanced Technology*, vol. 1, no. 4, Aug.-Sept. 2013.
6. B. Swathy and **B. Sridhar Babu**, "Dynamic analysis of a hermetic reciprocating compressor," *International Journal of Latest Trends in Engineering, Science and Technology*, vol. 1, no. 5, May 2014.
7. **B. Sridhar Babu** and P. D. Dinkarrao, "Computational fluid dynamics and experimental analysis for optimum geometry of vortex tube," *International Journal of Innovative Research in Science, Engineering and Technology*, vol. 3, no. 8, 2014.
8. K. Raghunandan and **B. Sridhar Babu**, "Electro-mechanical system design for seating systems," *International Journal of Engineering Research and Technology*, vol. 3, no. 7, Jul. 2014.
9. V. Sudheer and **B. Sridhar Babu**, "Computational fluid dynamics analysis of a building ventilation solar chimney," *International Journal of Advance Research and Innovative Ideas in Education*, vol. 2, no. 2, Apr. 2017.
10. L. Durga Prasad, D. Dev Singh, and **B. Sridhar Babu**, "Static and dynamic analysis of centrifugal blower using composite material," *International Journal of Latest Trends in Engineering Science and Technology*, vol. 2, no. 3, Oct. 2015.
11. N. Srinivas, D. Dev Singh, and **B. Sridhar Babu**, "Prediction of behavior of composite material low-pressure vessels under various loadings," *International Journal of Latest Trends in Engineering Science and Technology*, vol. 2, no. 3, Oct. 2015.
12. G. Venkatesh, G. V. Ramana, and **B. Sridhar Babu**, "Simulation of friction stir welding process parameters of Al 5086 and Al 6061 joints," *International Journal of Latest Trends in Engineering Science and Technology*, vol. 2, no. 3, Oct. 2015.
13. N. Srujana and **B. Sridhar Babu**, "Comparative study of performance of acoustic horns using FEA," *International Journal of Latest Trends in Engineering Science and Technology*, vol. 2, no. 3, Oct. 2015.
14. S. Rama Krishna, G. V. Ramana, and **B. Sridhar Babu**, "Design of impulse tubing assembly structure for seismic conditions," *International Journal of Latest Trends in Engineering Science and Technology*, vol. 2, no. 3, Oct. 2015.
15. **B. Sridhar Babu**, "Development and analysis of connecting rod using reverse engineering technique," *International Journal of Research in Engineering & Advanced Technology*.
16. **B. Sridhar Babu**, "Experimental study on effect of diameter and rotational speed on AA6063-T6 friction welded joints," *International Journal for Scientific Research & Development (IJSRD)*.
17. M. Srinivas and **B. Sridhar Babu**, "Development of high strength, toughness and wear resistant parts for mud pump," *International Journal of Innovations in Engineering and Technology*.
18. V. Sudheer and **B. Sridhar Babu**, "Thermal analysis of automobile oil sump," *International Journal of Advance Research and Innovative Ideas in Education*, vol. 2, no. 2, 2017.

CONFERENCE PAPERS

1. G. Juneja, B. Kumar, and **B. Sridhar Babu**, "Mechanical characterization of Haynes 242 alloy using depth-sensing indentation technique," *International Conference on Advanced Materials, Manufacturing and Engineering*, 2025.
2. A. Kumaraswamy, **B. Sridhar Babu**, and B. Anjaneya Prasad, "Non-destructive evaluation of elasto-plastic properties of Ti-6Al-4V alloy through nanoindentation," *NDE 2012 Conference*, Dec. 10-13, 2012. doi: <https://doi.org/10.1016/j.matdes.2011.01.003>
3. **B. Sridhar Babu**, A. Kumaraswamy, and B. Anjaneya Prasad, "Computational study of factors affecting nanoindentation characterization," *57th Congress of ISTAM*, DIAT, Pune, pp. 115-120.
4. **B. Sridhar Babu**, A. Kumaraswamy, and B. Anjaneya Prasad, "Effect of strain rate on Ti-6Al-4V alloy through nanoindentation," *National Conference on Micro & Nano Fabrication*, CMTI, Bangalore, Jan. 2013, pp. 127-131.
5. **B. Sridhar Babu**, A. Kumaraswamy, and B. Anjaneya Prasad, "Effect of strain rate on mechanical behavior of Haynes 242 alloy," *National Conference on Emerging Trends in Mechanical Engineering*, Osmania University.
6. Y. Balram and **B. Sridhar Babu**, "Experimental study on AA6063-T6 friction welded joints," *National Conference on Recent Trends & Innovations in Mechanical Engineering*, NNREC, Hyderabad.
7. **B. Sridhar Babu**, A. Kumaraswamy, and B. Anjaneya Prasad, "Investigation on indentation behavior of Ti-6Al-4V alloy," *AIMTDR Conference 2018*, Anna University, Chennai.
8. S. Satheesh Kumar and **B. Sridhar Babu**, "Comparison of mechanical attributes of sisal fiber composites," *International Conference on Intelligent Manufacturing and Energy Sustainability*, Hyderabad, June 21-22, 2019.

BOOKS PUBLISHED:

1. **B. Sridhar Babu**, "Hybrid composites: Processing, characterization and applications," **Verlag Walter de Gruyter GmbH**, Germany. ISBN: 978-3-11-072468-4. Available: <https://www.degruyter.com/document/isbn/9783110724684/html>
2. K. Kumar and **B. Sridhar Babu**, "Advances in industrial automation and robotics," **CRC Press (Taylor & Francis)**, USA. ISBN: 978-0-36-748797-3. Available: <https://www.routledge.com/Industrial-Automation-and-Robotics-Techniques-and-Applications/Kumar-Babu/p/book/9780367487973>
3. **B. Sridhar Babu** and J. P. Davim, "Lightweight materials: Processing and characterization," **ISTE Science Publishing Ltd.**, UK, 2021. ISBN: 978-1-78-630797-2. Available: <http://iste.co.uk/book.php?id=1810>
4. **B. Sridhar Babu** and K. Kumar, "Nanomaterials and nanocomposites: Characterization, processing and applications," **CRC Press (Taylor & Francis)**, USA. ISBN: 978-0-367-48389-0.
5. K. Kumar, **B. Sridhar Babu**, and J. P. Davim, "Coatings – Materials, processes and characterization," **Springer Nature**, Germany.
6. **B. Sridhar Babu**, "Engineering mechanics," **Spectrum Publications**, 2019.
7. **B. Sridhar Babu**, "Engineering drawing," **Spectrum Publications**, 2019.
8. **B. Sridhar Babu**, "Ballistic performance of multi-layered metallic plates: FEM," **Lambert Academic Publishing**. ISBN: 978-3-659-92044-8.
9. **B. Sridhar Babu**, "Numerical analysis of ultrasonic machine acoustic horn," **Lambert Academic Publishing**. ISBN: 978-3-659-93969-3.
10. **B. Sridhar Babu**, "Analysis of honeycomb sandwich structures," **Lulu Publications**. ISBN: 978-1-365-60830-8.
11. **B. Sridhar Babu**, "Analysis of CNC rotary table used in horizontal machining centre," **Lulu Publications**.
12. K. Kumar, **B. Sridhar Babu**, and J. P. Davim, "Lightweight materials – Industrial approach," **CRC Press (Taylor & Francis)**, USA.

BOOK CHAPTERS PUBLISHED:

1. **B. Sridhar Babu** and K. Kumar, "Characterization of coatings through indentation technique," in **Coatings / Related Engineering Volume**.
2. C. Ranjan, H. Kalita, **B. Sridhar Babu**, and K. Kumar, "Application of evolutionary optimization techniques towards non-traditional machining for performance enhancement," in G. K. Bose and P. Pain, Eds., **Machine Learning Applications in Non-Conventional Machining Processes**, IGI Global, USA, pp. 181–194. doi: <https://doi.org/10.4018/978-1-7998-3624-7.ch011>
3. **B. Sridhar Babu**, "Multiaxis CNC programming and machining," in **Modern Manufacturing Processes**, Woodhead Publishing (Elsevier), 2020 (**Scopus**)
4. B. Vijay Kumar and **B. Sridhar Babu**, "Optimization of process parameters for AA6063 alloys friction surfacing on mild steel," in **Coatings**, Springer Nature, 2021.
5. Uzawal and **B. Sridhar Babu**, "Development and mechanical characterization of jute/polypropylene/coir composites," in **Plant and Animal Composites**, De Gruyter, 2021.
6. S. Satheesh Kumar and **B. Sridhar Babu**, "A review on ductile attributes of natural fiber composites," in **Plant and Animal Composites**, De Gruyter, 2021.

CONFERENCES, WORKSHOPS, SHORT TERM COURSES CONDUCTED:

1. **B. Sridhar Babu**, Convener, **4th International Conference on Manufacturing, Materials Science and Engineering (ICMMSE'22)**, Dec. 30–31, 2022, SVCET, Chittoor, Andhra Pradesh, India.
2. **B. Sridhar Babu**, Program Coordinator, **AICTE Sponsored Two-Week Faculty Development Programme on Artificial Intelligence for Industry 4.0**, Mar. 2021.
3. **B. Sridhar Babu**, Convener, **3rd International Conference on Manufacturing, Materials Science and Engineering (ICMMSE'21)**, Aug. 13–14, 2021, CMR Institute of Technology, Hyderabad, India.
4. **B. Sridhar Babu**, Convener, **2nd International Conference on Manufacturing, Materials Science and Engineering (ICMMSE'20)**, Aug. 7–8, 2020, CMR Institute of Technology, Hyderabad, India.
5. **B. Sridhar Babu**, Convener, **1st International Conference on Manufacturing, Materials Science and Engineering (ICMMSE'19)**, Aug. 16–17, 2019, CMR Institute of Technology, Hyderabad, Telangana, India.
6. **B. Sridhar Babu**, Convener, **National Level Student Symposium "Illuminate 2017"**, CMR Institute of Technology, Hyderabad, India.

7. **B. Sridhar Babu**, Convener, **National Level Student Symposium “Illuminate 2016”**, CMR Institute of Technology, Hyderabad, India.
8. **B. Sridhar Babu**, Convener, **National Level Student Symposium “STANZA & Waves (2006–2008)”**, RRS College of Engineering, Hyderabad, India.
9. **B. Sridhar Babu**, Convener, **National Level Two-Day Workshop on Material Characterization**, CMR Institute of Technology, Hyderabad, India.
10. **B. Sridhar Babu**, Convener, **National Level Two-Day Workshop on Advanced Composite Materials**, CMR Institute of Technology, Hyderabad, India.
11. **B. Sridhar Babu**, Convener, **National Level Two-Day Workshop on Advanced IC Engine Topics**, CMR Institute of Technology, Hyderabad, India.

INSTITUTIONAL MEMBERSHIPS :

- Fellow member of institute of engineers
- Life Member of Indian Society for Technical Education
- Member of SAE India
- Member of international association of engineers

EDITORIAL SERVICES:

12. Associate Editor , Journal of Mechanical Behaviour of Materials(Scopus) Degruyter Publications
13. Academic Editor, PLOS ONE journal (SCI&SCOPUS)
14. Editorial Board Member, Discovery of Mechanical Engineering• (SCI&SCOPUS), Springer
15. Editorial Board Member Advanced Engineering materials Sage journal• (SCI&SCOPUS)
16. Academic Editor, Journal of Engineering Wiley Publications(SCI&SCOPUS)
17. Academic Editor, Advances in Polymer Technology(SCI&SCOPUS)’ Wiley Publications
18. Academic Editor, Advances in Materials Science and Engineering, (SCI&SCOPUS)’ Wiley Publications
19. Guest Editor, “Processing, Characterization and Application of Light weight materials” Special issue of Advances in Materials Science and Engineering, Wiley Publishers (SCI & Scopus) indexed journal.
20. Guest Editor, ‘Advances in Materials Processing and Techniques’ a Topical Collection of SN Applied Sciences, Springer Nature journal (ESCI Indexed)
21. Guest Editor, Proceedings of 3rd International Conference on Manufacturing, Material Science and Engineering (ICMMSE’20), AIP Proceedings (Scopus and WOS indexed).
22. Guest Editor, Proceedings of 2nd International Conference on Manufacturing, Material Science and Engineering (ICMMSE’20),MaterialsToday– Proceedings (Scopus and CPCI Indexed).
23. Guest Editor, Proceedings of 2nd International Conference on Manufacturing, Material Science and Engineering (ICMMSE’20), AIP Proceedings(Scopus and CPCI Indexed, WOS).
24. Guest Editor, Proceedings of International Conference on Research and Advances in Mechanical Engineering (ICRAME 2020), IOP Conference Series: Materials Science and Engineering (Scopus and CPCI Indexed).
25. Guest Editor, Proceedings of 1st International Conference on Manufacturing, Material Science and Engineering (ICMMSE’19), Materials Today–Proceedings(Scopus and CPCI Indexed).
26. Guest Editor, Proceedings of 1st International Conference on Manufacturing, Material Science and Engineering (ICMMSE’19), AIP Proceedings(Scopus and CPCI Indexed, WOS).

(Dr.B.Sridhar Babu)