


## FACULTY ACADEMIC PROFILE

|   |   |                            |            |   |
|---|---|----------------------------|------------|---|
| Name  | Dr. Hazoor Singh Sidhu  |                            |            |  |
| Designation   | Professor   |                            |            |   |
| Department/ Section/<br>Subject                                 | Mechanical Engineering  |                            |            |   |
| Official Address  | Yadavindra College of Engineering, Punjabi<br>University Guru Kashi Campus, Talwandi Sabo<br>(Distt. Bathinda) Punjab India - 151302  |                            |            |   |
| Contact No. (s)   | +91-8146260200  |                            |            |   |
| Email (s)   | <a href="mailto:hazoors@yahoo.com">hazoors@yahoo.com</a>  |                            |            |   |
| <b>ACADEMIC QUALIFICATIONS</b>                                  |   |                            |            |   |
| Degree  | Degree Name   |                            | University |   |
| PhD   | PhD   |                            | PTU        |   |
| Post-Graduation   | M.Tech (Mech. Engg.)  |                            | PTU        |   |
| Graduation  | B.Tech (Mech Engg.)   |                            | PTU        |   |
| Any other   |   |                            |            |   |
| <b>Thrust Areas/<br/>Research Interests</b>                     | <ol style="list-style-type: none"> <li>1. Surface Engineering</li> <li>2. Coating and Material Technology</li> <li>3. Welding Technology</li> </ol>   |                            |            |   |
| <b>Subjects Taught</b>  | <ol style="list-style-type: none"> <li>1. Material Technology</li> <li>2. Welding Technology</li> <li>3. Basic Thermodynamics</li> <li>4. Non-Conventional Machining method</li> </ol>  |                            |            |   |
| <b>Total Experience (Years)</b>                                 | <b>19</b>   | <b>Teaching Experience</b> | <b>19</b>  | <b>Industry Experience</b>  |
| <b>Employment History</b>                                       | <ol style="list-style-type: none"> <li>1. R.E.C. Kurukshertra</li> <li>2. 2.SLIET Longowal</li> <li>3. Yadavindra College of Engineering, 04.02.2005 to till date</li> </ol>  |                            |            |   |
| <b>Membership of Punjabi<br/>University Academic<br/>Bodies</b> | <ol style="list-style-type: none"> <li>1. Board of Study</li> <li>2. ACD</li> </ol>   |                            |            |   |
| <b>Administrative/<br/>Academic Duties<br/>performed.</b>       | <ol style="list-style-type: none"> <li>1. Head, YCoE (2016-2019)</li> <li>2. Incharge Mechanical Section (2008-2015)</li> <li>3. Warden Boys Hostel-II (2005)</li> <li>4. Incharge ECA</li> <li>5. Incharge M.Tech</li> <li>6. Incharge College Discipline Committee</li> </ol> |                            |            |   |

## FACULTY RESEARCH PROFILE

|   |   |   |                            |
|---|---|---|----------------------------|
| Google Scholar ID   | <a href="https://scholar.google.com/citations?user=dd56ge8AAAAJ&amp;hl=en">https://scholar.google.com/citations?user=dd56ge8AAAAJ&amp;hl=en</a>   |   |                            |
| Impact Factor   | 2.22+1.45+0.76+1.261+2.129+5.87+1.449+0.73+0.231+0.87+0.35+1.87+1.47+0.87+0.37+0.11+0.6+5.15+0.35+3.192+2.129+3.192+1.3+0.35+2.129+3.192+2.24+3.192+2.129+1.47+1.427+4.178+3.192+1.47+2.12  |   |                            |
|   | Citation Index  | <b><u>1033</u></b>  | I10-index <b><u>26</u></b> |
|   | h-Index   | <b><u>16</u></b>  | SJR <b><u>0.973</u></b>    |
|   | SNIP  | <b><u>1.435</u></b>   |                            |
| No. of Candidates (Completed PhD)   | <b><u>06</u></b>  | No. of Candidates (Ongoing PhD)                                 | <b><u>07</u></b>           |
| PG Thesis guided  | <b><u>43</u></b>  | PG Thesis Ongoing   |                            |
| Research Projects Completed<br><b>1. Title 2. Amount in lakhs 3. Date of completion</b> | <ol style="list-style-type: none"> <li>1. Technological Innovations to improve degradation resistance of pulverized coal burner nozzle (PCBN),<br/>Rs 2412000/-, D.O.C. : 2014</li> <li>2. Development of Cr<sub>3</sub>C<sub>2</sub> – NiCr Corrosion and Erosion Resistant HVOF Sprayed Coatings for Boiler Tube Steels Operating at Elevated Temperatures,<br/>Rs3870000/-, D.O.C. : 2014</li> </ol> |   |                            |
| Research Projects Ongoing   | -----   |   |                            |
| Research Projects Submitted   | -----   |   |                            |
| Papers in International Journals  | <b><u>67</u></b>  | Papers in National Journals                                     | <b><u>11</u></b>           |
| Papers in International Conferences   | <b><u>13</u></b>  | Papers in National Conferences                                  | <b><u>06</u></b>           |
| Names of Foreign Countries Visited for Academic Purpose                                 | Singapore   |   |                            |
| International Conferences Attended  | 9   | National Conferences Attended                                   | <b><u>3</u></b>            |
| Books Published as Single Author  | ---   | Books Published as Joint Author                                 | <b><u>2</u></b>            |
| Edited Books  | ----  | Book Chapters   | <b><u>---</u></b>          |
| International Conferences/ Workshops/ Seminars /STCs/ FDPs organized                    |   | National Conferences/ Workshops/ Seminars/ STCs/ FDPs organized | <b><u>06</u></b>           |
| Memberships of  |   | Memberships of National Professional                            | <b>ISTE, IE, SOMME</b>     |

|                                   |  |        |  |
|-----------------------------------|--|--------|--|
| International Professional Bodies |  | Bodies |  |
|-----------------------------------|--|--------|--|

### PHD SUPERVISION DETAILS

| Sr.              | Candidate Name           | Registration No.     | University                 |
|------------------|--------------------------|----------------------|----------------------------|
| <b>Completed</b> |                          |                      |                            |
| 1                | Sukhpal Singh            | YCE (TS)-145         | Punjabi University Patiala |
| 2                | Rakesh Bhatia            | PUP-Ph.D (2010)-6    | Punjabi University Patiala |
| 3                | Tejinder Pal Singh Sarao | PUP (Ph.D) 2009-254  | Punjabi University Patiala |
| 4                | Gurpreet Singh           | PUP (Ph.D) 2009- 287 | Punjabi University Patiala |
| 5                | Khushdeep Goyal          | 7141-13-1117         | Punjabi University Patiala |
| 6.               | Roshan Lal Viridi        | 7141-13-1120         | Punjabi University Patiala |

### PUBLICATION IN SCI AND SCUPUS INDEX JOURNALS

| S. No. | Author  | Title  | Journal                         | Vol. | No. | Page no.    | Year of Publication |
|--------|---|--|---------------------------------|------|-----|-------------|---------------------|
| 1      | Bansal, Puneet; Singh, Gurpreet; Sidhu, Hazoor Singh;     | Improvement of surface properties and corrosion resistance of Ti13Nb13Zr titanium alloy by plasma-sprayed HA/ZnO coatings for biomedical applications    | Materials Chemistry and Physics | 257  |     | 12373<br>8  | 2021                |
| 2      | Singh, Jarnail; Chatha, Sukhpal Singh; Singh, Hazoor;     | Characterization and corrosion behavior of plasma sprayed calcium silicate reinforced hydroxyapatite composite coatings for medical implant applications | Ceramics International          | 47   | 1   | 782-<br>792 | 2021                |
| 3      | Viridi, Roshan Lal; Chatha, Sukhpal Singh; Singh, Hazoor; | Experimental investigations on the tribological and lubrication behaviour of minimum quantity lubrication technique in grinding of Inconel 718 alloy     | Tribology International         | 153  |     | 10658<br>1  | 2021                |
| 4      | Bansal, Puneet; Singh,                                    | Plasma-Sprayed HA/Sr Reinforced Coating for  | Journal of Materials            | 36   | 2   | 431-        | 2021                |

|    |   |   |   |    |   |           |      |
|----|---|---|---|----|---|-----------|------|
|    | Gurpreet; Sidhu, Hazoor Singh;  | Improved Corrosion Resistance and Surface Properties of Ti13Nb13Zr Titanium Alloy for Biomedical Implants   | Research  |    |   | 442       |      |
| 5  | Bansal, Puneet; Singh, Gurpreet; Sidhu, Hazoor Singh;                     | Plasma-Sprayed Hydroxyapatite-Strontium Coating for Improved Corrosion Resistance and Surface Properties of Biodegradable AZ31 Mg Alloy for Biomedical Applications                                 | Journal of Materials Engineering and Performance                        | 30 | 3 | 1768-1779 | 2021 |
| 6  | Kumar, Munish; Sidhu, Hazoor Singh; Sidhu, Buta Singh;                    | Parametric and microstructural analysis of cryogenically treated austenitic stainless steel   | Materials Today: Proceedings  |    |   |           | 2021 |
| 7  | Jindal, Chamkaur; Sidhu, Buta Singh; Kumar, Pardeep; Sidhu, Hazoor Singh; | Role of surface treatment for enhancing resistance to degradation: An outline   | Materials Today: Proceedings  |    |   |           | 2021 |
| 8  | Pal, Amrit; Chatha, Sukhpal Singh; Sidhu, Hazoor Singh;                   | Tribological characteristics and drilling performance of nano-MoS <sub>2</sub> -enhanced vegetable oil-based cutting fluid using eco-friendly MQL technique in drilling of AISI 321 stainless steel | Journal of the Brazilian Society of Mechanical Sciences and Engineering | 43 | 4 | Jan-20    | 2021 |
| 9  | Singh, Jarnail; Chatha, Sukhpal Singh; Singh, Hazoor;                     | Synthesis and characterization of plasma sprayed functional gradient bioceramic coating for medical implant applications  | Ceramics International  | 47 | 7 | 9143-9155 | 2021 |
| 10 | Jindal, Chamakur; Sidhu, Buta Singh; Kumar,                               | Performance of hardfaced/heat treated materials under solid particle erosion: A systematic literature review  | Materials Today: Proceedings  |    |   |           | 2021 |

|    |  |   |   |    |   |         |      |
|----|--|---|---|----|---|---------|------|
|    | Pardeep;<br>Sidhu, Hazoor<br>Singh;                                  |   |   |    |   |         |      |
| 11 | Pal, Amrit;<br>Chatha,<br>Sukhpal Singh;<br>Sidhu, Hazoor<br>Singh;  | Performance evaluation of the minimum quantity lubrication with Al <sub>2</sub> O <sub>3</sub> -mixed vegetable-oil-based cutting fluid in drilling of AISI 321 stainless steel | Journal of Manufacturing Processes  | 66 |   | 238-249 | 2021 |
| 12 | Pal, Amrit;<br>Chatha,<br>Sukhpal Singh;<br>Sidhu, Hazoor<br>Singh;  | Performance Evaluation of Various Vegetable Oils and Distilled Water as Base Fluids Using Eco-friendly MQL Technique in Drilling of AISI 321 Stainless Steel                    | International Journal of Precision Engineering and Manufacturing-Green Technology |    |   | Jan-20  | 2021 |
| 13 | Goyal,<br>Khushdeep;<br>Singh, Hazoor;<br>Bhatia,<br>Rakesh;         | Behaviour of carbon nanotubes-Cr <sub>2</sub> O <sub>3</sub> thermal barrier coatings in actual boiler  | Surface Engineering   | 36 | 2 | 124-134 | 2020 |
| 14 | Kumar,<br>Sandeep;<br>Singh, Hazoor;<br>Bhatia,<br>Rakesh;           | Hot corrosion behaviour of CNT-reinforced zirconium yttrium composite coating at elevated temperature   | Materials Today: Proceedings  |    |   |         | 2020 |
| 15 | Singh ",<br>"Roshan Lal<br>Viridi Sukhpal<br>Singh Chatha<br>Hazoor; | Performance Evaluation of Inconel 718 under vegetable oils based Nanofluids using Minimum Quantity Lubrication Grinding   | Materials Today: Proceedings  |    |   |         | 2020 |
| 16 | Singh ",<br>"Roshan Lal<br>Viridi Sukhpal<br>Singh Chatha<br>Hazoor; | Performance evaluation of Minimum Quantity Lubrication grinding of hard to machine material under the influence of CuO based Nanofluids   | Materials Today: Proceedings  |    |   |         | 2020 |
| 17 | Kumar,<br>Munish; Sidhu,   | Effect of different operating parameters on the slurry  | Materials Today:  | 28 |   | 1429-   | 2020 |

|    |  |  |   |     |   |           |      |
|----|--|--|---|-----|---|-----------|------|
|    | Hazoor Singh; Sidhu, Buta Singh;                         | erosion behavior of cryo-treated hydro-turbine steel   | Proceedings                                       |     |   | 1438      |      |
| 18 | Bansal, Puneet; Singh, Gurpreet; Sidhu, Hazoor Singh;    | Investigation of corrosion behavior and surface properties of plasma sprayed HA/Sr reinforced coatings on CoCr alloys                                    | Materials Chemistry and Physics                   | 253 |   | 123330    | 2020 |
| 19 | Pal, Amrit; Chatha, Sukhpal Singh; Sidhu, Hazoor Singh;  | Experimental investigation on the performance of MQL drilling of AISI 321 stainless steel using nano-graphene enhanced vegetable-oil-based cutting fluid | Tribology International                           | 151 |   | 106508    | 2020 |
| 20 | Bansal, Puneet; Singh, Gurpreet; Sidhu, Hazoor Singh;    | Investigation of surface properties and corrosion behavior of plasma sprayed HA/ZnO coatings prepared on AZ31 Mg alloy                                   | Surface and Coatings Technology                   | 401 |   | 126241    | 2020 |
| 21 | Virdi, Roshan Lal; Chatha, Sukhpal Singh; Singh, Hazoor; | Processing characteristics of different vegetable oil-based nanofluid MQL for grinding of Ni-Cr alloy  | Advances in Materials and Processing Technologies |     |   | Jan-14    | 2020 |
| 22 | Virdi, Roshan Lal; Chatha, Sukhpal Singh; Singh, Hazoor; | Machining performance of Inconel-718 alloy under the influence of nanoparticles based minimum quantity lubrication grinding                              | Journal of Manufacturing Processes                | 59  |   | 355-365   | 2020 |
| 23 | Kumar, Sandeep; Bhatia, Rakesh; Singh, Hazoor;           | High-Temperature Corrosion Behaviour of CNT-reinforced Zirconium Yttrium Coatings on Boiler Tube Steel in Coal-Fired Boiler of Thermal Power Plant       | Journal of Failure Analysis and Prevention        | 20  | 6 | 2029-2039 | 2020 |
| 24 | Kumar, Sandeep; Bhatia, Rakesh; Singh,                   | Hot Corrosion Behaviour of CNT Reinforced Zirconium Yttrium Coatings in Molten Salt Environment  | Journal of Bio-and Tribo-Corrosion                | 6   |   | 01-Sep    | 2020 |

|    |  |   |  |    |    |           |      |
|----|--|---|--|----|----|-----------|------|
|    | Hazoor;  |   |  |    |    |           |      |
| 25 | Goyal,<br>Khushdeep;<br>Singh, Hazoor;<br>Bhatia,<br>Rakesh;                 | Experimental investigations of carbon nanotubes reinforcement on properties of ceramic-based composite coating                          | Journal of the Australian Ceramic Society                    | 55 | 2  | 315-322   | 2019 |
| 26 | Goyal,<br>Khushdeep;<br>Singh, Hazoor;<br>Bhatia,<br>Rakesh;                 | Hot-corrosion behavior of Cr 2 O 3-CNT-coated ASTM-SA213-T22 steel in a molten salt environment at 700° C                               | International Journal of Minerals, Metallurgy, and Materials | 26 | 3  | 337-344   | 2019 |
| 27 | Singh,<br>Harkulvinder;<br>Chatha,<br>Sukhpal Singh;<br>Sidhu, Hazoor Singh; | Influence of Heat Treatment and Sealing on Hot Corrosion Behavior of 80Ni-20Cr Coatings   | Journal of Thermal Spray Technology                          | 28 | 7  | 1478-1491 | 2019 |
| 28 | Singh ",<br>"Roshan Lal Viridi Sukhpal Singh Chatha Hazoor;                  | Experiment evaluation of grinding properties under Al <sub>2</sub> O <sub>3</sub> nanofluids in minimum quantity lubrication            | Materials Research Express                                   |    |    |           | 2019 |
| 29 | Goyal,<br>Khushdeep;<br>Singh, Hazoor;<br>Bhatia,<br>Rakesh;                 | Hot corrosion behaviour of carbon nanotubes reinforced chromium oxide composite coatings at elevated temperature                        | Materials Research Express                                   | 5  | 11 | 116408    | 2018 |
| 30 | Goyal,<br>Khushdeep;<br>Singh, Hazoor;<br>Bhatia,<br>Rakesh;                 | Effect of carbon nanotubes on properties of ceramics based composite coatings   | Advanced Engineering Forum                                   | 26 |    | 53-66     | 2018 |
| 31 | Goyal,<br>Khushdeep;<br>Singh, Hazoor;<br>Bhatia,                            | Cyclic high temperature corrosion studies of carbon nanotubes-Cr <sub>2</sub> O <sub>3</sub> composite coatings on boiler steel at 900° | Anti-Corrosion Methods and Materials                         |    |    |           | 2018 |

|    |  |   |  |      |   |           |      |
|----|--|---|--|------|---|-----------|------|
|    | Rakesh;  | C in molten salt environment  |  |      |   |           |      |
| 32 | Goyal,<br>Khushdeep;<br>Singh, Hazoor;<br>Bhatia,<br>Rakesh;           | Mechanical and microstructural properties of carbon nanotubes reinforced chromium oxide coated boiler steel | World Journal of Engineering                     |      |   |           | 2018 |
| 33 | Sarao,<br>Tejinder Pal Singh;<br>Singh, Harpreet;<br>Singh, Hazoor;    | Enhancing biocompatibility and corrosion resistance of Ti-6Al-4V alloy by surface modification route        | Journal of Thermal Spray Technology              | 27   | 8 | 1388-1400 | 2018 |
| 34 | Singh, Jarnail;<br>Chatha,<br>Sukhpal Singh;<br>Singh, Hazoor;         | Characterization and Corrosion Behavior of Functional Gradient Hydroxyapatite Coating                       | Journal of Thermal Spray Technology              | 27   | 8 | 1371-1380 | 2018 |
| 35 | Khushdeep<br>Goyal, Hazoor<br>Singh, Rakesh<br>Bhatia;                 | Carbon Nanotubes: A Potential Reinforcement Material for Composites   | A Journal of Nanotechnology and Its Applications | 19   | 2 | 42-49     | 2017 |
| 36 | Chatha,<br>Sukhpal Singh;<br>Sidhu, Hazoor<br>S; Sidhu, Buta<br>Singh; | Performance of 75Cr3C2-25NiCr coating produced by HVOF process in a coal-fired thermal power plant          | Advanced Materials Research                      | 1137 |   | 88-100    | 2016 |
| 37 | Goyal,<br>Khushdeep;<br>Singh, Hazoor;<br>Bhatia,<br>Rakesh;           | Current status of thermal spray coatings for high temperature corrosion resistance of boiler steel          | Journal of Material & Metallurgical Engineering  | 6    | 1 | 29-35     | 2016 |
| 38 | Singh,<br>Ripandee;<br>Singh,<br>Gurpreet;<br>Sidhu, Hazoor<br>Singh;  | The Cold Spray Coating Process: A Future Technique in Material Deposition                                   | Asian J. Eng. Appl. Technol                      | 5    | 1 | 01-Mar    | 2016 |
| 39 | Singh, Jarnail;  | Erosion behavior of Pulverized Coal Burner Nozzle material  | Materials Science                                | 808  |   | 01-Sep    | 2015 |



|    |   |  |  |     |   |           |      |
|----|---|--|--|-----|---|-----------|------|
|    | Singh, Hazoor;  | hardfaced by solid wire and flux cored wire electrode  | Forum  |     |   |           |      |
| 40 | Bhatia, Rakesh; Sidhu, Hazoor Singh; Sidhu, Buta Singh; | High temperature behavior of Cr 3 C 2-NiCr coatings in the actual coal-fired boiler environment  | Metallurgical and Materials Transactions E             | 2   | 1 | 70-86     | 2015 |
| 41 | Bhatia, Rakesh; Singh, Hazoor; Sidhu, Buta Singh;       | Hot corrosion studies of HVOF-sprayed coating on T-91 boiler tube steel at different operating temperatures  | Journal of materials engineering and performance       | 23  | 2 | 493-505   | 2014 |
| 42 | Singh, Gurpreet; Singh, Hazoor; Sidhu, Buta Singh;      | In vitro corrosion investigations of plasma-sprayed hydroxyapatite and hydroxyapatite-calcium phosphate coatings on 316L SS                                  | Bulletin of Materials Science                          | 37  | 6 | 1519-1528 | 2014 |
| 43 | Singh, Tejinder Pal; Singh, Harpreet; Singh, Hazoor;    | Characterization of thermal sprayed hydroxyapatite coatings on some biomedical implant materials   | Journal of applied biomaterials & functional materials | 12  | 1 | 48-56     | 2014 |
| 44 | Singh, Gurpreet; Singh, Hazoor; Sidhu, Buta Singh;      | Characterization and investigation of in-vitro Corrosion behavior of plasma Sprayed hydroxyapatite and hydroxyapatite–Calcium phosphate coatings on AISI 304 | Journal of Corrosion Science and Engineering           | 17  |   | Jan-14    | 2014 |
| 45 | Singh, Gurpreet; Singh, Hazoor; Sidhu, Buta Singh;      | Corrosion behavior of plasma sprayed hydroxyapatite and hydroxyapatite-silicon oxide coatings on AISI 304 for biomedical application                         | Applied surface science                                | 284 |   | 811-818   | 2013 |
| 46 | Singh, Hazoor; Sidhu, Buta Singh;                       | Erosion Characteristics of HVOF Developed Cr <sub>3</sub> C <sub>2</sub> -NiCr and WC-Co Coatings  | Materials Science Forum                                | 751 |   | 71-79     | 2013 |

|    |   |   |  |     |       |           |      |
|----|---|---|--|-----|-------|-----------|------|
| 47 | Singh,<br>Gurpreet;<br>Singh, Hazoor;<br>Sidhu, Buta<br>Singh;  | Characterization and corrosion resistance of plasma sprayed HA and HA-SiO <sub>2</sub> coatings on Ti-6Al-4V                            | Surface and Coatings Technology                                    | 228 |       | 242-247   | 2013 |
| 48 | Chatha,<br>Sukhpal Singh;<br>Sidhu, Hazoor S;<br>Sidhu, Buta S; | High-temperature behavior of a NiCr-coated T91 boiler steel in the platen superheater of coal-fired boiler                              | Journal of thermal spray technology                                | 22  | 5     | 838-847   | 2013 |
| 49 | Singh,<br>Gurpreet;<br>Singh, Hazoor;<br>Sidhu, Buta<br>Singh;  | The Effect of CaP Concentration on Corrosion Behavior of Plasma Sprayed Hydroxyapatite Coating on Titanium in Simulated Body Fluid      | Biomimetics Biomaterials and Tissue Engineering                    | 18  | 1     |           | 2013 |
| 50 | Chatha,<br>Sukhpal Singh;<br>Sidhu, Hazoor S;<br>Sidhu, Buta S; | The effects of post-treatment on the hot corrosion behavior of the HVOF-sprayed Cr <sub>3</sub> C <sub>2</sub> -NiCr coating            | Surface and Coatings Technology                                    | 206 | 19-20 | 4212-4224 | 2012 |
| 51 | Chatha,<br>Sukhpal Singh;<br>Sidhu, Hazoor S;<br>Sidhu, Buta S; | Characterisation and corrosion-erosion behaviour of carbide based thermal spray coatings  | Journal of Minerals and Materials Characterization and Engineering | 11  | 6     | 569       | 2012 |
| 52 | Singh, Hazoor;<br>Sidhu, Buta<br>Singh;<br>Prakash,<br>Satya;   | Performance of HVOF sprayed NiCr and Stellite-6 coatings under pin on disc wear testing   | Materials science forum  | 701 |       | 21-29     | 2012 |
| 53 | Singh, Tejinder Pal;<br>Singh,<br>Harpreet;<br>Singh, Hazoor;   | Characterization, corrosion resistance, and cell response of high-velocity flame-sprayed HA and HA/TiO <sub>2</sub> coatings on 316L SS | Journal of thermal spray technology                                | 21  | 5     | 917-927   | 2012 |
| 54 | Chatha,<br>Sukhpal Singh;                                       | High temperature hot corrosion behaviour of NiCr and Cr <sub>3</sub> C <sub>2</sub> -   | Surface and Coatings   | 206 | 19-   | 3839-     | 2012 |

|    |  |   |  |     |        |           |      |
|----|--|---|--|-----|--------|-----------|------|
|    | Sidhu, Hazoor S; Sidhu, Buta S;                                      | NiCr coatings on T91 boiler steel in an aggressive environment at 750 C   | Technology                                       |     | 20     | 3850      |      |
| 55 | Sarao, Tejinder Pal Singh; Sidhu, Hazoor Singh; Singh, Harpreet;     | Characterization and in vitro corrosion investigations of thermal sprayed hydroxyapatite and hydroxyapatite-titania coatings on Ti alloy                | Metallurgical and Materials Transactions A       | 43  | 11     | 4365-4376 | 2012 |
| 56 | Tejinder Pal Singh, Harpreet Singh, Hazoor Singh Sidhu;              | Characterization of thermal sprayed hydroxyapatite coatings on some biomedical implant materials  | J Appl Biomater Biomech                          |     |        |           | 2012 |
| 57 | Sidhu, Hazoor S; Sidhu, Buta S; Prakash, S;                          | Wear characteristics of Cr <sub>3</sub> C <sub>2</sub> -NiCr and WC-Co coatings deposited by LPG fueled HVOF  | Tribology International                          | 43  | 05-Jun | 887-890   | 2010 |
| 58 | Rakesh Bhatia, Sukhpal S. Chatha, Hazoor S. Sidhu and Buta S. Sidhu; | Erosion - Corrosion Resistance of Carbide Based Thermal Spray Coatings: A Review  | IJEST  | 4   | 1      | 57-62     | 2010 |
| 59 | Sidhu, Hazoor Singh; Sidhu, Buta Singh; Prakash, S;                  | Solid particle erosion of HVOF sprayed NiCr and Stellite-6 coatings   | Surface and Coatings Technology                  | 202 | 2      | 232-238   | 2007 |
| 60 | Sidhu, HS; Sidhu, BS; Prakash, S;                                    | Hot corrosion behavior of HVOF sprayed coatings on ASTM SA213-T11 steel   | Journal of thermal spray technology              | 16  | 3      | 349-354   | 2007 |
| 61 | Sidbu, Hazoor Singh; Sidhu, Buta Singh; Prakash, S;                  | Materials Characterization- Comparative Characteristic and Erosion Behavior of NiCr Coatings Deposited by Various High-Velocity Oxyfuel Spray Processes | Journal of Materials Engineering and Performance | 15  | 6      | 699-704   | 2006 |

|    |   |  |  |     |       |           |      |
|----|---|--|--|-----|-------|-----------|------|
| 61 | Sidhu, Hazoor Singh; Sidhu, Buta Singh; Prakash, S; | Evaluation of the hot corrosion behavior of LPG assisted HVOF NiCr wire sprayed boiler tube steels in molten salt environments   | ISIJ international                               | 46  | 7     | 1067-1074 | 2006 |
| 63 | Sidhu, Hazoor Singh; Sidhu, Buta Singh; Prakash, S; | Mechanical and microstructural properties of HVOF sprayed WC-Co and Cr <sub>3</sub> C <sub>2</sub> -NiCr coatings on the boiler tube steels using LPG as the fuel gas                    | Journal of Materials Processing Technology       | 171 | 1     | 77-82     | 2006 |
| 64 | Sidhu, Hazoor Singh; Sidhu, Buta Singh; Prakash, S; | The role of HVOF coatings in improving hot corrosion resistance of ASTM-SA210 GrA1 steel in the presence of Na <sub>2</sub> SO <sub>4</sub> -V <sub>2</sub> O <sub>5</sub> salt deposits | Surface and Coatings Technology                  | 200 | 18-19 | 5386-5394 | 2006 |
| 65 | Sidhu, Hazoor Singh; Sidhu, Buta Singh; Prakash, S; | Comparative characteristic and erosion behavior of NiCr coatings deposited by various high-velocity oxyfuel spray processes  | Journal of materials engineering and performance | 15  | 6     | 699-704   | 2006 |
| 66 | Sidhu, HS; Sidhu, BS; Prakash, S;                   | Cyclic hot corrosion of high-velocity oxy fuel sprayed coatings on steel at 900 °C   | Corrosion  | 62  | 11    | 1028-1038 | 2006 |
| 67 | R. Arulmani, H. S. Sidhu;                           | Effect of Hardfacing on the performance of ploughshares  | Australasian Welding Journal                     | 49  |       | 50-53     | 2004 |

### LIST OF NON-SCI JOURNAL PUBLICATIONS

| S. No. | Author  | Title  | Journal                        | Vol. | No.    | Page no.  | Year of Publication |
|--------|---|--|--------------------------------|------|--------|-----------|---------------------|
| 1      | Bansal, Puneet; Singh, Gurpreet; Sidhu, Hazoor Singh; | The Importance of Co-Cr Alloys in Bioimplants for Hip Joints: A Review | Manufacturing Technology Today | 19   | 01-Feb | 25-35     | 2020                |
| 2      | Khushdeep Goyal, Hazoor                               | Mechanical properties of carbon nanotubes reinforced                   | Journal of Emerging            | 5    | 8      | 1012-1016 | 2018                |

|   |  |  |   |   |        |         |      |
|---|--|--|---|---|--------|---------|------|
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| 4 | Sukhpal Singh Chatha, Hazoor S. Sidhu, Buta S. Sidhu;        | Hot corrosion in power plant boilers and role of coatings: A review                | Steam and Boiler Review   | 7 | 2      | 199-201 | 2013 |
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| 6 | Bhatia, Rakesh; Singh, Hazoor; Sidhu, Buta Singh;            | Characteristic parameters and erosion behaviour of 65% Cr3C2–35% NiCr Coating      | International Journal of Surface Engineering and Materials Technology | 2 |        | 39-47   | 2012 |
| 7 | Rakesh Bhatia, Hazoor Singh Sidhu Buta Singh Sidhu;          | Characterisation of 80% Cr 3 c - 20 % (Ni-20cr) Coating and Erosion Behaviour 2    | AJEAT   | 1 | 2      | 05-Dec  | 2012 |
| 8 | Sharmaa, Kovid; Chathaa, Sukhpal Singh; Singha, Hazoor;      | HEAT TREATMENT OF THERMAL SPRAY COATINGS: A REVIEW                                 | Materials Science and Engineering                                     | 2 | 01-Feb |         | 2011 |

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| 9  | Sidhu, Hazoor<br>Singh; Sidhu,<br>Buta Singh;<br>Parkashc, S; | Characteristic Parameters of<br>HVOF sprayed NiCr and Stellite-<br>6 coatings on the boiler steels<br>using LPG as fuel gas | International<br>Journal of<br>Engineering<br>and<br>Information<br>Technology |   |   | 133-<br>139 | 2010 |
| 10 | Sidhu, Hazoor<br>S; Gaurav,<br>Kumar; Bhatia,<br>Rakesh;      | Life enhancement of single<br>point cutting tool by hard facing<br>and cryogenic treatment                                  | Int J Eng Sci<br>Technol   | 4 | 1 | 19-23       | 2010 |
| 11 | Sidhu, Hazoor<br>Singh; Sidhu,<br>Buta Singh;<br>Prakash, S;  | REVIEW ON THE PART OF HV OF<br>THERMAL SPRAY COATING IN<br>PROTECTION TO CORROSION  | Industrial<br>Practice   | 7 |   | 383         | 2006 |

### Book Publish

1. Hazoor Singh and Buta Singh Sidhu: HVOF Coatings in Improving Resistance to Surface Degradation, Lambert Academic Publishing, Germany, ISBN: 978-3-659-47260-2.
2. Sukhpal Singh Chatha and Hazoor Singh: Electrical Discharge Machining using Powder-Mixed Dielectric, Lambert Academic Publishing, Germany, ISBN: 978-3-659-52513-1

### Faculty Development course Attended

1. Two week FDP by NITCON at YCoE Talwandi Sabo, 15-01-2014 to 28-01-2014.
2. One week short term training programme on Bio-Energy Technologies for Power and Environmental Applications at SLIET Longowal, Dec.16-20, 2013.
3. One week short term course on Recent trends in Materials, Manufacturing and Safety, organized by GZS-PTUCampus Bathinda from 02-12-2013 to 06-12-2013.
4. One week Faculty Development Programme on Industrial Tribology held during January 3-8, 2011 in the School of Mechanical, Materials & Energy Engineering

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INDIA.

5. UGC-SPONSORED ORIENTATION PROGRAMME, on "Pedagogical Issues in Teaching" from 06-07-2009 to 01-08-2009, Academic Staff College Punjabi University, Patiala
6. One week winter school on "Perspective of Welding Technology " organized by Department of Mechanical Engineering, National Institute of Technology, Jalandhar.
7. One week training program, Pro Engineering Wildfire 3.0 Software Package, Adroitec Information System New Delhi
8. Two Week training program, Drawing and Drafting on AutoCAD SLIET Longowal, 2001
9. One week training program, Solidworks Education Edition software Package Ideas Design Solution Pvt. Ltd, Gurgaon 18-25 March, 2010