

# RESUME

**Dr. Dharmendra Singh**

Email: [dharmendra3103@gmail.com](mailto:dharmendra3103@gmail.com)



**Assistant Professor**

**Department of Mechanical Engineering**

Government Engineering College Bikaner,

Bikaner, (Raj.) – 334004

Contact: 9587555586

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## RESEARCH INTEREST:

Severe plastic deformation techniques and development of ultrafine grained materials, Properties and applications, Microstructural characterization, Corrosion protection of materials, Production and Industrial engineering

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## EDUCATIONAL QUALIFICATIONS

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| ➤ <b>Ph. D. (Metallurgical and Materials Engineering)</b><br>Indian Institute of Technology, Roorkee, Utrakhand. | <b>Feb. 2014</b> |
| ➤ <b>M. Tech. (Production Engineering)</b><br>Institute of Technology, BHU Varanasi                              | <b>2003</b>      |
| ➤ <b>B.E. (Mechanical Engineering)</b><br>MBM Engineering College, Jodhpur                                       | <b>2000</b>      |

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*Scopus Author ID: 57214416500*

*Researcher ID: AAB-2942-2021*

*Orcid ID: <https://orcid.org/0000-0002-6726-310X>*

*<https://scholar.google.com/citations?user=j8Siv8wAAAAJ&hl=en>*

*[https://www.researchgate.net/profile/Dharmendra\\_Singh56](https://www.researchgate.net/profile/Dharmendra_Singh56)*

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## PROFESSIONAL EXPERIENCE

S.No	Name of the Organization	Period	Position Held
1	Rajasthan Institute of Engineering & Technology, Jaipur	01.01.2007 to 25.05.2007	Sr. Lecturer (10000-325-15200)
2	Ajmer Institute of Technology, Ajmer	16.06.2005 to 31.01.2007	Assistant Professor (10000-325-15200)
3	Shankara Institute of Technology, Jaipur	10.07.2003 to 15.06. 2005	Lecturer (8000-275-13500)
4	Prasad Institute of Technology, Varanasi	15.01.2003 to 30.06.2003	Lecturer (8000-275-13500)
➤	<i>Currently working as Assistant Professor in Senior Scale (Department of Mechanical Engineering) in Govt. Engineering College Bikaner, since 26 May, 2007.</i>		

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## ADMINISTRATIVE RESPONSIBILITIES

- |   |  |   |
|---|--|---|
| 1 | Head of Department & Proctor   | June 2005 to Jan. 2007                            |
| 2 | Controller of Examination at AIT Ajmer                               | June 2005 to Jan. 2007                            |
| 3 | Faculty Coordinator (Exam) at Department ECB                         | May 2007 to July 2010                             |
| 4 | Workshop Superintendent at ECB                                       | June 2013 to Dec. 2015<br>28.02.2018 to till date |
| 5 | Quality Manager, Ceramic Electrical Research and Development Centre, | 21.05.2014 to 06.09.2017                          |

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(CERDC), Govt. of Rajasthan Bikaner (Additional Charge)

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|----|---|---------------------------|
| 6  | Head, Mechanical Testing Lab, Ceramic Electrical Research and Development Centre, (CERDC), Govt. of Rajasthan Bikaner (Additional Charge) | 23.12. 2016 to till date. |
| 7  | Nodal Officer, Academics, TEQIP II  | 4.11.2015 to 15.06.2016   |
| 8  | Nodal Officer, Finance, TEQIP II  | 15.6.2016 to 06.09.2017   |
| 9  | Assistant Dean, Research, Bikaner Technical University (Additional Charge)  | 07.03.2019 to 10.04.2010  |
| 10 | Member of Department Research Committee, Mechanical Engineering, Bikaner Technical University, Bikaner                                    | 09.04.2019 to till date   |
| 11 | Member of Board of Management, BLM Institute of Technology and Management, Jhunjhunu, Rajasthan   | 03.11.2018 to till date   |
| 12 | Coordinator TEQIP-III   | 18.12.2020 to till date   |

## MEMBERSHIP IN PROFESSIONAL SOCIETIES:

1. Associate member of Institution of Engineers (AM095901-7)

## DISSERTATIONS

*Ph.D.* Mechanical behaviour of ultrafine grained 5083 Al alloy processed by cryorolling.

*M. Tech.* Building an Active Material Requirement Planning System (A Case Study).

*B. E.* Comparative Study of Conventional and Rotary Ultrasonic Machining.

### M.Tech. / Ph.D. Guided:

M. Tech. 04 Completed, 01 under supervision

Ph.D. 04 under Supervision

## RESEARCH PROJECTS: On going

- 1 Actuator Design and Testing for the Deployment of Fire Extinguisher Ball Using IoT Based Drone. Co-PI (NPIU, TEQIP-III, Amount- Rs, 17, 02000 and 1 lac additional grant received)
- 2 Fabrication of In-situ TiC Reinforced Aluminium 2024 Composite for Aerospace Application. Co-PI (NPIU, TEQIP-III, Amount- Rs, 2,40,000)
- 3 Building Integrated Photovoltaic Thermal (BIPVT) facades for Combined electrical and Thermal Energy Utilization. Co-PI (NPIU, TEQIP-III, Amount- Rs, 2,40,000)

## ACADEMIC ACHIVEMENTS: 15

- 1 Keynote speaker and session chair at International conference on “Emerging Trends of Research in Applied Sciences & Computational Techniques” from 21-22 Feb. 2014 at JIET group of Institutions, Jodhpur, Rajasthan.
- 2 Expert Lecture at One week Faculty Development Program on “Advanced Computational and Measurement Techniques in Research” from 17-22 Oct. 2016 at CTAE, Udaipur, Rajasthan.
- 3 Keynote speaker at National Conference on “Virtual Manufacturing and Advanced Technology -2017” on 28 Feb. 2017 at Bhagwant University, Ajmer, Rajasthan.
- 4 Keynote speaker and session chair at National conference on “Modern Approaches in Energy Science and Technology-2017” from 21-26 March 2017 at Manda Institute of Technology, Bikaner, Rajasthan
- 5 Invited talk on Newer Machining Methods and their trends at International conference on “Recent Advancements in Mechanical, Materials and Civil Engineering” from 1-3 June 2017 at MLRIET, Hyderabad.
- 6 Invited talk on Bulk nano structured materials at International conference on “Recent Advancements in

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Mechanical, Materials and Civil Engineering” from 1-3 June 2017 at MLRIET, Hyderabad.

- 7 Keynote speaker and session chair at National conference on “Innovative Trends in Science & Technology (NCITST-2018) from 20-21 January 2018 at Manda Institute of Technology, Bikaner, Rajasthan
- 8 Invited Talk on Mechanical Behaviour and Corrosion Resistance of Al-Mg Alloys at Bhartiya Institute of Engineering and Technology, Sikar, May 15-16, 2018.
- 9 Keynote speaker at National conference on “Modern Construction Materials and Techniques-2018” on 27 Nov 2018 at Bhagwant University Ajmer, Rajasthan.
- 10 Keynote speaker and session chair at International conference on “Emerging Trends and Advancements in Mechanical Engineering” from 11-12 March 2019 at LIET Alwar, Rajasthan.
- 11 Expert talk in STTP sponsored by TEQIP-III on Material Science and Engineering from 9-13 Dec. 2019 at Mahila Engineering College Ajmer, Rajasthan
- 12 Keynote speaker in FDP on “Introduction to Advanced Aerospace/ Nuclear Materials: Recent Trends and Future Prospects” from 16-20 Dec. 2019 at JIET Jodhpur, Rajasthan.
- 13 Keynote speaker and in National seminar on “Recent Advances in Mechanical and Materials Engineering” on 22 Feb. 2020 at Bhagwant University Ajmer, Rajasthan
- 14 Keynote speaker at National conference on “Renewable Energy & Digitalization Resources for the Development of Rural Area” from 28-29 Feb. 2020 at JNIT, Jaipur, Rajasthan.
- 15 Invited talk in one week FDP on “Design Aspects and Industry 4.0” from 10-14 Sep. 2020 at UCET Bikaner under TEQIP-III.
- 16 Expert talk on “Lean Implementation Drivers and Barriers in Indian SMEs” on April 21, 2021 at Sri Sai College of Engineering and Technology, Badhani, Pathankot, Punjab.
- 17 Invited talk in one week FDP on “Advances in Mechanical Engineering” from 20-24 April 2021 at DYP CET Kolhapur, Maharashtra.

## (LIST OF RESEARCH PUBLICATIONS)

### International Journals : 24

- 1 **Dharmendra Singh**, P. Nageswara rao, R. Jayaganthan, “Study of microstructural evolution and impact toughness behavior of Al 5083 alloy processed by cryorolling”, **International Journal of Minerals, Metallurgy and Materials**, **20 (2013), 759-769. (Springer)(SCI- 1.638)**
- 2 **Dharmendra Singh**, P. Nageswara rao, R. Jayaganthan, “Effect of deformation temperature on mechanical properties of ultrafine grained Al-Mg alloys processed by rolling”, **Materials and Design**, **50 (2013) 646-655. (Elsevier) (SCI-6.289)**
- 3 **Dharmendra Singh**, P. Nageswara rao, R. Jayaganthan, “High cyclic fatigue behaviour of ultrafine grained Al 5083 alloy”, **Material Science and Technology**, **30(14) (2014) 1835-1842. (Maney Publications, presently Taylor and Francis)(SCI-1.835)**
- 4 P. Nageswara rao, **Dharmendra Singh**, R. Jayaganthan, “Effect of annealing on microstructure and mechanical properties of Al 6061 alloy processed by cryorolling”, **Material Science and Technology**, **29 (2013)76-82. (Maney Publications, presently Taylor and Francis)(SCI-1.835).**
- 5 P. Nageswara rao, **Dharmendra Singh**, R. Jayaganthan, “Mechanical properties and microstructural Evolution of Al 6061 alloy processed by Multi Directional Forging at Liquid nitrogen temperature”, **Materials and Design**, **56 (2013) 97-104. (Elsevier)(SCI-6.289)**
- 6 P. Nageswara rao, **Dharmendra Singh**, R. Jayaganthan, “Effect of Post cryorolling treatments on microstructural and mechanical behaviour of ultrafine grained Al-Mg-Si Alloy”, **Journal of Material Science and Technology**, **30(10) (2014) 998-1005. (Elsevier-6.155)**
- 7 P. Nageswara rao, **Dharmendra Singh**, Heinz-Günter Brokmeier, R. Jayaganthan, “Effect of ageing on tensile behavior of ultrafine grained Al 6061 alloy”, **Materials Science & Engineering A**, **641 (2015) 391-401.(Elsevier)(SCI-4.652).**
- 8 Maruff Hussain, **Dharmendra Singh**, P. Nageswara rao, R Jayaganthan, “Precipitation hardening behaviour of Al-Mg-Si alloy Processed by Cryorolling and Room temperature Rolling”, **Material**

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**Research Express, 5 (2018) 046529 , (IOP Science) (SCI-1.929).**

- 9 V.G. Arigela, N.R. Palukuri, **D. Singh**, S.K. Kolli, J. Rengaswamy, P. Chekhonin, J. Scharnweber , W. Skrotzki, “Evolution of microstructure and mechanical properties in 2014 and 6063 similar and dissimilar aluminium alloy laminates produced by accumulative roll bonding”, **Journal of Alloys and Compounds 790 (2019) 917-927. (SCI-4.65).**
- 10 Jagdish Bhadu, Pramod Kumar, Jaiprakash Bhamu, **Dharmendra Singh**, An ISM approach for lean implementation in labor intensive ceramic SMEs” **In Press, International Journal of Productivity and Quality Management.**
- 11 Amit Sharma, C. S. Rajoria, **Dharmendra Singh**, J. P. Bhamu, R. Kumar, “Numerical simulation of heat transfer characteristics of taper helical and spiral tube heat exchanger. **In Press, Journal of Thermal Engineering.**
- 12 Pramod Kumar, Jagdish Bhadu, Jaiprakash Bhamu, **Dharmendra Singh**, Integration between lean six sigma and Industry 4.0 technologies” **In Press, International Journal Six Sigma and Competitive Advantages.**
- 13 **Dharmendra Singh**, P. Nageswara rao, C S Rajoria, J P Bhamu, R. Jayaganthan, “Corrosion behaviour of ultrafine grained Al 5083 alloy processed by cryorolling”, **Under Review, Advances in Material and Processing Technologies.**
- 14 **Maruff Hussain**, P. Nageswara rao, **Dharmendra Singh**, R. Jayaganthan, “Insight on the evolution of nano precipitates by cryo plus warm rolling in Al 6061 alloys”, **Material Science & Engineering A**, DOI: 10.1016/j.msea.2021.141072, Vol. 841 (2021)
- 15 Jagdish Bhadu, Jaiprakash Bhamu, **Dharmendra Singh**, “Lean production performance indicators for medium and small manufacturing enterprises: Modelling through Analytical Hierarchy Process (AHP)” **Under Review, International Journal of System Assurance Engineering and Management**
- 16 Jagdish Bhadu, Pramod Kumar, **Dharmendra Singh**, Jaiprakash Bhamu, “Analysis of lean implementation barriers for labor intensive Indian ceramic industries: Modelling through interpretive ranking process” **International Journal of Productivity and Performance Management.**
- 17 Pramod Kumar, **Dharmendra Singh**, Jaiprakash Bhamu, “Development and validation of DMAIC based framework for process improvement: A case study of Indian manufacturing organizations”. **International Journal of Quality & Reliability Management**, DOI: 10.1108/IJQRM-10-2020-0332.
- 18 Pramod Kumar, Jagdish Bhadu, Jaiprakash Bhamu, **Dharmendra Singh**, “Exploratory study on design principles and key technologies of Industry 4.0”. **In Press, International Journal of Advanced Operation Management.**
- 19 Pooja Patil, **Dharmendra Singh**, Sunil J. Raykar, Jaiprakash Bhamu, Multi-objective Optimization of Fused Deposition Modeling Parameters: Best Infill Patterns, (Accepted), **International Journal of Six Sigma and Competitive Advantage.**
- 20 Jagdish Bhadu, Pramod Kumar, **Dharmendra Singh**, Jaiprakash Bhamu, An Analytic Hierarchy Process (AHP) Approach for Prioritizing of Industries 4.0 Technologies (I4.0T), **In Press, International Journal of Advanced Operation Management.**
- 21 Pramod Kumar, **Dharmendra Singh**, Jaiprakash Bhamu, Application of Kaizen Lean approach to Reduce Rejections and Failure Cost at Shop Floor of a Wire Harness Manufacturing Company: A Case Study, **Indian Journal of Engineering and Material Sciences, Under Review.**
- 22 Pooja Patil, **Dharmendra Singh**, Sunil J. Raykar, Jaiprakash Bhamu, Modeling and Analysis of Surface Roughness in Fused Deposition Modeling Based on Infill Patterns, **In Press, Indian Journal of Engineering and Material Sciences, Under Review.**
- 23 Jagdish Bhadu, Jaiprakash Bhamu, **Dharmendra Singh**, Critical Success Factors of Lean Manufacturing for Indian Ceramic Industries: Modelling through Interpretive Ranking Process, **In Press, Indian Journal of Engineering and Material Sciences.**
24. Sankalp Goel, **Dharmendra Singh**, Nikhil Kumar, A K Chauhan, Effect of Water and Mercury Quenching

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on the Microstructure and Mechanical Behavior of Room Temperature Rolled Zircaloy-2, **Under Review, Indian Journal of Engineering and Material Sciences, Under Review.**

25. Pramod Kumar, **Dharmendra Singh**, Jaiprakash Bhamu, A Categorized Review of I4.0, **International Journal of Production Research, Under Review.**

## **Full Paper Published in Conference/Proceedings (SCOPUS Indexed): 18**

- 1 **Dharmendra Singh**, P. Nageswara rao, R. Jayaganthan, “Study of microstructural evolution and mechanical properties of Al 5083 alloy processed by cryorolling”, **Advanced Materials Research**, 585 (2012) 376-380. (Scientific.net) AMPCO 2012
- 2 P. Nageswara rao, Amrita Kaurwar, **Dharmendra Singh**, R. Jayaganthan, “Enhancement of strength and ductility of Al-Mg-Si alloy by cryorolling followed by warm rolling”, **Procedia Engineering** 75 (2014) 123-128, (Elsevier) ICMAT-2014
- 3 Maruff Hussain, P. Nageswara rao, **Dharmendra Singh**, R. Jayaganthan, Surendra Singh, “Comparative study of microstructure and mechanical properties of Al 6063 alloy processed by Multi axial forging at 77K and cryorolling”, **Procedia Engineering**, 75 (2014) 129-133. (Elsevier) ICMAT-2014
- 4 **Dharmendra Singh**, R. Jayaganthan, P. Nageswara Rao, A. Kumar, D. Venketeswarlu, “Effect of initial grain size on microstructure and mechanical behavior of cryorolled 5083 AA”, **Materials Today Proceedings**, 4 (2017) 7609-7617 ( Elsevier) ICAAMM-2016
- 5 S. Srivastava, S. K Rajput, S. Kumar, **Dharmendra Singh**, “Effect of Heat treatment and Uniaxial Deformation on Thermal Stability and Wear Behaviors of AA 2014 alloy” **Materials Today Proceedings**, 5 (2018) 3610-3617 (Elsevier). ICMPC 2017
- 6 C. S. Rajoria , Pankaj Kumar Gupta, Sanjay Agrawal, G. N. Tiwari, **D. Singh**, “Effect of Different Photovoltaic Materials on Energetic and Exergetic Performance of Photovoltaic Thermal Arrays”, **MATEC Web of Conferences** 95, 01006 (2017)
- 7 Maruff Hussain, P. Nageswara rao, **Dharmendra Singh**, R Jayaganthan, “Effect of pre-ageing on the age hardening response of cryorolled Al-Mg-Si alloy”, **Advanced Materials and Manufacturing**, 877 (2018) 137-148 (Scientific.net), ICRAMMCE 2017
- 8 C. S. Rajoria, **D. Singh**, Pankaj Kumar Gupta, “Performance Evaluation of Solar Photovoltaic Panel Driven Refrigeration System”, **Material Science and Engineering IOP Science** 330 (2018) 012133, ICRAMMCE 2017
- 9 Manpreet Singh, Mohd. Yunus Sheikh, **Dharmendra Singh**, P. Nageswara rao, “Combustion Characteristics Of Ci Diesel Engine Fuelled With Blends Of Jatropa Oil Biodiesel”, **Material Science and Engineering, IOP Science**, 330 (2018) 012075, ICRAMMCE 2017.
- 10 Kanchan Singh, Rajput S K, Soota T, Vijay Verma, **Dharmendra Singh**, “Prediction of hot deformation behavior of high phosphorous steel using artificial neural network” **Material Science and Engineering, IOP Science** 330 (2018) 012038, ICRAMMCE 2017.
- 11 Manpreet Singh, Mohd. Yunus Sheikh, **Dharmendra Singh**, Combustion Characterstics of Single Cylinder Diesel Engine Fueled with Blends of Thumba Biodiesel as Alternative Fuel, **Material Science Forum (Scientific.net)**, 969 (2018) 451-460, ICRAMMT 2018.
- 12 Ravi Jain, Mohd. Yunus Sheikh, **Dharmendra Singh**, Manoj Tripathi, “Numerical Analysis of Joukowski (T = 12%) Airfoil by k-e Turbulence Model at High Reynolds Number, (Springer), 13, 320–329, 2020, ICSISCET 2019.
- 13 **Dharmendra Singh**, C S Rajoria. J P Bhamu, S Raykar, P K Gupta, S K Rajput, Mechanical and Corrosion Behavior of Al 5083 Alloy Processed by Multi Directional Forging at Cryogenic Temperature”, (Accepted), CIMS 2020, NIT Jalandhar
- 14 Pooja Patil, **Dharmendra Singh**, Sunil J. Raykar, Jaiprakash Bhamu, Multi-objective optimization of process parameters of Fused Deposition Modeling (FDM) for printing Polylactic Acid (PLA) polymer components, **Materials Today: Proceedings**, DOI: 10.1016/j.matpr.2021.01.353, ICAMSE 2021

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- 15 P K Gupta, Tapas Bajpei, Nikhil Jain, **Dharmendra Singh**, “Performance Enhancement of Electrochemical Discharge Machining by Process Variants: A Review”, (Accepted), CIMS 2020, NIT Jalandhar
- 16 C S Rajoria, P K Gupta, **Dharmendra Singh**, Amit Sharma, “Performance analysis of semi transparent photovoltaic thermal module with single and double pass configuration”, (Accepted), CIMS 2020, NIT Jalandhar.
- 17 C S Rajoria, P K Gupta, **Dharmendra Singh**, “CO<sub>2</sub> Emission reduction potential of a typical Indian village” **AIP Conference Proceedings**, 2273, 020010 (2020), 1-7, ICMMRE 2019
- 18 C S Rajoria, Ravi Kumar, Amit Sharma, **Dharmendra Singh**, Sathans Suhag “Development of Flat-plate building integrated photovoltaic/thermal (BIPV/T) system: A Review” **Materials Today Proceedings**, <https://doi.org/10.1016/j.matpr.2020.08.790>, ICICET 2020.
- 19 D. M. D. Addona, S. J. Raykar, **Dharmendra Singh**, **Davorin** Kramar, Multi Objective Optimization of Fused Deposition Modeling Process Parameters with Desirability Function, 14th CIRP Conference on Intelligent Computation in Manufacturing Engineering, CIRP ICME '20, **Procedia CIRP 99 (2021)** 707–710.

## Paper presented at Conferences/Seminars (National-07, International-10)

- 1 Implication of computer integrated manufacturing in factory automation”, **National Conference** on Recent Advancements in Engineering & Technology, Engineering College Ajmer, April 26, 2008.
- 2 Global fingerprints of green house warming”, **National Symposium** on Global Warming under the aegis of ISTE, Department of Electronics Instrumentation & Control, Engineering College Bikaner, March 5, 2008.
- 3 Skill Mapping- A method of productivity improvement”, **National Conference** on Advanced Manufacturing Techniques, Shri Mata Vaishno Devi University, Nov. 6-9, 2009.
- 4 Energy conservation opportunities in boiler and chilling plants: A review”, **National Conference** on Energy Management sponsored by AICTE, Engineering College Bikaner, 20-21 Nov. 2009
- 5 Ultrafine/ Nano structured metals and alloys”, **National seminar** "Microstructure-2011, IIT Roorkee, Nov. 4-5, 2011.
- 6 Effect of second phase particles on strengthening behavior of Al 5083 & 6061 alloys processed by cryorolling” **International Conference** on Recent Advances in Materials & Processing (RAMP -2011), PSG Coimbatore, Dec. 23-24, 2011.
- 7 Microstructure and thermal stability of Al 6061 alloys processed by cryorolling” **International Conference** on Recent Advances in Materials & Processing (RAMP -2011), PSG Coimbatore, Dec. 23-24, 2011.
- 8 Study of microstructural evolution and Mechanical properties of Al 5083 alloy processed by cryorolling”, **International conference** on Advanced Materials Processing: Challenges and Opportunities-2012, IIT Roorkee, Nov. 2-4, 2012
- 9 Development of High Strength Al 7075 Alloy” **International Conference** on Condensed Matters- 2015, Engineering College Bikaner, Oct. 30-31, 2015.
- 10 Microstructure, Microstructural Evolution and anisotropy of Al-Mg Alloy subjected to Cryorolling through different rolling routes”, **International Conference**, ICRAMMCE 2017, MLRIET Hyderabad, 3-5 June 2017. **(First Prize)**.
- 11 Hardening Behaviour of Al-Mg-Si alloy processed by cryorolling followed by warm rolling, **International Conference**, ICRAMMCE 2017, MLRIET Hyderabad, 3-5 June 2017.
- 12 Accumulative Roll bonding of 5083 Al Alloy, **International Conference** on Condensed Matters- 2017, 24-25 Nov-2017, Engineering College Bikaner.
- 13 Severe plastic deformation of Aluminium alloys, **National Conference**, NCMAEST-2017, 25-26 March, 2017 Manda Institute of Technology Bikaner
- 14 Effect of Microstructure on Corrosion Resistance and High Cycle Fatigue Life of Al-Mg Alloy Processed through Cryorolling and Warm rolling, **International Conference**, RITDME-2018, Jaipur Engineering College and Research Centre, Jaipur, 6-7 April 2018.

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- 15 Combustion Characteristics of CI Diesel Engine Fuelled with Blends of Jatropha Oil Biodiesel, **National Conference**, NCRTSE -2018, Bhartiya Institute of Engineering and Technology, Sikar, March 26-27, 2018.
- 16 Future prospects of autonomous institutions”, AICTE sponsored National Seminar on Technical Education in Current Perspective, Department of Civil Engineering, UCE, RTU Kota, Dec. 13-14, 2007.
- 17 Mechanical and Corrosion Behavior of Al 5083 Alloy Processed by Multi Directional Forging at Cryogenic Temperature”, CIMS 2020, NIT Jalandhar, 9-10 Oct 2020.
- 18 Optimization of Process Parameters of Fused Deposition Modeling (FDM) for Printing Polylactic Acid Polymer Components (PLA), International Conference on Aspects of Materials Science and Engineering" ICAMSE2021, Punjab University Chandigarh, 5-6 March 2021.
- 19 Development of Flat-Plate Building Integrated Photovoltaic/thermal (BIPV/T) System: A Review, International conference on Innovations in Clean Energy Technologies, (ICET-2020), Energy Centre, Maulana Azad National Institute of Technology, Bhopal, 27-28 August, 2020

## Conferences/ Seminars/ workshops attended

- 1 National Seminar on “Recent Trends in Nuclear Sciences organized by University of Bikaner”, Rajasthan, Jan. 19, 2008.
- 2 AICTE sponsored National workshop on “CAD/CAM” conducted by Department of Mechanical Engineering, Engineering College Bikaner, Dec. 19-20, 2008.
- 3 AICTE sponsored two days National workshop on “Application of Thermo Mechanical Simulator in Advanced Materials Research”, conducted by Metallurgical & Materials Engineering Department, IIT Roorkee, Feb. 4-5, 2011.
- 4 CSR/DST sponsored National seminar on “Industrial Engineering and Management, conducted by Department of Mechanical Engineering, Engineering College Bikaner, March 12, 2011.
- 5 QIP workshop on “Advances in Surface Finishing Technologies with Special References to Abrasive Flow Machining”, conducted by Department of Mechanical Engineering, IIT Roorkee, Dec. 19, 2012.
- 6 QIP workshop on “Industry Institute Interaction for Professionals, UG/ PG teaching scope of Employment in Metallurgical & Materials Engineering”, IIT Roorkee, Dec. 20, 2012.
- 7 NRC-M Symposium and Discussion meeting on Severe Plastic Deformation and Bulk Nano-structured Materials, held at Department of Materials Engineering, Indian Institute of Science Bangalore from 12- 14 May 2014.
- 8 NRC-M workshop on Advances in Corrosion Engineering, held at Department of Materials Engineering, Indian Institute of Science Bangalore from 22-24 Dec. 2014.

## Short Term Training Programs Attended: 28

- 1 Faculty development program conducted by Entrepreneurship Development Cell, Department of Management Studies, MNIT Jaipur, Sponsored by DST at Engineering College Bikaner from 07.06.2007 to 18.06.2007. **(Two week)**
- 2 Quality improvement program on Product Design and Development, Department of Mechanical and Production Engineering and Architectural & Planning, IIT Roorkee, 09.07.2007 to 13.07.2007. **(One week)**
- 3 Short term program on Automation Techniques conducted by Department of Electrical Engineering, Engineering College Bikaner, sponsored by NITTTR Chandigarh from 08.10.2007 to 12.10.2007. **(One week)**
- 4 Short term program on Mechatronics, Department of Mechanical Engineering, Engineering College Bikaner, sponsored by NITTTR Chandigarh from 21.10.2007 to 25.10.2007. **(One week)**
- 5 Quality improvement program on Spray & Combustion conducted by Department of Aerospace Engineering, IIT Kanpur from 02.12.2007 to 06.12.2007. **(One week)**

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- 6 Short term program on Communication Skills conducted by Curriculum Development Centre at Engineering College Bikaner, sponsored by NITTTR Chandigarh from 28.01.2008 to 01.02.2008. **(One week)**
- 7 AICTE sponsored Faculty development program on Biodiesel Alternative Fuel for Future fuel held at Engineering College Bikaner from 12.05.2008 to 23.05.2008. **(Two week)**
- 8 Short term program on Simulation & Modeling Using MATLAB conducted by Department of Mechanical Engineering, NITTTR Chandigarh from 21.07.2008 to 25.07.2008. **(One week)**
- 9 QIP short term course on Futuristic Nanocomposites conducted by Department of Mechanical Engineering and Material Science Programme, IIT Kanpur from 08.12.2008 to 12.12.2008. **(One week)**
- 10 Quality improvement program on Advanced Techniques in Microstructural Characterization conducted by Department of Metallurgical and materials Engineering, IIT Roorkee from 26.12.2011 to 30.12.2011. **(One week)**
- 11 Quality improvement program on Advances in Thermo Fluids Engineering: from Modelling to Experimentation conducted by Department of Mechanical and Industrial Engineering, IIT Roorkee from 02.07.2012 to 06.07.2012. **(One week)**
- 12 Quality improvement program on Advanced Techniques in Corrosion Testing and Protection of Materials, conducted by Department of Metallurgical and Materials Engineering, IIT Roorkee from 18.02.2013 to 22.02.2013. **(One week)**
- 13 Quality improvement program on Advanced Processing and Fabrication of Metal Matrix Composites, conducted by Department of Mechanical and Industrial Engineering, IIT Roorkee from 18.02.2013 to 22.02.2013. **(One week)**
- 14 ICT based short term course on Soft Computing Techniques Govt. Engineering College Bikaner from 11.11.2013 to 15.11.2013. **(One week)**
- 15 ISTE workshop on Engineering Mechanics, conducted by Indian Institute of Technology Bombay from 26.11.2013 to 06.12.2013. **(Two week)**
- 16 ISTE workshop on Fluid Mechanics, conducted by Indian Institute of Technology Kharagpur from 20.05.2014- 30.05.2014. **(Two week)**
- 17 ICT based short term course on Instructional Planning and Delivery at ECB Polytechnique College Bikaner from 05.05.2014 to 09.05.2014. **(One week)**
- 18 ICT based short term course on Renewable Energy Based Technologies at Govt. Engineering College Bikaner from 28.08.2014 to 29.08.2014. **(One week)**
- 19 Laboratory Quality Management System & Internal Audit as per ISO/IEC 17025:2005 training course, conducted by Indian Institute of Quality Management, Jaipur from 16.03.2015 to 19.03.2015. **(One week)**
- 20 ICT based short term course on Communication Skills at Govt. Engineering College Bikaner conducted by NITTTR Chandigarh from 20.04.2015 to 24.04.15. **(One week)**
- 21 ICT based short term course on Instructional Delivery (Instructional Planning & Delivery Module-II) at Govt. Engineering College Bikaner from 11.05.2015 to 15.05.2015. **(One week)**
- 22 ICT based short term course on Advanced Manufacturing Methods at Govt. Engineering College Bikaner conducted by NITTTR Chandigarh from 16.02.2015 to 20.02.15. **(One week)**
- 23 ICT based short term course on Alternate Energy Sources & Energy Conservations at Govt. Engineering College Bikaner conducted by NITTTR Chandigarh from 27.07.2015 to 31.07.15. **(One week)**
- 24 ICT based short term course on Industrial Automation & Robotics at Govt. Engineering College Bikaner conducted by NITTTR Chandigarh from 24.08.2015 to 28.08.15. **(One week)**
- 25 ICT based short term course on Optimization Using MATLAB at Govt. Engineering College Bikaner conducted by NITTTR Chandigarh from 24.10.2016 to 28.10.16. **(One week)**
- 26 ICT based short term course on Sustainable Environmental Management at Govt. Engineering College Bikaner conducted by NITTTR Chandigarh from 27.02.2017 to 03.03.17. **(One week)**



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- 27 ICT based short term course on Green Techniques for Sustainable Construction at Govt. Engineering College Bikaner conducted by NITTTR Chandigarh from 16.02.2017 to 20.02.17. (**One week**)
- 28 TEQIP-III Summer Course (Workshop) on Active learning, Autonomy, Academic Governance and R& D at IIT Roorkee held from 02.06.2018 to 08.06.2018. (**One week**)

## COURSES CONDUCTED/ ORGANIZED

- 1 Conducted 45 days (315 hours) short term training program for livelihoods on “**Electric Arc & Gas Welding**” sponsored by Rajasthan mission on livelihoods under aegis of Entrepreneurship & Management Development Institute, Jaipur, from 26.02.08 to 24.04.08., with training budget of Rs. 83540.00.
- 2 Conducted 45 days (315 hours) short term training program for livelihoods on “**Carpentry Cum furniture Making**” sponsored by Rajasthan mission on livelihoods under aegis of Entrepreneurship & Management Development Institute, Jaipur, from 21.07.08 to 15.09.08, with training budget of Rs. 88330.00.
- 3 Worked as **Co-convener** of National Workshop on **CAD/CAM** sponsored by AICTE, New Delhi, organized by Department of Mechanical Engineering, at Engineering College Bikaner, Dec. 19-20, 2008.
- 4 Worked as **Joint Secretary** of National Conference **Energy Management** sponsored by MNRE and DST, New Delhi, organized by Department of Mechanical Engineering, Engineering College Bikaner from Nov. 20-21, 2009.
- 5 Conducted 80 days (480 hours) short term training program for livelihoods on “**Turner**” sponsored by Rajasthan mission on livelihoods under aegis of Entrepreneurship & Management Development Institute, Jaipur, from 22.01.10 to 07.05.10, with training budget of Rs. 105900/-.
- 6 Worked as **Convener** of National Seminar on **Advanced Materials and Processing (AMP 2017)** sponsored by TEQIP-II organized by Department of Mechanical Engineering, at Engineering College Bikaner, Dec. 19-20, 2016.
- 7 Worked as **Organizing Secretary** of National Conference on **Recent Trends in Engineering and Technology (NCR TET 2019)** sponsored by TEQIP-III organized by Department of Mechanical Engineering, at Engineering College Bikaner, **Feb. 16-17, 2019.**
- 8 Worked as **Coordinator** of Online STTP on **Manufacturing Practices and Industry 4.0** sponsored by TEQIP-III organized by Department of Mechanical Engineering, at Engineering College Bikaner, **June 8-12, 2020.**
- 9 Worked as **Coordinator** of Online STTP on **Life Cycle Analysis for Sustainability** sponsored by TEQIP-III organized by Department of Mechanical Engineering, at Engineering College Bikaner, **June 8-12, 2020.**
- 10 Worked as **Convener** of STTP on **Solar Photovoltaic Installation** sponsored by TEQIP-III organized by Department of Mechanical Engineering, at Engineering College Bikaner, **Nov. 25-29, 2019.**
- 11 Worked as **Coordinator** of Online FDP on **Newer Aspects of Engineering and Technology** sponsored by TEQIP-III organized by Department of Mechanical Engineering, at Engineering College Bikaner, **Feb. 10-14, 2020.**
- 12 Worked as **Coordinator** of Online FDP on **Optimization Techniques in Engineering and Research** sponsored by TEQIP-III organized by Department of Mechanical Engineering, at Engineering College Bikaner, **Feb. 24-28, 2020.**
- 13 Worked as **Coordinator** of Online FDP on **Bio Energy: Technologies and Transitions** sponsored by TEQIP-III organized by Department of Mechanical Engineering, Engineering College Bikaner and NIT Kurushetra, **May. 13-17, 2020**
- 14 Worked as **Coordinator** of Online FDP on **Bio Energy: Technologies and Transitions** sponsored by TEQIP-III organized by Department of Mechanical Engineering, Engineering College Bikaner and NIT Kurushetra, **May. 18-22, 2020.**
- 15 Worked as **Organizing Secretary** of **Online International Conference on Challenges And Applications**

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**In Clean Energy (ICCACE-2020)** jointly organized by Engineering College Bikaner & NIT Kurukshetra (Mentor Institute in TEQIP-III), sponsored by TEQIP-III, Under Twining Activity, **25-26 Dec., 2020**

16 Worked as **Organizing Secretary** of **Online International Conference on Sustainable Engineering (ICSE-2021)** organized by Engineering College Bikaner sponsored by TEQIP-III, **26-27 Feb. 2021.**

17 Worked as **Coordinator** of Online STTP on **Advances in Mechanical Engineering for Sustainability** organized by Department of Mechanical Engineering, Engineering College Bikaner, **May 27-31, 2021**

**Worked as Faculty Coordinator for following Short Term Training Courses organized for students under TEQIP-II.**

S. No.	In the Capacity of	Title	Period	Organized at	Sponsored by	Amount [in lakhs]
1	Coordinator	Towards Sustainable development in Engineering Sector in Next Decade	03.10.2016 to 07.10.2016	ECB Bikaner	TEQIP-II	0.50
2	Coordinator	Recent Trends in Materials, Design and manufacturing Technology	06.04.2015 to 11.04.2015	ECB Bikaner	TEQIP-II	0.50
3	Coordinator	Innovations in Materials, Design and Manufacturing Technology	09.03.2015 to 14.03.2015	ECB Bikaner	TEQIP-II	0.50
4	Coordinator	Recent Advancements in Mechanical and Materials Engineering	07.12.2013 to 12.12.2013	ECB Bikaner	TEQIP-II	0.50

## PERSONAL PROFILE

Father's name : Shanker Singh

Date of birth : 31.03.1978

Languages Known : English, Hindi.

Marital Status : Married

I hereby declare that the information furnished above is true to the best of my knowledge.

Date:

**Dharmendra Singh**