

Dr. ABHISHEK KUMAR SINGH

Production & Industrial Engineering, B.I.T, Mesra, Ranchi Jharkhand- 835215

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RESUME SUMMARY

This resume is meant for the short profile of the applicant is as follows:

Ph.D (Production Engg.) and M.E (Automated Manufacturing System, Production Engineering) from Birla Institute of Technology (Mesra, Ranchi), B.E. (Mechanical Engg.) from University of Rajasthan, Jaipur and over 16 Yrs. of teaching and research experience in Birla Institute of Technology , Mesra, Ranchi, having published more than ten articles in Peer-reviewed International Journals along with two book chapters and one book.

1. Academic background {Higher Secondary (class XII) onward}:

Degree	Year of Graduation and duration (from-to)	Discipline	Name of Institution/University/Board	Record (%Marks/Grade/Class)
XII	2000-2002	Science	C.B.S.E	65.40%
B.E	2003-2007	Mechanical Engineering	University of Rajasthan, Jaipur	69.70%
M.E (AMS)	2007-2009	Production Engineering	Birla Institute of Technology, Mesra, Ranchi	83.00%
Ph.D	2016	Production Engineering	Birla Institute of Technology, Mesra, Ranchi	80.00%

Title of Ph. D Thesis.:

“Adoption of Green Manufacturing in selected Indian Industries”

Year of Award and Name of Ph.D. Supervisor with Affiliation: **2016; Guide: Dr. Sanjay Kumar Jha, Associate Professor, B.I.T Mesra, Ranchi, Co-Guide: Dr. Anand Prakash, Sr. Associate Professor, NICMAR University Pune.**

PUBLICATIONS

Paper published in International Journal

- Anurag Sinha, Vandana Sharma, Ahmed Alkhayyat, Suman, Biresh Kumar, Neetu Singh, **Abhishek Kumar Singh**, Shatrudhan Pandey. "Design and optimization of three class object detection modalities for manufacturing steel surface fault diagnosis and dimensionality classification " (2024) Int J Syst Assur Eng Manag. Springer <https://doi.org/10.1007/s13198-024-02503-8>
- Ritwik Chatterjee · Binay Kumar · **Abhishek Kumar Singh** · Shatrudhan Pandey. "Investigating Organizational Transformations on the Path to Sustainable Supply Chain 4.0 Implementation".(2024) Circular Economy and Sustainability, Springer <https://doi.org/10.1007/s43615-024-00426-x>
- Ibrak Hossain, Abhijit Bhowmik, Ashutosh Pattanaik, Rahul Kumar, **Abhishek Kumar Singh** and Shatrudhan Pandey, "Computational investigation of plasma arc welding process for aluminium alloys" Engineering Research Express, Published 2024, 6(2), 025541 , DOI: [10.1088/2631-8695/ad4a24](https://doi.org/10.1088/2631-8695/ad4a24) [Scopus].
- Pulkit Kumar, Harpreet Kaur Channi, Raman Kumar, Chander Prakash, Abhijit Bhowmik, Shatrudhan Pandey, **Abhishek Kumar Singh**, Muhammad Mahmood Ali, Manzoore Elahi M. Soudagar. "Efficient integration of photo voltaic and hydro energy technologies for sustainable power generation in rural areas: A case study" Materials Science for Energy Technologies, 2024,ISSN2589 2991, <https://doi.org/10.1016/j.mset.2024.04.002>. [Scopus].
- Poddar, S., Priya, M., Ghosh, M., **Abhishek Kumar Singh***, Shatrudhan Pandey*. "Circular Economy Integration in the Indian FMCG Supply Chain: Unveiling Strategic Hurdles and Pathways to Sustainable Transformation". Circular Economy and Sustainability (2024). <https://doi.org/10.1007/s43615-024-00356-8>. [Scopus].
- Vijaya G, Muralidhar Singh M, Manish Kumar, Ashok Kumar M S, Amit Kumar, Dheeraj Kumar, Shatrudhan Pandey*, S M Mozammil Hasnain*, **Abhishek Kumar Singh**, Gaurav Kumar "Nano indentation studies on ceramic thin films coatings deposited using sputtering process for energy applications" Materials Science for Energy Technologies, (2023), 7, 115-123, DOI: <https://doi.org/10.1016/j.mset.2023.08.001>. , [Scopus, CiteScore: 17.7]
- Muralidhar Singh M, Manish Kumar, P. Sivaiah, Vijaya G., Amit Kumar, Dheeraj Kumar, Shatrudhan Pandey*, **Abhishek Kumar Singh**, Ahmed Farouk Deifalla*, S M Mozammil Hasnain*, "Simulation of metal ceramic single layer coatings for solar energy applications" Materials Science for Energy Technologies, (2023), 7, 85-90, DOI: <https://doi.org/10.1016/j.mset.2023.06.003>. , [Scopus, CiteScore: 17.7]
- Shatrudhan Pandey*, Karan Kumar Mishra, Pampa Ghosh, **Abhishek Kumar Singh**, and Sanjay Kumar Jha "Characterization of tin-plated steel" Frontiers in Materials, 10, (2023): 1113438, DOI: <https://doi.org/10.3389/fmats.2023.1113438>. , [SCIE, IF: 3.985]

- Anand, R.S , Prakash, P , Jha, S.K , **Singh, A. K.**,(2020). “*Numerical investigations of effect of input process parameters on heat generation in friction stir welding*”, Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2020.03.113>. [Scopus]
- Prakash. A, Jha. S. K, Prasad. K. D, & **Singh. A. K.**, “*Productivity, Quality and Business Performance: An Empirical Study*”, International Journal of Productivity and Performance Management, Vol: 66, PP: 78-91 Issue: 1, Jan 2017. <https://doi.org/10.1108/IJPPM-03-2015-0041> [Scopus]
- **Singh. A. K.**, Jha. S. K, and Prakash. A, “*Adoption of Green Manufacturing (GM) in Selected Indian Industries*”, International Journal of Applied Engineering Research, PP. 20383-20404, Volume 9, No. 23, December 2014. [Scopus]
- **Singh. A. K.**, Jha. S. K and Prakash. A, “*Green Manufacturing (GM) Performance Measures: An Empirical Investigation from Indian MSMEs*”, International Journal of Research in Advent Technology, PP. 51-65, Volume 2, No. 4, April 2014.
- **Singh. A. K.**, Shukla. S. S and Jha. S. K, “*Green Manufacturing Practices in Brick Industries: A Case Study Using AHP*”, International Journal of Innovative Research in Science, Engineering and Technology, PP. 2236-42, Volume 2, Issue 6, 2013.

(B) **Book Chapter**

- Shatrudhan Pandey, Kirtika Kiran, Shreyanshu Parhi, Abhishek Kumar Singh and Sanjay Kumar Jha (2023), "*Safety Management in the Era of Emerging Industrial Revolution: The Conceptualisation of Safety 4.0*", Emerald Publishing Limited in Book Titled: Fostering Sustainable Development in the Age of Technologies, Chapter-15, pp. 239-256, 2023, <https://doi.org/10.1108/978-1-83753-060-120231017>. [Scopus]
- Shatrudhan Pandey and Abhishek Kumar Singh “*Integrating AI with Green Manufacturing for process industry*,”CRC Press, Taylor & Francis Group in Book Titled: Industry 4.0 and Climate Change, Chapter-20, pp. 225-234, 2022, eBook ISBN: 9781003293576 DOI: <https://doi.org/10.1201/9781003293576-20>.

(C) **Paper published in National Journal**

- **Singh. A. K.**, Jha. S. K, Prakash. A, and Aggarwal. H, “*Life Cycle Assessment of Polyethylene Terephthalate (PET) Bottles*” ELK Asia Pacific Journals, Special Issue, PP. 122-128, April 2016.
- **Singh. A. K.**, Jha. S. K, Prakash. A, and Sukla. S. S, “*A Decision-Making Model for Green Manufacturing using Analytical Hierarchy Process and Grey Relation Grading*” ELK Asia Pacific Journals, Special Issue, PP. 113-116, April 2016.
- **Singh. A.K.**, Jha. S. K & Prakash. A, “*Imperatives of Green Manufacturing*”, ELK Asia Pacific Journals, Special Issue, pp: 472-478, April -2015.
- Jha. S. K, **Singh. A. K.** and Prakash. A, “*Understanding Green Manufacturing (GM)*”, Journal of Production Research and Management, PP. 33-45, Volume 4, Issue 1, May 2014.

(D) Paper published in International Conference

- Shatrudhan Pandey, **Abhishek Kumar Singh**, Shreyanshu Parhi “*Process Safety Management in the Indian Steel Industry: A Comprehensive Evaluation*“, The 4th Asian Conference on Ergonomics and Design (**ACED-2023**) jointly with Humanizing Work and Work Environment (HWWE) & BRICSplus HFE Conference 2023, 14th - 16th December 2023, Indian Institute of Management Mumbai (IIM Mumbai), India, PP- 39.
- Shatrudhan Pandey, **Abhishek Kumar Singh**, Shreyanshu Parhi “*Occupational Safety and Health in the Steel Manufacturing Industry in India and its Potential Impacts on Worker’s Health*“, Translational Research: Metals & Materials (**TRMM-2023**), 19th - 21st November 2023, National Institute of Advanced Manufacturing Technology, Mesra, Ranchi, Jharkhand, India, PP- 49
- Shivam Singh, Arunjeet Chakraborty, Shatrudhan Pandey, **Abhishek Kumar Singh** “*Prediction of Occupational Accidents in Steel Industry using Bayesian Belief Network,*” International Conference on Advancements in Interdisciplinary Research (**AIR-2022**), 6th-7th May 2022 at Department of Applied Mechanics Motilal Nehru National Institute of Technology Allahabad, Prayagraj (U.P.), India. DOI: <https://doi.org/10.13052/rp-978-87-7022-828-2>
- Shatrudhan Pandey and **Abhishek Kumar Singh** “*Integration of Artificial Intelligence in Green Manufacturing Process*”, International Conference on Industrial Engineering and Management (**ICIEM-2021**), December 15-17, 2021, Malaviya National Institute of Technology, Jaipur.
- **Singh. A.K**, Shukla. S, and Jha. S. K, “*Comparative Study of Green Manufacturing Process in Brick Industries using AHP and Decision Tree*” Proceeding of 1st International Conference on Mechanical Engineering emerging Trends for Sustainability, MNIT, Bhopal, PP-701-709, 29th -31st January -**2014**.

(E) Paper published in National Conference

- **Singh. A.K** and Jha. S. K, “*Perspectives On Green Manufacturing*” e-Proceeding of All India Seminar on Recent Advancement in Manufacturing and its Management, B.I.T Sindri, Dhanbad, 07th -08th Feb -**2014**.
- **Singh. A.K** and Jha. S. K, “*Sustainability assessment using Analytical Hierarchy Process: A case study*” e-Proceeding of All India Seminar on Technology Solution in Manufacturing, B.I.T Mesra, Ranchi, 01st -02nd march -**2013**.
- **Singh. A. K**, Acharya.D.S and Jha.S. K, “*A Generalized Model of Green Manufacturing for Manufacturing Process using Fuzzy Logic*” e-Proceeding of 27th National Convention of Production Engineers & National Seminar on Advancements in Manufacturing - Vision 2020, B.I.T Mesra, Ranchi, 25th -26th May -**2012**.
- **Singh. A.K** and Jha. S. K, “*Exploring Possibilities of Green Manufacturing: Positioning and Orientation Using Fuzzy Logic*” e-Proceeding of 27th National Convention of Production Engineers & National Seminar on Advancements in Manufacturing - Vision 2020, B.I.T Mesra, Ranchi, 25th -26th May -**2012**.

(F) Book Publication

Singh, A. K., Prakash, A., & Jha, S. K., (2016). “*Practices of Green Manufacturing in selected Indian industries*” LAP: LAMBERT Academic Publishing. ISBN: 978-3-659-89805-1.

PROFESSIONAL ACTIVITY

1. **Reviewer** of *Circular Economy and Sustainability @ Springer*
2. **Reviewer** of *International Journal of Productivity and Performance Management* © Emerald.
3. **Reviewer** of *International Journal of Management Concepts and Philosophy (IJMCP)* © Inderscience.

SHORT TERM COURSES ATTENDED.:

1. Participated & completed successfully “**Inculcating Universal Human Values in Technical Education**” organized by All India Council for Technical Education(AICTE) from **7.06.2021to 11.06.2021**.
2. Participated & completed successfully AICTE Training and Learning (ATAL) Academy and ISTE Online refresher course on "**Welding processes and Non Destructive Evaluation**" from **01.03.2021 to 06.03.2021** at **Institute of Technology and Management Universe,Varodra,Gujrat**.
3. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "**Energy Engineering**" from **19-10-2020 to 23-10-2020** at **Indian Institute of Technology Roorkee**.
4. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "**Green Technology & Sustainability Engineering**" from **14-09-2020 to 18-9-2020** at **National Institute of Technology Jamshedpur**.
5. Attended online short term course "**Reliability, Maintainability and Quality Issues in Process Industries**" during **04-08 August 2020** organised by **Department of Industrial and Production Engineering, National Institute of Technology Jalandhar**.
6. Attended online **STC, Industry 4.0 and Smart Manufacturing: Opportunities and Challenges** during **20-24 July 2020**, organized by **Department of Industrial and Production Engineering Department, NIT Jalandhar**.
7. Attended “**Faculty Development programme on NETWORK SECURITY**” held at **B.I.T Mesra Off Campus Deoghar** jointly organized by **Electronics and ICT**

Academics held from 20.05.2019 to 24.05. 2019 by Ministry of Electronics and Information Technology (MeitY), Government of India.

8. Attended “**Environmental Performance of Manufacturing Systems: Modelling and Application**” held at **Department of Industrial and Systems Engineering, IIT Kharagpur** from **25.03.2019 to 29.03. 2019.**
9. Attended “**Advance Course on Sustainability in Materials and Design**” held at **Department of Mechanical Engineering, Malaviya National Institute of Technology Jaipur – 302017** from **21.05.2018 to 01.06. 2018.**
10. Attended **AICTE Sponsored Short Term Course on Quality Management: Issues,Tools And Techniques** Organizing by **Department of Mechanical and Industrial Engineering Indian Institute of Technology Roorkee** during **29.05.2017 to 09.06.2017.**
11. Attended Short Term Course on “**Advanced Materials and Processing**” held at **NIT Durgapur**, organized by **Department of Physics** during **06th -10th March 2017.**
12. Attended Short Term Course on “**Micro-manufacturing Technologies**” held at **IIT Guwahati**, organized by **Department of Mechanical Engineering** during **23rd -27th March 2015.**

PERSONAL MEMORANDA

- Date of Birth : July 15, 1985.
- Hobbies : Travelling, Debating
- Strengths :
 - ✓ Being Focused & Objective driven
 - ✓ Systematic & organized in approach
- Permanent Address :
S/o Mr. Sanjay Kumar Singh
C.C.M Road
Behind Co-operative Bank
Adampur, Bhagalpur
Bihar-812001
INDIA

DECLARATION

I hereby confirm that the above-mentioned information and attached annexure is true. References can be provided upon request.

Date:

Place:

Dr. Abhishek Kumar Singh