1. Personal Information

Name	Dr. Kailash Rai	
Qualification	Ph.D.	
Designation	Assistant Professor	
Email-id	krai@sgsits.ac.in	
Employee No.	0605223	
Department	Industrial and Production Engineering	
Experience	13 years	



2. Educational Qualification

S.No.	Degree	Specialization	Year	University/Board
1	Ph.D.	Mechanical Engineering	2019	Mewar University
2	M.E.	Industrial Engineering & Management	2011	RGPV, Bhopal
3	B.E.	Mechanical Engineering	2008	RGPV Bhopal

3. Research Interests

Production and Operations Management, Industrial Engineering, Quality Management

4. Patent

A project "Pipe support assembly to avoid bending of pipe" design accepted and published in journal no. 02/2021 and dated 08/01/2021, application no. is 326431-001 and Cbr no. 1736.

A project related to "Microchannel heat sink with Fins" is filed for publication, application no. is 373410-001 and Cbr no. is 207891 dated 02/11/2022. Status of design is accepted and published in journal no. 02/2024 dated 12/01/2024.

5. Book Published

"Industrial Engineering & Human Factor Engineering" is published with IPH publisher, ISBN 978-1-954461-32-1

6. NPTEL/FDP/Workshops

- 1. NPTEL online 12 week certification on "Manufacturing Process Technology I & II"
- 2. NPTEL online FDP on "Manufacturing Process Technology I & II"
- 3. NPTEL online 4 week certification on "Teaching And Learning in Engineering"
- 4. NPTEL online FDP on "Teaching And Learning in Engineering"

- 5. One day FDP on "Bloom Taxonomy in Teaching and Learning"
- 6. One week FDP on "Modern Manufacturing in Industry 4.0 (MMI-2023)
- 7. One week FDP on "Cloud Infrastructure (AWS)"
- 8. One week FDP on "Recent Trends & Issues in Mechanical Engineering"
- 9. Two weeks "ISTE" Thermodynamics workshop, conducted by "IIT, Bombay"
- 10. Participated in GIMP workshop, by "IIT, Bombay"

7. Workshop Organized

Conducted Two days Automobile workshop by "IIT, Delhi", in LNCT, Jabalpur

Conducted Auto CAD workshop in LNCT, Jabalpur

Workshop coordinator of CAD workshop

8. Research Papers

Title of research paper "Design and comparative analysis of truck chassis" published in International Journal "IRJMETS" vol. 5, issue 3, March 2023

One paper published in International Journal "IJETMR" vol.1, issue 1, "New Production Technology for Textile Industries".

Title of research paper "Mass Customization Practices for Manufacturing Industries" published in International Journal "IJIET" vol. 6, issue 2, Dec 2015.

Title of research paper "New Production Technology for Manufacturing Industries" published in International Journal "IJR", vol. 3, issue 14, Oct-2016.

Title of research paper "Mass Customization is New Trend for Textile Industries", in IJDR, Vol. 1, issue 2, Feb 2017.

Title of research paper "Mass Customization: A Research Report on Textile Industries in India", in IJNIET, Vol. 8, issue 2, May 2018.

Title of research paper "Mechanical Scheduling in a Piston manufacturing industry using Value Stream Mapping", in IJRAR, Vol. 5, issue 1, Feb. 2018, pp-29-35.

Title of research paper "Scheduling automobile selection by using Multi Attribute Utility Technique & Linear Programming", in IJRAR, Vol. 5, issue 6, April 2018, pp- 16-23.

Title of research paper "Comparative study and optimization of hydraulic press with different materials" in JASRAE, Vol. XIV, issue 2, January 2018, pp- 1342-1351.

Title of research paper "Failure mode analysis of a CNC machine by FMEA and Grey Relational Analysis Approach", in JASRAE, Vol. XV, issue 1, April 2018, pp-893-898.

Title of research paper "Analysis of conveyor belt materials with different carcass material", in JASRAE, Vol. XV, issue 1, April 2018, pp-887-892.

Title of research paper "Failure Analysis of Head Gear Pulley with different materials using FEA", in IJRAR, Vol. 5, issue 2, April 2018, pp- 24-28.

Title of research paper "Mechanical Testing on Magnesium Matrix Composites by adding different

percentages of SiC", in IJRAR, Vol. 6, issue 1, March 2019, pp- 953-956.

Title of research paper "Lean Production using Value stream Mapping and Kanban", in IJRAR, Vol. 6, issue 1, March 2019, pp- 966-973

Title of research paper "Heat Transfer Analysis on Ribs in Solar Air Heater Duct by CFD: A Review Report", in IJREISS, Vol. 9, issue 4, April 2019, pp- 11-13

Title of research paper "Risk analysis and optimization in Production line by using FMEA and RPN method", in IJRAR, Vol. 6, issue 2, April 2019, pp- 941-947

Title of research paper "Evaluation of Mechanical properties of PVC through applying different Mechanical tests", in IJRAR, Vol. 6, issue 2, April 2019, pp- 948-952.

Title of research paper "Approach for Raw Material Quality Control in aGelatine Manufacturing Plant Using Statistical Tools", in IJREISS, Vol. 9, issue 5, May 2019, pp- 410-415.

Title of research paper "Comparisons of Tensile Strength of Bamboo Fiber and Glass Fibre Epoxy Composite", in JASRAE, Vol. 16, issue 6, May 2019, pp- 1567-1571.

Title of research paper "Failure Mode Assessment in Production Line by Using FMEA and RPN Method", in JASRAE, Vol. 16, issue 6, May 2019, pp- 1557-1566.

Title of research paper "Heat Transfer Analysis on Ribs in Solar Air Heater Duct by CFD: A Review Report" in IJREISS, Vol. 9, issue 4, April 2019, pp- 11-13.

9. Conference/ Seminars/ Webinar

Title of research paper "Mass Customization in Textiles Industries" presented in AMITY University, Jaipur, Rajasthan, in international conference

Title of research paper "Problems in Textile Industries for Mass Customization" presented in SVITM, Indore, in national conference

Title of paper "Generation Next Nuclear Power Plants", in national seminar organized by Premier Engineering. College, Jabalpur, held on 12th May 2016

Title of research paper is "New Technologies for Mass Customization" is presented in the "ICITMR" 2014.

Attended webinar on "Smart Manufacturing" organized by department of IPE, SGSITS, Indore

Attended webinar on "Advanced Techniques for Energy Efficient Devices and MATLAB coding" organized by department of Mechanical Engineering, SGSITS, Indore.