

Details of Research Publications during past five years

International Journal

1. Chattopadhyaya S., Sarkar P.K., “Condition monitoring of a typical gear generation process through analysis of vibrations”, v.3 & 4, July-Dec,2007, Int. J. of Manufacturing Technology & Research, pp. 63-66.
2. K.R.Pillai,, A.Ghosh, S.Chattopadhyaya, P.K.Sarkar, K.Mukherjee, “Some investigations on the interactions of the process parameters of Submerged Arc welding”, , v.3 No. 1 & 2, Jan-Jun,2007, Int. J. of Manufacturing Technology & Research, pp. 57-67.

National Journal

1. Sadhu,P.K., S.Chattopadhyaya, D.K.Mitra., “ Online Monitoring and actuation for curing of rubber conveyor belts’ v. 89, Oct,2008, J. of IE(I), MC, 41-46.
2. Pillai K.,Chattopadhyaya S., “Assessment of cellular formations through Rank Order Clustering for a rotary blower manufacturing unit”, J.IE(I)-PR, vol.88, Sep. 2008.pp. 31-36.
3. G.Vinamra,A.Kumar,P.K.Rai,A.Ghosh,S.Chattopadhyaya,S.Mukherjee,P.K.Sarkar, ”Analysis of the influence of the heat input and bead volume on HAZ hardness for submerged arc welding process for mild steel plates”, ,July,2008,Indian Welding J. published in technical association with the American Welding Society, pp. 46 -51.
4. Chattopadhyaya S., “Mathematical Modeling to Determine Relative Agility of the Homologous Manufacturing Units in a Controlled Environment”,J. IE(I)-PR, v. 3, March,2008.
5. Ravi Kumar,S.Chattopadhyaya,S.Mukherjee, ”An analytical approach towards the interactive behavior of the confounded parameters of submerged arc welding process for mild steel plates”, ,April,2007,v. 40 ,Indian Welding J. published in technical association with the American Welding Society, pp. 24-31.
6. A.Ghosh,S.Mukherjee,S.Chattopadhyaya,P.K.Sarkar, ”Weld Bead parametric Estimation of SAW process through Neural Network”, pp. 33-43,October,2007,volume 40 No.4, Indian Welding J. published in technical association with the American Welding Society.
7. Sadhu,P.K., S.Chattopadhyaya, D.K.Mitra., “ Online Monitoring and control System for truck tyres’ v. 86, January,2006, J. of IE(I), Mechanical Engg., section, pp. 175.

International Conference

1. Aniruddha Ghosh, S.Chattopadhyaya “Optimum Solution of SAW Process” pp.171,proc.7th International Conference on Optimization Techniques and Applications (ICOTA7),Kobe, Japan, December 12-15, 2007.
2. S.Chattopadhyaya “Object Oriented Manufacturing in a conveyor belt manufacturing unit” presented in an International conference at Dhaka, Bangladesh December, 2001.
3. Dr. Alok Varma, S. Chattopadhyaya, “Eco-Friendly Manufacturing through Green Technologies”, Proceeding International Conference on Manufacturing, Feb. 2000, Dhaka, Bandladesh,PP. 684-690.
4. Dr.S.Kumar, S.Chattopadhyaya “Inflicting agility to tribal brassware technology”,pp. 506-510, Proc. International Conference on Manufacturing ICM 2002 at Dhaka, Bangladesh August 2002.
5. S.Chattopadhyaya, Dr.Alok Varma,, Dr.A,K,Basu, ”Information Technology requirements for Handling and flow of Materials in a manufacturing unit ”, pp. 693-701, Proc. International Conference on Manufacturing ICM 2002 at Dhaka, Bangladesh, August 2002.
6. S.Chattopadhyaya, ”An analysis on the effect of the discharge current Ip and wire feed on the surface roughness of the parts manufactured by Wire EDM”, International Conference on Global manufacturing and innovation, Coimbatore Institute of technology, pp.178, July,2006.

Chaired one technical session at the International Conference on Manufacturing ICM 2002, at Dhaka, Bangladesh, 2002.

7. Sharma,V.,Chattopadhyaya,S., “Development of Eco-friendly technology for coal cutting under Indian Environmental conditions”., 2007, American WJTA Conference,August,2007, Texas,USA.

Before Joining ISM

1. S.Chattopadhyaya, Dr.Alok Varma, "Design of a Mechatronic Factory - A case study on a conveyor Belt Manufacturing unit", Proceedings, National Seminar on "Mechatronics in Manufacturing Systems", & 14th National Convention of Production Engineers, IE (I), March,2000.

2. Dr.Alok Varma, Somnath Chattopadhyaya, "Mechatronics For Intelligent Manufacturing ", Proceeding National Seminar on "Mechatronics in Manufacturing systems", 14th National Convention of Production Engineers, IE (I),March,2000.

3. S.Chattopadhyaya, Dr.S.Kumar, Dr.Alok Varma, "Just in time Practices in Indian Manufacturing Unit" Proceedings of the National seminar -Bundelkhand Institute of Technology, August, 2000.

4. Dr.S.Kumar, S.Chattopadhyaya "Transfer of Agile engineering Technology to tribal brassware technology", at 19th AIMTDR conference at IIT Chennai, Poster Presentation, December, 2000.

5. S.Chattopadhyaya, "Productivity Improvements of Agile Manufacturing Enterprises through Blue Tooth Technology" Proc. of the National Conference at IIT Kanpur, March, 2001.

6. S.Kumar,S.Chattopadhyaya , "Intelligent Rapid prototyping with builtin Diagnostic sensors", Proc., National Seminar on Intelligent Processing of Advanced Materials, At BE College Shibur, Howrah,December,2001.

After Joining ISM

7. Chattopadhyaya,S. , Kumar,S., "Intelligent cure monitoring of truck tyres by rapidly manufactured smart layer based aluminium mould", Proc.,National Conference in Value Engineering, July,2003 at Birla Institute of Technology, Mesra, Ranchi-835215.

8. Indira Prasanna, Reena Bajaj, S.Chattopadhyaya, A.K.Basu," Attainment of Agility through just in time in a premier truck tyre manufacturing unit", national Seminar on " Tyres in mining and allied sectors: status and outlook", TIMAS,2003, ISM Dhanbad.

9. S.Chattopadhyaya et. al., "Development of OTR mould through reverse engineering", national Seminar on " Tyres in mining and allied sectors: status and outlook", TIMAS,2003, ISM Dhanbad.

10. S.Chattopadhyaya et. al., "Built-in diagnosis to a future technology for micro manufacturing – a case study on an Indian tyre manufacturing plant", national Seminar on " Tyres in mining and allied sectors: status and outlook", TIMAS,2003, ISM Dhanbad.

11. P.K.Sadhu, S.Chattopadhyaya, D.K.Mitra, "Implementation of closed loop PC based control of cure monitoring process of OTR tyres" national Seminar on " Tyres in mining and allied sectors: status and outlook", TIMAS,2003, ISM Dhanbad.

12. R.Vasudevan, S.Chattopadhyaya, R.Venugopal,"Development of MATLAB based programme for the selection of Pumps based on Operations maintenance and installations", pp. 395-396, proc., National Conference on Recent trends in Manufacturing, CARTM 2003.

13. Mohit Kumar Roy, S.Chattopadhyaya, R.Venugopal,"Design and Calculation of Power requirements of conveyor belts in material / mineral handling using MATLAB Programme", pp. 397-398, proc., National Conference on Recent trends in Manufacturing, CARTM 2003.

14. Anil Kumar Misra, S.Chattopadhyaya,R.Venugopal, " Development of MATLAB program for the selection of Bulk handling equipment considering different critical parameters", pp. 399-402, proc., National Conference on Recent trends in Manufacturing, CARTM 2003.

15. S.Chattopadhyaya et. al., "Development of Knowledge Based System

for Structural Health Monitoring Subjected to Seismic Excitation” SAP UGC Seminar on Recent advances in theoretical and applied mechanics, March,2004 at the department of Applied Mathematics at Indian School of Mines, Dhanbad.

16. S.Chattopadhyaya” Curriculum Development through Capability Maturity Model”, National seminar on curriculum development held at Birla Institute of Technology, Mesra, Ranchi, April 2004.

17. S.Chattopadhyaya et. al., “Lean manufacturing through rapid response monitoring of the truck tyres by means of piezo electric smart layer embedded into the aluminium mould” at the national Conference on CAD/CAM held at the department of Mechanical Engineering, Thapar Institute of Technology, March,2005.

18 Chattopadhyaya, S.” Implementation of Integrated Multi media sensing for the Robots used for Manufacturing Sensing” National seminar on CAD/CAM Robotics and futuristic Factories, institution of Engineers(I) Ranchi, India. During 10-11 December,2005.

19. Chattopadhyaya, S., Sharama,M.K.,” Applications of Robotics in War”, M.K.Sharma, National seminar on CAD/CAM Robotics and futuristic Factories” , Institution of Engineers(I) Ranchi, India., during 10-11 December,2005.

20. Some Investigations on the interactions of the process parameters of Submerged Arc Welding”,K. R. Pillai, A.Ghosh, S. Chattopadhyaya, P.K.Sarkar, K.Mukherjee,Proc. in National Seminar on Best Practices in manufacturing held in Birla Institute of Technology, Mesra, Ranchi in national convention of Production engineers held during 9th-10th December,2006.

21. Some Investigation on the Characteristic Vibrations of a Gear Shaper “, S.Chattopadhyaya, P.K.Sarkar, Proc. National Seminar on Best Practices in Manufacturing held in Birla Institute of technology, Mesra, Ranchi in national convention of Production engineers held during 9th-10th December,2006.

22. Design of Cells through Rank order Clustering for a typical Western Indian machine component manufacturing plant “, Ravi Kumar¹Krishna.R.Pillaiand S.Chattopadhyay, Seminar on Lean manufacturing Proc. national Seminar on “Lean manufacturing” held in August,2006, Birla Institute of technology, Mesra, Ranchi.

12. Awards:

1. Received the best paper award for presentation of the paper entitled “**Smart Layer Approach for Built Diagnostic**”, in one of the technical sessions in the National Conference on “**Agile Engineering**”, 2000.
2. Received the best paper award for the presentation of the paper entitled “**Design of a Mechatronic Factory - A case study on a Conveyer Belt Manufacturing unit**”, in one technical session of the National Seminar on “**Mechatronics in Manufacturing Systems** ” and **14th National Convention of Production Engineers, IE (I)**.