

## Program Schedule

### 4<sup>th</sup> International Conference on Mathematical, Engineering and Management Sciences

September 10-11<sup>th</sup>, 2024

Day 1, 10<sup>th</sup> September, 2024

Link: <https://meet.google.com/ykk-cbfq-hvm>

10:00 AM : Delegates Welcome  
10:00- 11:00 AM : Conference Inaugural Session

- Welcome and Introduction of Keynote Speaker (10:00 AM-10:10 AM)- **Dr. Kishore Debnath**, NIT Meghalaya
- Keynote Speech (10:10 AM-10:50 AM)- **Prof. Meghanshu Vashishth**, IIT BHU
- Vote of Thanks (10:50 AM-11:00 AM)- **Dr. Om Ji Shukla**, NIT Patna

11:15 AM-12:30 PM: Technical Session 1: Four Parallel Tracks

10<sup>th</sup> September 2024 | Time: 11:15 AM- 12:30 PM

#### Track 1: Management and Supply Chain

Link: <https://meet.google.com/ykk-cbfq-hvm>

(Session Chair: Dr. Ganesh Shukla, Guru Ghasidas Vishwavidyalaya, Chhattisgarh)

S. No.	Paper ID	Author's Name	Title of the Abstract
1	101	Jibin Francis and M. Subha	The Role of English Language in Driving Innovation and Management Excellence
2	102	Manisha	The Transformative Impact of Artificial Intelligence on Business Operations: A Comprehensive Research Study
3	106	Varun Kuma and Om Ji Shukla	Strategic Approaches to Sustainable E-Waste Management within the Framework of Industry 5.0
4	108	Anshima and Bhawana Bhardwaj	Unveiling the Underlying Mechanism for Sustainable Development: Employing the Lens of Green Organizational Identity
5	110	Jaya Choudhary, Ashok Singh Bhandari, and Mangey Ram	Enhancing the Reliability of a Smart Home Energy Management System using Driving Training-Based Optimization Algorithm
6	154	Mohit Sharma, Mohit Tyagi, and R.S. Walia	Evaluation of Circular Supply Chain Drivers for Environmental Protection by Using Fuzzy DEMATEL Technique
7	152	Abhishek Kashyap, Om Ji Shukla, and Surya Prakash	AI-Driven Transformations in Agricultural Supply Chains: A Trend Analysis
8	123	Bhavna Sharma	Artificial Intelligence as a Driver of Innovation in Banking
9	130	Diwakar Suman, Manjul Mishra, Jayant Rituraj, Dinesh Kumar, and Sonu Rajak	A Multi Objective Mathematical Model Optimization for Sustainable Closed Loop Supply Chain

10<sup>th</sup> September 2024 | Time: 11:15 AM- 12:30 PM

#### Track 2: Engineering and Manufacturing Systems

Link: <https://meet.google.com/prx-vggd-mnv>

(Session Chair: Dr. Nur Alom, NIT Meghalaya)

S. No.	Paper ID	Author's Name	Title of the Abstract
1	103	<b>Rishikant Mishra</b> , Ravi Pratap Singh, and R.K. Garg	Investigation into $\mu$ -Electrochemical Machining of Fe-based Shape Memory Alloy: Microstructure Analysis and Parametric Optimization
2	104	Piyush Kumar Verma, Hitesh Kumar Sahu, and Anuj Kumar Shukla	Thermal Performance of Hexagonal Shaped Battery Thermal Management System (BTMS) with Phase Change Material and Liquid Cooling for Cylindrical Lithium-Ion Battery (in CFD)
3	105	Sourabh Kumar Singh, <b>Sourabh Luthra</b> , and Anuj Kumar Shukla	Optimization of Waste Heat Recovery Power Plants using Machine Learning Techniques
4	107	<b>Ruchita Shrimali</b> , Naveen Kumar Agarwal, and Laxman Kumar Pandey	Assessment of Energy Efficiency and Cost Effectiveness of Composite Insulated Rooftops for Sustainable Building in Indian Climate Conditions
5	111	<b>Rakesh Kumar</b> , Ravi Pratap Singh, and Satnam Singh	Study on the Machinability in Fabricating $\mu$ -Slots on Quartz Ceramic via $\mu$ -Electrochemical Discharge Machining
6	113	<b>Anshul Sachdeva</b> , Chandrashekara M, and Avadhesh Yadav	Development and Thermal Analysis of a Solar Assisted Desiccant Wheel Dehumidifier in Indian Humid Climatic Conditions
7	115	<b>Shubham Gangari</b> and Vibhor Sharma	Smart Health: An IoT-Enabled System for Optimized Patient Care and Medication Adherence
8	151	Ayush Kumar Singh, <b>Manoj Kumar</b> , Bharavi Mishra, and Mohit Makkar	Support Vector Regression for Modelling and Optimizing the Effect of Welding Current and Electrode Polarity on Weld Bead Geometry and Shape Relationships in Gravity Assisted Mechanized Contact SMAW

10<sup>th</sup> September 2024

Time: 11:15 AM- 12:30 PM

### *Track 3: Engineering and Manufacturing Systems*

Link: <http://meet.google.com/fqk-jric-bzr>

(Session Chair: Dr. Sambit Majumder, NIT Meghalaya)

S. No.	Paper ID	Author's Name	Title of the Abstract
1	119	<b>Rakesh Kumar Ram</b> , Satyajeet Kumar, Abhinav Bharti, and Shailesh Mani Pandey	Effect of TIG Cladding on TiB <sub>2</sub> -Mo-Cr Composites: Microstructural and Mechanical Performance on AISI 304 Stainless Steel
2	120	<b>Satyajeet Kumar</b> , Abhinav Bharti, Rakesh Kumar Ram, and Shailesh Mani Pandey	Advancing Thermal Barrier Coating Technology: A Multiscale Approach to Understand, Predict, and Prevent Failure Mechanisms in Extreme Environments
3	122	<b>Mukesh Kumar</b> , Arvind Kalia, and Pardeep Kumar	Unified Agile Framework: Crafting a Customized Set of Practices for Software Development
4	124	<b>Manpreet Kaur</b> and Soni Bisht	Analyzing the Reliability Characteristics of k-out-of-(n+1) System using the Transform Methodology in a Star Configuration
5	125	<b>Madhusudan Painuly</b> , Ravi Pratap Singh, and Rajeev Trehan	Optimizing Electrochemical Machining Parameters for Micro-Machining Inconel 625: A Precision Study
6	136	<b>Abhinav Bharti</b> , Satyajeet Kumar, Rakesh Kumar Ram, Anup Kumar Keshri, and Shailesh Mani Pandey	Enhancing Microstructure and Thermomechanical Properties of GNP Doped Advanced Ceramics Deposited by APS Technology

7	138	<b>Aayushi Chachra</b> , Mangey Ram, and Akshay Kumar	Fuzzy Reliability Assessment of Photovoltaic Power Plant System with Generalized Intuitionistic Fuzzy Sets
8	153	<b>Ruma Roy</b> , Girish D. Mehta, and Tejas Manoj Shende	A Critical Review of Fault Incurred in Roller Bearing

**10<sup>th</sup> September 2024**

**Time: 11:15 AM- 12:30 PM**

***Track 4: Data Analytics and Business Operations***

Link: <https://meet.google.com/odi-ppwf-qbh>

(Session Chair: Dr. Sonu Rajak, NIT Patna)

S. No.	Paper ID	Author's Name	Title of the Abstract
1	118	<b>Soumyajoy Kundu</b> and Avipsa Bakshi	An Analysis of Consumer Behavior in the Digital Era
2	121	<b>Vibhor Sharma</b> , Deepak Srivastava, and Pramod Kumar	A Novel Method for Forecasting Agricultural Output using Artificial Neural Network Structure
3	126	<b>Jatin Jangid</b> and Bhawana Bhardwaj	Green Hedging Capacity and Risk in the Indian Stock Market
4	129	<b>Mohd Danish</b> and Mohammad Amjad	ChatGPT and the Future of Learning: Sentiment Trends in Indian Education
5	131	<b>Kshitish Kumar Mohanta</b>	Enhancing Performance Assessment in Intuitionistic Fuzzy Data Envelopment
6	116	<b>Vaishali Tyagi</b> , Roshan Dubey, and Suraj Singh	Enhancing Urban Air Quality with Smart Vehicle Exhaust Management

**DAY ONE ENDS**

## Day 2, 11<sup>th</sup> September 2024

Link: <http://meet.google.com/fqk-jrjc-bzr>

Keynote Speech (10:10 AM-11:00 AM)- **Shri Prem Kumar**, Associate Director- Economic Research & Specialist Economist at Dun & Bradstreet Managing India, Europe & Central Asian Economies

### 11:15 AM-12:30 PM: Technical Session 2-Three Parallel Tracks

11<sup>th</sup> September 2024

Time: 11:15 AM- 12:30 PM

#### *Track 1: Management and Supply Chain*

Link: <http://meet.google.com/fqk-jrjc-bzr>

(Session Chair: Dr. Vinod Yadav, Manipal University, Jaipur)

S. No.	Paper ID	Author's Name	Title of the Abstract
1	132	<b>Krishan Kumar Yadav</b> , Ajay Singh Yadav, and Shikha Bansal	Analytical Optimization of a Two-Warehouse Inventory Model with Parabolic Holding Costs for Deteriorating Items Under Complete Backlogging
2	133	<b>Ashish Negi</b> and Ompal Singh	A Probabilistic Inventory Model for Deteriorating Items with Uncertain Demand Under Pentagonal Fuzzy Environment
3	134	Ritu Rani, <b>Nidhi Tanwar</b> , and Mohit Tyagi	Emerging Financial Technologies: The Transformative Role of Blockchain in the Financial System
4	137	<b>Shagun Smith</b> , Mohit Tyagi, Anju Singla, and R.S. Walia	Mapping the Negative Influence of Consumer Concerns Hindering Sustainable Supply Chain Practices
5	140	<b>Upasana Rana</b> and Tanuj Kumar	Grey Wolf Optimization for Inventory Management of Deteriorating Items with Freshness and Price-Dependent Demand in a Pentagonal Fuzzy Environment
6	143	<b>Kapil Dave</b> and Tanuj Kumar	Fuzzy Deteriorating Inventory Model with Time Dependent Demand and Partial Backlogging under Resalable Returns
7	150	<b>Vinita Dwivedi</b>	Managing Pharmaceutical Inventory Costs in the COVID-19 Era: A Strategic Approach with Evidence Theory and Hybrid Evolutionary Algorithms.
8	127	<b>Hemant Kumar</b> , Rishi Kumar Jha, Om Ji Shukla, and Amit Kumar	Interpretive Structural Modelling (ISM) on cultivation-consumption pattern of Millets Value Supply Chain

11<sup>th</sup> September 2024

Time: 11:15 AM- 12:30 PM

#### *Track 2: Engineering and Manufacturing Systems*

Link: <https://meet.google.com/sqs-oqsc-nqe>

(Session Chair: Dr. Narendra Kumar, NIT Jalandhar)

S. No.	Paper ID	Author's Name	Title of the Abstract
1	139	<b>Shivani</b> , Nupur Goyal, Mangey Ram, and Akshay Kumar	Analyzing Reliability and Cost Factors of an HVAC System Considering Warranty Implications
2	141	<b>Lalit Kumar Sharma</b>	Application of Finite Element Method for Analysis of Thin Film Coating

			on Kiln Lamella Sealing Plate Material
3	144	<b>Harshanand P Ramteke</b> , Girish D. Mehta, and Sagar D. Shelare	Flexible Coupling a Closer Insight
4	145	<b>Harshanand P. Ramteke</b> , Girish D. Mehta, and Sagar D. Shelare	Simulation and Failure Analysis of Flexible Type Swing Coupling: Analytical Approach Corroborated with Software Simulation
5	147	Ritesh Shrimali, <b>Manoj Kumar</b> , Vikram Sharma, and Sunil Pandey	Experimental Investigation and Optimization of Process Parameters for Wetting Angle in Robotic Gas Metal Arc Welding Process
6	148	Raj Krishna, Ritesh Shrimali, Sunil Pandey, and <b>Manoj Kumar</b>	Investigating the Hardness of Cr – B - Mn Based Hard Facing Alloy on Mild Steel Through Paste Coating
7	149	Rishabh Katiyar, Harsimar Singh, Ayush Agarwal, Raj Krishna, Ritesh Shrimali, Sunil Pandey, and <b>Manoj Kumar</b>	Effect of SAW Process Parameters on Bead Geometry and Shape Relationship with Wear Resistant Flux

**11<sup>th</sup> September 2024**

**Time: 11:15 AM-12:30 PM**

***Track 3: Applied Mathematics and Statistics***

Link: <https://meet.google.com/odi-ppwf-qbh>

(Session Chair: Dr. Umesh Gupta, J.K.L.U. Jaipur)

S. No.	Paper ID	Name of author(s)	Paper title
1	109	<b>Shristi Kharola</b> , Aditi Bisht, Vidisha Sharma, Akshay Kumar, and Mangey Ram	System Reliability Modelling under UGF and Intuitionistic Fuzzy
2	112	<b>Nidhi</b>	Transient Analysis of Fault-Tolerance Machining System in an Optional Retrieval Queue
3	114	<b>Natasha</b> and Deepak Gupta	Economic Analysis of Queuing Model with Reverse Balking and Retention of Impatient Customers
4	117	<b>Deepika Singh</b> and Rajan Arora	Approximate Analytical Solutions of Some Non-linear PDEs using Homotopy Analysis Method
5	128	<b>Mamta Keswani</b>	Designing a Fuzzy Logic-Based Carbon Emission Cost-Incorporated Inventory
6	135	<b>Trivedi Achyut</b> , Mihir Patel, and Apurva Indrodia	ARIMA based Mathematical Modeling to Investigate the Impact of Process
7	142	<b>Piyush V. Patel</b> and Roopal M. Gajjar	Study of Cordial Labeling on Origami Kusudama Cherry Blossom Graph
8	146	<b>Natasha</b> and Deepak Gupta	Economic Analysis of Queuing Model with Reverse Balking and Retention of Impatient Customers

**END OF CONFERENCE**