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stabilized austenitic stainless steel (Fe – 18Cr – 22Mn – 0 . 65N): a material with a bright future for orthopedic implant ," 2021.

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List of Publications and International Conferences (2021-2023)

Google Scholar: https://scholar.google.com/citations?user=_mkz6a0AAAAJ&hl=en&oi=ao		*Research Gate:* https://www.researchgate.net/profile/Dileep-Pathote-2	
Citation	**85**	*Citations*	**80**
h-index	***05***	*h-index*	***05***
i10- index	***04***	Research Interest Score	***66.40***

(Publications from Ph.D. Thesis Work)

1. **Dileep Pathote,** Pooja Kumari, Vikrant Singh, Dheeraj Jaiswal, R. K. Gautam, and C. K. Behera. "Biocompatibility evaluation, wettability, and scratch behavior of Ta-coated 316L stainless steel by DC magnetron sputtering for the orthopedic applications." ***Surface and Coatings Technology*** **(2023)**: 129392. http://dx.doi.org/10.1016/j.surfcoat.2023.129392 ***[Q1-IF- 5.40]***
2. **Dileep Pathote**, Dheeraj Jaiswal, Vikrant Singh, C.K. Behera, "Electrochemical corrosion behavior of tantalum coated 316L stainless steel by DC Magnetron sputtering for orthopedic applications", **Applied Surface Science Adv. 13 (2023)** 100365 https://doi.org/10.1016/j.apsadv.2022.100365 ***[Q2-IF-6.20]***
3. **Dileep Pathote,** Dheeraj Jaiswal, Vikrant Singh, R. K. Gautam, and C. K. Behera, "Wear behavior and microhardness studies of tantalum (Ta)-coated 316L stainless steel by DC magnetron sputtering for the orthopedic applications", **J Mater Sci (2022)** 57:21039–21056 10.1007/s10853-022-07939-6 ***[Q1-IF- 4.682]***
4. **D. Pathote**, D. Jaiswal, V. Singh, and C. K. Behera, "Optimization of electrochemical corrosion behavior of 316L stainless steel as an effective biomaterial for orthopedic applications," *Mater. Today Proc.*, vol. 57, pp. 265–269, Jan. 2022, doi: 10.1016/J.MATPR.2022.02.501
5. **Dileep Pathote**, Vikrant Singh, Dheeraj Jaiswal, R.K. Gautam, C.K. Behera, Improving the electrochemical corrosion behavior of stainless steel (316L) through the deposition of tantalum-based thin films, Materials Today: Proceedings, 2023, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2023.08.003

List of Publications and International Conferences (2021-2023)

(Publications from other Work)

6. Jaiswal D, Singh V, **Pathote D**, Behera CK (2021) Electrochemical behaviour of lead-free Sn–0.7Cu–xIn solders alloys in 3.5 wt% NaCl solution. **J Mater Sci Mater Electron** 32(18):23371–23384. https://doi.org/10.1007/s10854-021-06824-03 ***[Q2-IF- 2.779]***

7. Jaiswal D, **Pathote D**, Singh V, Behera CK (2022) Effect of Al addition on electrochemical behavior of Sn-0.7Cu-xAl lead-free solders alloys in 3.5 wt. % NaCl solution. **J Mater Eng Perform.** doi: https://doi.org/10.1007/s11665-022-06771-y ***[Q2-IF- 2.036]***

8. Jaiswal D, **Pathote D,** Singh V, Behera CK (2022) Electrochemical behaviour of lead-free Sn–In–Al solders alloys in 3.5 wt. % NaCl solution. **Mater Today Proc.** doi: https://doi. org/10.1016/j.matpr.2022.02.315

9. Singh V, Jaiswal D, **Pathote D**, Behera CK (2022) Drop calorimetric measurement of In-Zn system for Lead-Free solder applications. **Mater Today Proc** 57:285–288. https://d oi.org/10.1016/j.matpr.2022.02.601

10. Singh, V., **Pathote, D.**, Jaiswal, D. *et al.* Measurement of Mixing Enthalpies for Sn-Bi-Sb Lead-Free Solder System. *J. Electron. Mater.* (2023). https://doi.org/10.1007/s11664-023-10579-4 ***[Q2-IF- 2.047]***

11. Vikrant Singh, Dheeraj Jaiswal, **Dileep Pathote**, Kamalesh K. Singh, C.K Behera, "Measurement of Mixing Enthalpies for Bi-Zn Lead-Free Solder System" in **Materials Today Proceedings** 2023, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2023.08.004.

12. Singh, V., **Pathote, D**., Jaiswal, D. et al. Calorimetric measurements of Ga–In, Ga–Sn, and In–Sn binary alloy systems as sustainable lead-free solder alternatives. J Mater Sci: Mater Electron 34, 2089 (2023). https://doi.org/10.1007/s10854-023-11521-4 [Q2-IF- 2.8]

List of Publications and International Conferences (2021-2023)

List of International Conferences

1. Participated in **ORAL** presentation in International Symposium on "Materials of the Millennium: Emerging Trends and Future Prospects" held **19-21 November 2021** entitled "Optimization of Corrosion Behavior of 316L Stainless Steel as an effective biomaterial for Orthopedic Applications''.
2. Participated in **ORAL** presentation in International Conference on Advanced Materials and Mechanical Characterization (ICAMMC-2021) held **02-03 December 2021** entitled "Characterizations and accessement of Ta-coated 316L Stainless steel by DC Sputtering machine for biomedical applications''.
3. Participated in an **ORAL** presentation at International Conference on Corrosion and Coatings (i3C) at **CSIR-NML Jamshedpur**, India, on 7-8 December 2022, entitled "Electrochemical Corrosion Behavior of Ta-coated 316L Stainless steel by DC Magnetron Sputtering in ABF, SBF, and Ringer solution for biomedical applications". [***Received BEST ORAL presentation award***]
4. Participated in **ORAL** presentation in 11th International Conference on Industrial Tribology (ICIT) Theme: "Tribology for Energy, Environment and Society" held on **12-14 December 2022, New Delhi**, India (IndiaTrib-2022) entitled "Optimization of Wear behavior in SBF of Ta-coated 316L Stainless steel by DC Magnetron Sputtering for the orthopedic applications".
5. Participated in **ORAL** presentation in 2nd International Conference on Management and Recycling of Metallurgical Wastes **27-28 February 2023**, IIT (BHU), Varanasi, INDIA. Centenary Celebrations of Department of Metallurgical Engineering (MetWaste-2023) entitled "Improving the Electrochemical corrosion behavior of stainless steel (316L) through deposition of tantalum based thin films".

List of Publications and International Conferences (2021-2023)

Book Chapter

(Tribology for Energy, Environment, and Society)

1. **Dileep Pathote[1]*,** Dheeraj Jaiswal[1], Vikrant Singh[1], C.K. Behera[1], and R.K. Gautam[2], "Wear behavior of Tantalum coated 316L SS by DC Magnetron Sputtering for orthopedic applications". Chapter-7, ***10.1007/978-981-99-9264-5*** (In press)