

# BIO-DATA      Prof. Jaimal Singh Khamba



Name : **Dr. Jaimal Singh Khamba**  
 Date of Birth : **16. 06. 1962 (55 Years)**  
 Present Designation : **Professor of Mechanical Engg, Punjabi University, Patiala**  
 Official Address : **Mechanical Engineering Department, Punjabi University, Patiala-147002**  
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## (A) ACADEMIC QUALIFICATIONS

Examination Passed	Name of Board/University	Year of Passing	% of marks obtained	Distinction if any
B.E. (Mechanical Engg.)	T.I.E.T. Patiala (Thapar University)	1987	71.18 %	First with Honors
M.E. (Industrial Engg.)	T.I.E.T. Patiala (Thapar University)	1994	70.29 %	First Division
Ph. D. (Industrial Engg.)	T.I.E.T. Patiala (Thapar University)	2001	N. A.	N. A.

## (B) TEACHING EXPERIENCE: (Years/Months)

I. Under-graduate : Years **30** Months **00**  
 II. Post-Graduate : Years **23** Months **00**

Name of Employer	Post held	Period From	To	Brief Description of Duties
Mechanical Engineering Department, Punjabi University, Patiala	Professor	16.9.2016	Till Date	Research Guidance Teaching UG/PG Classes
Mechanical Engineering Department, Punjabi University, Patiala	Professor and Head	16.9.2013	15.9.2016	Academic administration, Research Guidance, Teaching UG/PG Classes
University College of Engineering (UCoE), Punjabi University, Patiala	Head, UCoE	14.7.2011	15.9.2013	Academic administration, Research Guidance, Teaching UG/PG Classes
CGC Gharuan, Mohali (Chandigarh University)	Campus Director	17.7.2009	28.4.2011	Academic administration
Lovely Professional University, (LPU) Jalandhar	Dean, Engineering	6.9.2008	16.7.2009	Academic administration
UCOE, Punjabi University, Patiala	Professor	15.7.2005	5.9.2008	HOD, Teaching & Administration
TIET (Thapar University), Patiala	Assistant Professor	1.4.1996	14.7.2005	Teaching UG & PG, Research Guidance
TIET (Thapar University), Patiala	Lecturer	3.8.1987	31.3.1996	Teaching UG & PG Classes

**(C) AREA OF SPECIALIZATION**

I. Major : **Mechanical Engineering**  
II. Minor : **Non-traditional Machining, Industrial Engineering**

**(D) RESEARCH EXPERIENCE**

Total : Years **23** Months **00**  
Post Doctorate : Years **16** Months **00**

**RESEARCH GUIDANCE**

M.E. : Guided **14** Under Guidance -- (Annexure – I)  
Ph. D. : Guided **11** Under Guidance **04** (Annexure – I)

**(E) SEMINARS/CONFERENCES ATTENDED**

National : **05** (Annexure –II)  
International : **09** (Annexure –II)

**(F) RESEARCH AWARDS/RECOGNITIONS**

International : -- **Best Paper Award for the paper entitled ‘Advanced Manufacturing Technology Utilization; A Review – July, 2008**

**(G) PUBLICATIONS**

(i) Books (Mention Titles) : **10** (Annexure – III)  
(ii) Research Papers : **178** (70+14+57+37) (Annexure – IV)

**(H) PATENTS (if any) : 01** (Annexure – V)

**(I) SPONSORED PROJECTS : 05** (Annexure – V)

# ANNEXURE – I

## RESEARCH GUIDANCE

**M.E. THESES - 14**

S. No.	TITLE OF THE THESIS	NAME OF THE CANDIDATE	YEAR
1.	Analysis and Design of Compressed air Generation and Distribution system in an Engineering Industry	Ashok Kumar	1996
2.	Technology Utilization – A case study at DCW, Patiala	Sunil Kumar Gera	1997
3.	Adoption and Adaptation of New Technology in an Engineering Organization – A case study	I. P. S. Ahuja	1998
4.	Indigenous development of technology – A case study	Bhagel Singh	1999
5.	Technology Transfer – A case study	Manoj Kumar	1999
6.	A case study for organization of jobs in multi-staged, non-identical parallel processors	Karan Dhawal	2000
7.	Inventory Management in an Engineering Organization	Onkar Singh Kambo	2000
8.	Implementing World Class Manufacturing Concepts in an Engineering organization: A Case Study	Jaspreet Singh Oberoi	2000
9.	Implementing Total Quality Development Concepts	Amanpreet Singh Sethi	2000
10.	Managing Supply Chain of an Organization: A case study	Hardeep Singh	2000
11.	Enhancing Line Efficiency to Improve Productivity	Ramesh Kumar	2003
12.	Exploring Manufacturing Competencies of a Car manufacturing Unit	Harvinder Singh	2013
13.	Role of Manufacturing Competency in Performance Parameters of Tractor manufacturing Unit	Palwinnder Singh	2014
14.	Role of Manufacturing Competency in Performance parameters of a Harvesting Combine manufacturing Unit	Ashish Gupta	2014

**Ph. D. Guided :11 Under Guidance : 04**

S. No.	TITLE OF THE Ph.D. RESEARCH PROPOSAL	NAME OF THE CANDIDATE	REGN.	STATUS
1.	Investigating the Machining characteristics of Titanium and its alloys using Ultrasonic Machining	Rupinder Singh	2002	Awarded in 2006
2.	Impact of New Technology and Sourcing practices in Managing Manufacturing Flexibilities	Jaspreet Singh Oberoi	2003	Awarded in 2008
3.	Flexible Management of Technology Adoption and Adaptation in Manufacturing Industry	Amanpreet Singh Sethi	2003	Awarded in 2008
4.	Modeling the Machining Characteristics of Pure Titanium and its alloy Titanium-12	Jatinder Kumar	2004	Awarded in 2008
5.	Ultrasonic machining of Cemented carbide, Stellite and Diamond	Vinod Singla	2004	Awarded in 2008
6.	Strategic implementation of T PM in Indian manufacturing industry for enhanced competitiveness	I. P. S. Ahuja	2005	Awarded in 2008
7.	A study to improve the utilization of new technologies in manufacturing industry	Harvinder Singh	2006	Awarded in 2009
8.	Development and characterization of fluxes for submerged arc welding	Vinod Verma	2007	Awarded in 2010
9.	Impact of Cryogenically treated brass wire on the performance of Wire Electric Discharge machining	Jatinder Kapoor	2008	Awarded in 2013
10.	Impact of Manufacturing Competency on Strategic Success of Automobile Industry	Chandandeep Singh Tanghi	2012	Awarded in 2016
11.	Role of TQM on Productivity Enhancement	Davinder Singh	2012	Awarded in 2017
12.	Productivity Enhancement in Manufacturing Industry	Sidharath Gautam	2014	Ongoing
13.	Role of Technology Innovation in Productivity	Naveen khullar	2014	Ongoing
14.	Building Competitive Strategy through Improved	Abrar Ali Khan	2016	Ongoing

	Manufacturing Performance in Automobile Industry			
15.	Enhancing Manufacturing Performance through TPM implementation	Sandeep Singh	2016	Ongoing

## ANNEXURE – II

### CONFERENCES/SEMINARS ATTENDED: (09 + 05 = 14)

**International:**

**09**

**National:**

**05**

#### **INTERNATIONAL:**

**09**

1. **IABE-2015 SAN FRANCISCO–Winter Conference, December 20-22, 2015, San Francisco, USA**
2. **2012 International Conference on Manufacturing Engineering and Technology for Manufacturing Growth (METMG 2012), November 1-2, 2012, San Diego, USA**
3. First Global Conference on Flexible Systems Management (GLOGIFT' 2000), December 17-20, 2000, New Delhi, INDIA.
4. International Conference on Operations Management for Global Economy (POMS'99), Dec., 21-24, 1999, IIT, Delhi (INDIA)
5. **15th International Conference on CAD/CAM, Robotics and Factories of the Future (CARS & FOF'99), August 18-20, 1999, Auguas de Lindoia, Sao Paulo, BRAZIL.**
6. International Conference on System Dynamics (ICSD'98) December 17-18, 1998, IIT Kharagpur, INDIA.
7. 14th International Conference on CAD/CAM, Robotics & factories of the future (CARS & FOF' 98), December 1-3, 1998, PSG College of Technology, Coimbtore, INDIA.
8. International Conference on Management of Technology, ICMOT'97, Dec. 21-24, 1997, IIT Delhi, INDIA.
9. International Conference on Advances in Mechanical & Industrial Engineering, Feb 6-8, 1997, University of Roorkee, Roorkee, INDIA.

#### **NATIONAL:**

**05**

1. Second TIET Foresight Symposium on Higher Technical Education – Issues of Access and Delivery, Nov. 22-23, 2003, TIET, Patiala, INDIA.
2. National Conference on Recent Developments in Mechanical Engineering (NCME-2003), Oct. 31-Nov. 1, 2003, TIET, Patiala, INDIA.
3. National Conference on Material Related Technologies (NCMRT), Sept. 19-20, 2003, TIET, Patiala, INDIA.
4. 5<sup>th</sup> Punjab Science Congress, Feb. 7-9, 2002, TIET, Patiala, INDIA.
5. National Conference on Mathematical and Statistical techniques, Dec. 6-8, 2001, TIET, Patiala, INDIA.

## ANNEXURE – III

**Books Published: 10**

S. No.	Title of the Book	Publisher
1.	Manufacturing Competency: Case Studies in Manufacturing Industries	LAP LAMBERT Academic Publishing
2.	Improving the utilization of new technology in manufacturing industry	LAP LAMBERT Academic Publishing
3.	Effect of Cryogenically treated brass wire on the performance of WEDM	Scholars' Press
4.	Modern Manufacturing Techniques-Vol. I (Welding)	AICTE
5.	Modern Manufacturing Techniques-Vol. II ( Machining )	AICTE
6.	Modern Manufacturing Techniques-Vol. III (Casting & Forming)	AICTE
7.	Men at Work: An Ergonomic Aspect	AICTE
8.	Man-Machine Interface	AICTE
9.	Ergonomics in Project Design	AICTE
10.	Partnership of Industries in Teaching Schedule of UG students	AICTE

## ANNEXURE – IV

### RESEARCH PAPERS PUBLISHED IN

#### INTERNATIONAL REFEREED JOURNALS (70)

S. No.	Title of Research Paper	Author(s)	Journal Details
1.	Manufacturing Competency and Strategic Success: A Case Study in a Four Wheeler Manufacturing Unit	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Engineering, ISSN: 1025-2495, e-ISSN: 1735-9244 <b>(Accepted for Publication)</b>
2.	Role of Manufacturing Competency in Strategic Success of a Commercial Vehicle Manufacturing Unit: A Case Study	Singh, C.D. and <b>Khamba, J.S.</b>	European Journal of Industrial Engineering,, ISSN print: 1751-5254 <b>(Accepted for Publication)</b>
3.	Structural Equation Modeling (SEM) of Technology Innovation Model using AMOS for Indian MSMEs	Singh, D., <b>Khamba, J.S.</b> and Nanda, T.	International Journal of Productivity and Quality Management, Vol. 21, No. 1, pp. 72-96, 2017
4.	Influence of Technological Innovation on Performance of Small Manufacturing Companies'	Singh, D., <b>Khamba, J.S.</b> and Nanda, T.	International Journal of Productivity and Performance Management, Vol. 66, No. 7, pp. 838-856, 2017
5.	Impact of Manufacturing Competency on Strategic Success in Automobile Manufacturing Unit	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Industrial and Systems Engineering, Vol. 25, No. 3, pp. 335-359, 2017
6.	AHP Analysis of Manufacturing Competency and Strategic Success Factors	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Computing and Optimization, Vol. 1, Issue 2, pp: 357-373, 2015
7.	Structural Equation Modelling for Manufacturing Competency and Strategic Success Factors	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Engineering Research in Africa, Vol. 19, pp 156-170, 2015
8.	Analysis of Major Problems Faced by Small Firms in North India	Singh, D., <b>Khamba, J.S.</b> and Nanda, T.	International Journal of Engineering Research in Africa, Vol. 15, pp. 150-160, 2015
9.	Exploring the Determinants of Technology Innovation in MSMEs	Singh, D., <b>Khamba, J.S.</b> and Nanda, T.	International Journal of Engineering Research in Africa, Vol. 13, pp. 103-115, 2015
10.	A Case Study of a Two Wheeler Manufacturing Unit on Manufacturing Competency and Strategic Success,	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Engineering Research in Africa, Vol. 19, pp: 138-155, 2015
11.	Factors Contributing Towards Technology Development in Small Firms	Singh, D., <b>Khamba, J.S.</b> and Nanda, T.	International Journal of Mechanical, Industrial Science and Engineering, Vol. 8, No. 1, pp. 235-243, 2014
12.	Technology Up-gradation Characteristics of Small Firms: A Study in the Region	Singh, D., <b>Khamba, J.S.</b> and Nanda, T.	International Journal of Business and Management Studies, Vol. 3, No. 3, pp 443-449, 2014
13.	Influence of Welding Parameters on Flux Consumption in Submerged Arc Welding	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal for Multi-Disciplinary Engineering and Business Management, Vol. 2, Issue 1, pp: 1-3, 2014
14.	Exploring Manufacturing Competencies of a Tractor Manufacturing Unit	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Applied Studies, Vol. 1, Issue 1, pp. 53-62, 2014
15.	Influence of tool pin profiles on mechanical properties of FSP processed Aluminium- 6063	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Engineering, Business and Enterprise Applications, Vol. 8, Issue 1, pp: 24-28, 2014
16.	To study the role of manufacturing competency in the performance of SONALIKA tractor manufacturing unit	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Engineering, Business and Enterprise Applications", Vol. 8, Issue 1, pp: 62-66, 2014
17.	To study the role of manufacturing competency in the performance of Preet tractor	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal for Multi-Disciplinary Engineering and Business

	manufacturing unit		Management, Vol. 2, Issue 2, pp: 4-7, 2014
18.	Evaluation of manufacturing competency factors on performance of an automobile manufacturing unit	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal for Multi-Disciplinary Engineering and Business Management, Vol. 2, Issue 2, pp: 8-16, 2014
19.	Effect of FSP Multi-pass on Micro-hardness and Rockwell Hardness of AL6063	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Applied Studies, Vol. 1, Issue 3, pp: 1-10, 2014
20.	Effect of tool pin profile on microstructure and micro hardness of aluminium 6063	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Applied Studies, Vol. 1, Issue 3, pp: 16-23, 2014
21.	Evaluation of Strategic Success Factors on Performance of an Automobile Manufacturing Unit	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Engineering Research & Management Technology, Vol. 1, Issue 4, pp: 144-157, 2014
22.	Analysis of Manufacturing Competency for an Automobile Manufacturing Unit	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Engineering, Business and Enterprise Applications, Vol. 9, Issue 1, pp: 44-51, 2014
23.	Analysis of Strategic Success for an Automobile Manufacturing Unit	Singh, C.D. and <b>Khamba, J.S.</b>	International Journal of Engineering, Business and Enterprise Applications", Vol. 9, Issue 2, pp: 104-111, 2014
24.	Technology Innovation Issues Affecting Small Firms Performance	Singh, D., <b>Khamba, J.S.</b> and Nanda, T.	International Journal of Research in Mechanical Engineering and Technology, Vol. 3, No. 2, pp. 174-178, 2013
25.	Effect of different wire electrodes on the performance of WEDM	Kapoor, J., <b>Khamba, J.S.</b> and Singh, S.P.	Material Science Form, Vol. 751, pp 27-34, 2013
26.	Effect of shallow cryogenic treated brass wire electrode on work piece surface roughness in wire-EDM	Kapoor, J., Singh, S.P. and <b>Khamba, J.S.</b>	International Journal of Materials Engineering Innovation, Vol. 3 (3/4), pp 190-203, 2012
27.	High performance wire electrodes for wire electrical discharge machining – A review	Kapoor, J., Singh, S.P. and <b>Khamba, J.S.</b>	International Journal of Mechanical Engineering Science, Vol. 226(11): pp 1757-1773, 2012
28.	The effect of machining parameters on surface roughness and material removal rate with cryogenic treated wire in WEDM	Kapoor, J., <b>Khamba, J.S.</b> and Singh, S.P.	International Journal of Machining and Machinability of Material, Vol 12(1/2): pp 126-141, 2012
29.	Effect of cryogenic treated brass wire electrode on material removal rate in wire electrical discharge machining	Kapoor, J., <b>Khamba, J.S.</b> , and Singh, S.P.	International Journal of Mechanical Engineering Science, Vol. 226 (11), pp 2750 – 2758, 2012
30.	An investigation on wear of shallow cryogenic treated wire in WEDM	Kapoor, J., <b>Khamba, J.S.</b> , and Singh, S.P.	Materials Science Form, Vol. 701, pp 31-42, 2012
31.	Effects of cryogenic treated wire electrode on the surface of an EN-31 steel machined by WEDM	Kapoor, J., <b>Khamba, J.S.</b> , and Singh, S.P.	International Journal of Surface Engineering and Material Technology, Vol.1 (1), pp 43-47, 2011
32.	Current research trends on wire electrodes for wire electrical discharge machining	Kapoor, J., Singh, S.P. and <b>Khamba, J.S.</b>	International Journal of Engineering Sciences, Vol 1 (1), pp 167-174, 2011
33.	An interpretive structural modelling (ISM) approach for advanced manufacturing technologies (AMTs) utilisation barriers	Singh, H. and <b>Khamba, J. S.</b>	International Journal of Mechatronics and Manufacturing Systems, Vol. 4, No. 1, pp 35-48, 2011
34.	Utilization of new technologies: A state-of-art-review and future prospective	Singh, H. and <b>Khamba, J. S.</b>	International of Services and Operations Management, Vol. 8, No. 2, pp 164-190, 2011
35.	Development of agglomerated acidic flux for submerged arc welding	Kumar, Vinod., Mohan, N., and <b>Khamba, J.S</b>	Estonian Journal of Engineering, Vol. 16, issue 2, pp135-141, 2010.
36.	Some investigation on bead width, performance and flux consumption in Submerged Arc Welded joints using developed fluxes	Kumar, Vinod., Mohan, N., and <b>Khamba, J.S</b>	Journal of Modern Manufacturing Technology- 2 (2), pp196-216, 2010



37.	Recent Research Trends in the Field of Submerged Arc Welding- An overview	Kumar, Vinod., Mohan, N., and <b>Khamba, J.S</b>	Journal of Manufacturing Technology Research, USA, " Vol. 2, issue1-2, pp143-159, 2010
38.	Modeling of bead width and flux consumption in submerged arc welding using developed fluxes	Kumar, Vinod., Mohan, N., and <b>Khamba, J.S.</b>	Journal of Mechanical Engineering, Icfai University, pp 42-57, 2010
39.	Enablers for utilisation of new technologies using ISM approach	Singh, H. and <b>Khamba, J. S.</b>	International Journal of Advanced Manufacturing Systems, Vol. 1, No. 1, pp 1-10, 2010
40.	An empirical examination for enhancing the utilization level of AMTs in Indian manufacturing industry	Singh, H. and <b>Khamba, J. S.</b>	Journal of Advances in Management Research, Vol. 7, No. 1, pp 112-126, 2010
41.	Evolving success factors for enhancing advanced manufacturing technologies (AMTs) utilization	Singh, H. and <b>Khamba, J. S.</b>	International Journal of Applied Management Science, Vol.2, No.1, pp 55-75, 2010
42.	Evolving the barriers for enhancing the utilization level of advanced manufacturing technologies (AMTs) in Indian manufacturing industry	Singh, H. and <b>Khamba, J. S.</b>	International Journal of Advanced Operations Management, Vol. 1, No. 2/3, pp 135-150, 2009
43.	An evaluation of AMTs utilisation in Indian industry for enhanced manufacturing performance	Singh, H. and <b>Khamba, J. S.</b>	International Journal of Indian Culture and Business Management, Vol.2, No.6, pp 585-601, 2009
44.	Investigation of Manufacturing Performance Achievements through Strategic Total Productive Maintenance Initiatives	I.P.S. Ahuja <b>J.S. Khamba</b>	International Journal of Productivity and Quality Management (IJPQM), Vol. 4, No. 2, pp 129-152, 2009
45.	Evolving indigenous TPM Methodology for Indian Manufacturing Industry	I.P.S. Ahuja <b>J.S. Khamba</b>	International Journal of Technology, Policy and Management, Vol. 9, No. 1, pp. 29-73, 2009
46.	Mathematical modeling of tool wear rate in Ultrasonic machining of titanium	Rupinder Singh, <b>J.S. Khamba</b>	The International Journal of Advanced Manufacturing Technology, Volume 43, No.5-6, 2009
47.	Mathematical Modeling of Surface roughness in Ultrasonic Machining of Titanium using Buckingham-Π Approach: A review	Rupinder Singh <b>J.S. Khamba</b>	International Journal of Abrasive Technology (IJAT), Vol 2, No. 1, pp 3-24, 2009
48.	An investigation into the machining characteristics of pure titanium using ultrasonic machining	Jatinder Kumar <b>J.S. Khamba</b> S.K. Mohapatra	International Journal of Machining and Machinability of Materials, Vol. 3, No. 1-2, 2008
49.	Surface quality evaluation in ultrasonic machining of Titanium using Taguchi method	Jatinder Kumar <b>J.S. Khamba</b> Mohapatra S K	Journal of Manufacturing Technology and Research, Vol. 4, No. 1-2, 2008
50.	Investigating and modeling tool-wear rate in the ultrasonic machining of titanium	Jatinder Kumar <b>J.S. Khamba.</b> Mohapatra S K	International Journal of Advanced Manufacturing Technology, (Springer-Verlag), London 2008
51.	Statistical analysis of experimental parameters in Ultrasonic Machining of Tungsten Carbide using the Taguchi Approach	Vinod Kumar <b>J. S. Khamba</b>	Journal of American Ceramic Society, Vol. 91, No. 1, pp 92-96, 2008.
52.	An empirical examination of advanced manufacturing technology and sourcing practices in developing manufacturing flexibilities.	J.S. Oberoi <b>J.S. Khamba</b> Sushil	International Journal of Service and operation management, Vol. 2, No. 6, 2008
53.	Comparison of slurry effect on machining characteristics of titanium in ultrasonic drilling	Rupinder Singh <b>J.S. Khamba</b>	Journal of Material Processing Technology, Vol. 197, No. 1-3, 2008, pp 200-205. (Elsevier publication)
54.	An Evaluation of TPM Initiatives in Indian Industry for Enhanced Manufacturing Performance.	I.P.S. Ahuja <b>J.S. Khamba</b>	International Journal of Quality & Reliability Management, Vol. 25, No. 2, 2008.
55.	Strategies and Success factors for overcoming Challenges in TPM Implementation in Indian Manufacturing Industry.	I.P.S. Ahuja <b>J.S. Khamba</b>	Journal of Quality in Maintenance Engineering, Vol. 14, No. 2, 2008.
56.	Justification of Total Productive Maintenance Initiatives in Indian Manufacturing Industry for achieving Core Competitiveness	I.P.S. Ahuja <b>J.S. Khamba</b>	Journal of Manufacturing Technology Management, Vol. 19, No. 5, 2008.

57.	An Assessment of Maintenance Management Initiatives in Indian Manufacturing Industry	I.P.S. Ahuja <b>J.S. Khamba</b>	International Journal of Technology, Policy, Management (IJTPM), Vol. 8, No. 3, pp 250-278, 2008.
58.	Total Productive Maintenance Implementation in a Manufacturing Organization.	I.P.S. Ahuja <b>J.S. Khamba</b>	International Journal of Productivity and Quality Management (IJPQM), Vol. 3, No. 3, 2008.
59.	Role of Technology Adoption and Adaptation process in building Technological Capabilities of Indian Manufacturing Industry:	A.P.S. Sethi <b>J.S. Khamba</b> Sushil	International Journal of Services and Operations Management, Vol. 4, No. 6, 2008.
60.	Manufacturing process optimization for surface roughness in stationary ultrasonic machining of titanium and its alloys	Rupinder Singh, <b>J.S. Khamba</b>	The International Journal of Advanced manufacturing technology , 2008 (Springer publications)
61.	Modeling of material removal rate in ultrasonic machining of titanium: Buckingham-II Approach	Rupinder Singh, <b>J.S. Khamba</b>	The International Journal of Advanced manufacturing technology, 2008 (Springer publications)
62.	An Evaluation of TPM Implementation Initiatives in an Indian Manufacturing Enterprise.	I.P.S. Ahuja <b>J.S. Khamba</b>	Journal of Quality in Maintenance Engineering, Vol. 3, No. 4, pp 338-352, 2007
63.	The relative impact of technology and sourcing practices in managing manufacturing flexibilities – Evidence from large and medium scale enterprises in India.	J.S. Oberoi <b>J.S. Khamba</b> Sushil	Human System Management, Vol. 26, No. 3, pp 199-215, 2007
64.	Impact of new technology and sourcing practices in managing tactical and strategic manufacturing flexibilities – an empirical study.	J.S. Oberoi <b>J.S. Khamba</b> Sushil	Global Journal of Flexible System Management, Vol. 4, No. 2, 2007
65.	Investigation for ultrasonic machining of titanium and its alloys	Rupinder Singh <b>J.S. Khamba</b>	Journal of Material Processing Technology Vol. 183, No. 2-3, pp 363-367, 2007 (Elsevier publication)
66.	Taguchi approach for modeling material removal rate in ultrasonic machining of titanium	Rupinder Singh <b>J.S. Khamba</b>	Material Science and Engineering: A, Vol. 460-461, pp 365-369, 2007 (Elsevier publication)
67.	Ultrasonic machining of titanium and its alloys: A Review	Rupinder Singh <b>J.S. Khamba</b>	Journal of Material Processing Technology, Vol. 173, No. 2, pp 125-135, 2006 (Elsevier publication)
68.	Macro-model for ultrasonic machining of titanium and its alloys: designed experiments	Rupinder Singh, <b>J.S. Khamba</b>	Journal of Engineering Manufacture, No. B2, pp 221-229. 2007(Proc. of IMechE Part B)
69.	An experimental investigation of Ultra-sonic Machining of Alumina-based Ceramic composite	Vinod Kumar <b>J. S. Khamba</b>	Journal of American Ceramic Society, Vol. 89, 2413-7, 2006.
70.	Strategically managed buyer-supplier relationships across supply chain: an exploratory study.	J.S. Oberoi and <b>J.S. Khamba</b>	Human System Management, Vol. 24, No. 4, pp 275-283, 2005

## RESEARCH PAPERS PUBLISHED IN

### NATIONAL JOURNALS (14)

S. No.	Title of Research Paper	Author(s)	Journal Details
1.	Technology Innovation in Indian MSMEs: A Case Study using SWOT and SAP-LAP Analysis	Singh, D., <b>Khamba, J.S.</b> and Nanda, T.	Productivity, Vol. 57, No. 1, pp. 43-50, 2016
2.	The effects of process variables on the penetration of submerged-arc weld deposits	Kumar, Vinod., Mohan, Narendra., and <b>Khamba, J.S</b>	Indian Journal of Engineering Science and Technology, Vol 4. No.1, pp. 13-18, 2010.
3.	Development of Basic Agglomerated Flux From Submerged Arc Welding Flux Waste	Kumar, Vinod., Mohan, Narendra., and <b>Khamba, J.S</b>	Journal of Manufacturing Engineering- Vol.5, issue2, pp.106-110, 2010.
4.	Research Methodology for Effective Utilization of Advanced Manufacturing Technologies in Northern India Manufacturing Industry	Singh, H. <b>Khamba, J. S.</b>	The Icfai Journal of Operations Management, Vol.9, Nos. 1-2, pp 43-56, February and May2010
5.	Extent of Use of Advanced Manufacturing Technologies (AMTs) in Northern India Mechanical Manufacturing Industry	Singh, H. <b>Khamba, J. S.</b>	Journal of Mechanical Engineering, Vol. 5, No.1, pp 1-4, March2010
6.	Barriers during advanced manufacturing technologies utilization : an overview	Singh, H. <b>Khamba, J. S.</b>	Manufacturing Technology Today, Vol.8, No.4, pp 22-27, April2009
7.	Strategic Implementation of Total Productive Maintenance in an Indian Manufacturing Organization – A Case Study.	I.P.S. Ahuja <b>J.S. Khamba</b>	Journal of Manufacturing Technology Today, Vol. 7, No. 3, 2008.
8.	An experimental investigation of the influence of work material properties on performance indices of ultrasonic machining	Jatinder Kumar <b>J.S. Khamba</b>	Journal of Manufacturing Technology Today, Vol. 7, No. 5, 2008.
9.	Ultrasonic machining of Titanium-A state-of-the-art Review	Jatinder Kumar <b>J.S. Khamba</b>	Journal of Manufacturing Technology Today, Vol. 6, No. 9, 2007, pp 3-9.
10.	Drivers of volume flexibility in manufacturing Organisations: An empirical study.	J.S. Oberoi <b>J.S. Khamba</b> Sushil	Apeejay Journal of Management and Technology, Vol. 2, No. 2, 2007, pp 18-25.
11.	Effect of Toughness on Machining Characteristics in Ultrasonic Assisted Drilling	Rupinder Singh <b>J.S. Khamba</b>	Journal of Manufacturing Technology Today, Vol. 5, No. 4, 2006, pp 11-14.
12.	Titanium Alloys Machining Characteristics Comparison using Alumina Slurry in Ultrasonic Assisted Drilling	Rupinder Singh <b>J.S. Khamba</b>	Journal of Manufacturing Technology Today, Vol. 4, No. 1, 2005, pp 18-20.
13.	Tool manufacturing technique in Ultrasonic drilling machine	Rupinder Singh <b>J.S. Khamba</b>	Journal of Manufacturing Technology Today, Vol. 3, No. 1, 2004, pp 5-7.
14.	Silicon carbide slurry effect in Ultrasonic assisted drilling of titanium alloy (TITAN15)	Rupinder Singh <b>J.S. Khamba</b>	Journal of Manufacturing Technology Today, Vol. 2, No. 7, 2003, pp 8-11.

## RESEARCH PAPERS PUBLISHED IN

### THE PROCEEDINGS OF INTERNATIONAL CONFERENCES (57)

S. No.	Title of Research Paper	Author(s)	Conference Details
1.	Exploring Manufacturing Competency and Strategic Success: A Review	Singh CD, <b>Khamba J.S.</b>	Proceedings of 2nd International Conference on Production and Industrial Engineering 2015, SINGAPORE, Vol. 13 (3), pp 1655-1658
2.	Exploring Manufacturing Competencies of a Two Wheeler Manufacturing Unit	Singh CD, <b>Khamba J.S.</b>	Proceedings of 27th International Conference on CAD/CAM, Robotics and Factories of the Future 2014, LONDON (UK), IOP Conf. Series: Materials Science and Engineering 65, pp 1-9
3.	Technology Innovation Characteristics of Indian Small Firms	Singh, D., <b>Khamba, J.S.</b> and Nanda, T.	Proceedings of Anglo-American Conference for Academic Disciplines, University of London (UK), 4-7 Nov. 2014, pp. 52-58.
4.	Exploring Manufacturing Competencies of a Car Manufacturing Unit	Singh CD, <b>Khamba J.S.</b>	Proceedings of International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, PTU, Jalandhar., October 3-6, 2013, pp: 88-97
5.	Technology Innovation Issues Affecting Small Firms Performance'	Singh, D., <b>Khamba, J.S.</b> and Nanda, T.	Proceedings of International Conference on Advances in Materials and Manufacturing Technology, Chitkara University, India, Dec. 12, 2013, pp. 174-178.
6.	Utilization of advanced manufacturing technologies in an Indian manufacturing enterprise	Singh, H. and <b>Khamba, J.S.</b>	Proceedings of 2 <sup>nd</sup> International Conference on Mechanical, Industrial, and Manufacturing Technologies MIMT 2011 held at Singapore from February 26-28, 2011, Vol. 2, pp 424-428
7.	The effect of machining parameters on surface roughness and material removal rate with cryogenic treated wire in WEDM	Kapoor, J., <b>Khamba, J.S.</b> and Singh, S. P.	Proceedings of 2 <sup>nd</sup> International Conference on .Production and Industrial Engineering (CPIE 2010), National Institute of Technology, Jalandhar, India. December 3-5, 2010, Vol. 1, pp 329-334
8.	Use of Response Surface Modeling In Prediction And Control Of Flux Consumption In Submerged Arc Weld Deposits	Kumar, Vinod., Mohan, Narendra., and <b>Khamba, J.S</b>	Proceedings of Word Congress on Engineering and Computer Science, San Francisco, USA, 20-22 October, 2010, pp 206-211
9.	Recent developments in wire electrodes for high performance WEDM	Kapoor, J., <b>Khamba, J.S.</b> and Singh, S. P.	Proceedings of the world congress on engineering (WCE 2010), London, UK: June 30-July 2, 2010, pp 1065-1068
10.	Development Of Cost Effective Agglomerated Fluxes From Waste Flux Dust For Submerged Arc Welding	Kumar, Vinod., Mohan, Narendra., and <b>Khamba, J.S</b>	Proceedings of World Congress on Engineering-2009, Imperial College, London, UK, July, 1-3, 2009, pp. 561-565
11.	Evaluating the barriers for enhancing the utilization level of advanced manufacturing technologies (AMTs) in Indian manufacturing industry	Singh, H. <b>Khamba, J.S.</b>	Proceedings of 2 <sup>nd</sup> International Multi-Conference on. Engineering and Technological Innovation: <b>IMETI</b> 2009 held at Orlando, Florida, USA from July19, 2009 to July13,2009, pp 282-285
12.	Enablers for utilisation of new technologies using ISM approach	Singh, H. <b>Khamba, J.S.</b>	Proceedings of International Conference on Advances in Mechanical Engineering, Surat, Gujrat, India, 2009, pp 854-858
13.	Advanced manufacturing technology utilization: a review	Singh, H. <b>Khamba, J.S.</b>	Proceedings of 1 <sup>st</sup> International Multi-Conference on Engineering and Technological Innovation: Orlando, Florida, USA, June29-July 02, 2008, pp 64-69
14.	An experimental investigation on ultrasonic machining of pure titanium using Taguchi method	Jatinder Kumar <b>J.S. Khamba</b> S.K. Mohapatra	Proceedings of International Conference on Theoretical, Applied, Computational and Experimental Mechanics, IIT, Kharagpur, India, Dec 27-29, 2007, pp 102-106
15.	Investigating tool wear rate and surface quality in ultrasonic machining of Titanium	Jatinder Kumar <b>J.S. Khamba</b> S.K. Mohapatra	Proceedings of International Conference on Advance Manufacturing Technologies, CMERI, Durgapur, India, Nov 29-30, 2007, pp 88-93
16.	Achieving Product Development Flexibility in Manufacturing	J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of International Conference on Total Engineering, Analysis and Manufacturing

	Organizations: An Empirical Study of Large and Medium Enterprises in India	R Kiran	Technologies- TEAMTECH-2007, IISc, Bangalore, India, Oct. 4-6, 2007, pp 312-318
17.	Key Determinants of Technological Capabilities and Productivity in Indian Manufacturing Industry: An Empirical Study.	A.P.S. Sethi <b>J.S. Khamba</b> R. Kiran	Proceedings of International Conference on Total Engineering Analysis and Manufacturing Technologies (TEAMTECH-2007), IIS, Bangalore, Oct. 4-6, 2007
18.	Study of tool material effect on machining characteristics of titanium alloys in Ultrasonic assisted drilling	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of Global conference on Production and Industrial Engineering (CPIE-2007), N.I.T. Jalandhar, March 22-24, 2007
19.	Study of tool material effect on machining characteristics of titanium alloys in Ultrasonic assisted drilling	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of Global conference on Production and Industrial Engineering (CPIE-2007), N.I.T. Jalandhar, March 22-24, 2007
20.	Outsourcing Manufacturing: A New Taxonomy Of Modern Manufacturing Practices	J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of International conference on Emerging trends in Engineering, CIT Coimbatore, July,2006
21.	Drivers of volume flexibility requirements in manufacturing sector”,	J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of International conference on Advances in Mechanical Engineering, AME-2006, BBSEC, Fatehgarh Sahib, Dec 1-3, 2006
22.	Advanced Manufacturing Technology: Adoption and Adaptation Issues.	A.P.S. Sethi <b>J.S. Khamba</b>	Proceedings of International Conference on Global manufacturing and Innovations at Coimbatore Institute of Technology, Coimbatore, July 27-29, 2006
23.	Robust design for modeling MRR in USM of titanium	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of International Conf on Advances in Mechanical Engineering (AME-2006), at BBSBEC, Fatehgarh Sahib, Punjab (India), Dec. 1-3, 2006, pp 219-223.
24.	Improved Organizational Behaviour through Strategic Total Productive Maintenance Implementation	I.P.S. Ahuja <b>J.S. Khamba</b>	Proceedings of ASME International Mechanical Engineering Congress and Exposition (IMECE), Chicago, Illinois (U.S.A.), Nov. 5–10, 2006, pp 1-8.
25.	Ultrasonic machining and its capabilities in machining of Titanium – A state-of-the-art review	Jatinder Kumar <b>J.S. Khamba</b>	Proceedings of International Conference on Advanced Design and Manufacture, Harbin Engineering University, Harbin, China in Association with Nottingham Trent University, UK, Jan 8-10, 2006, pp 276-281.
26.	Ultrasonic machining (USM) and its application to the machining of tough materials - A review	Jatinder Kumar <b>J.S. Khamba</b> S.K. Mohapatra	Proceedings of International Conference on Materials, Product design and Manufacture (ICMPM), BIT, Coimbatore, India, in association with North Carolina State A & T University, Greensboro, USA, Dec 12-15, 2005, pp 313-318.
27.	Machining characteristics optimization using Taguchi Technique Ultrasonic drilling of titanium alloys	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of International Conf. on emerging Technologies in Intelligent System and control (EISCO-2005), Kumara guru College of Tech. Coimbatore, India, Jan 5-7, 2005, pp 81-87.
28.	An experimental investigation on machining characteristics of titanium alloys using USM	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of Stainless Steel conference 2005, The Netherlands, Nov. 8-10, 2005, pp 261-264.
29.	New Technology Adoption: Implications for Manufacturing Modernization Policies.	A.P.S. Sethi J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of International Conference on Emerging Technologies in Intelligent Systems and Control at Kumaraguru College of Technology, Coimbatore, January 5-7, 2005
30.	New Technology Adoption: Implications for Manufacturing Modernization Policies”	A.P.S. Sethi J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of International Conference on Emerging Technologies in Intelligent Systems and Control; EISCO-2005, Kumaraguru College of Technology, Coimbatore, January 5-7, 2005
31.	Role of Sourcing Practices in Manufacturing Paradigmatic System Shift	J.S. Oberoi A.S. Sethi <b>J.S. Khamba</b>	Proceedings of 4 <sup>th</sup> Global Conference on Flexible Systems Management Jan. 1-4, 2005, ITM, Moussorie, India
32.	Working smarter: A key to Productivity	A.S. Sethi J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of 4 <sup>th</sup> Global Conference on Flexible Systems Management, DRDO, ITM, Moussorie, India, Jan. 1-4, 2005, pp 134-140
33.	Modeling the Machining Characteristics of Titanium alloys using Ultrasonic	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of 4 <sup>th</sup> ISME international conference on Mechanical Engineering, Delhi College of Engineering,

	Machining: Buckingham-[] Approach		Delhi, Dec. 12-14, 2005, pp 464-469.
34.	Understanding Outsourcing Decision for achieving manufacturing flexibilities.	J.S. Oberoi A.P.S. Sethi <b>J.S. Khamba</b>	Proceedings of International Conference on Innovation Flexibility and Technology Transfer at Jamia Milia Islamia, New Delhi, March 13-15, 2004, pp 438-448.
35.	Comparison of machining characteristics of titanium alloys: Effect of slurry in Ultrasonic machining process	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of the international Conf. on Manufacturing and Management (GCOMM-2004), at Vellore Institute of Tech., Tamilnadu, India, Dec.8-10, 2004, pp 54-58.
36.	Machining characteristics comparison of titanium alloys in Ultrasonic assisted drilling	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of International Conference on recent advances in composite materials (icracm2004), Institute of Technology, B.H.U, India, Dec. 17-19, 2004, pp 438-442.
37.	Study of machining characteristics of Titanium alloys in ultrasonic machining	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of 21 <sup>st</sup> AIMTDR Conference, Vellore Institute of Technology, Tamilnadu, India, Dec 20-22, 2004, pp 155-160.
38.	“Understanding Outsourcing Decision for achieving manufacturing flexibilities”	J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of Third Global Conference on Innovation Flexibility and Technology Transfer, New Delhi, March 13-15, 2004, pp 255-264.
39.	Technology adoption in manufacturing industry: Key factors and expected propositions	J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of Third Global Conference on Innovation Flexibility and Technology Transfer, New Delhi, March 13-15, 2004, pp 247-254.
40.	Role of Sourcing Practices in Manufacturing Paradigmatic System Shift	J.S. Oberoi A.P.S. Sethi <b>J.S. Khamba</b>	Proceedings of Fourth Global Conference on Flexible System Management, ITM, DRDO, Mussoorie, India, December 26-29, 2004, pp 324-328
41.	Working Smarter: A key to Productivity”	A.P.S. Sethi J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of Fourth Global Conference on Flexible System Management, at Institute of Technology Management, DRDO Mussoorie, India, December 26-29, 2004, pp 79-83
42.	Ultra-sonic assisted drilling of Titanium alloy (TITAN 31) using carbide, HSS and stainless steel tools.	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of the International conference on emerging technology (ICET-2003), KIIT, Bhubnarswar, India, Dec. 19-21, 2003, pp 67-70.
43.	A Framework for modeling the machining characteristics of Titanium alloys using ultrasonic machining.	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of the International Conference on Digital Aided Modeling and Simulation (DAMS-2003) Coimbatore Institute of Technology, Coimbatore, India, Jan. 6-8, 2003, pp 91-93.
44.	Investigation of Titanium Alloys for Machining characteristics using Ultrasonic machining process.	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of 47 <sup>th</sup> Congress of the Indian Society of Theoretical & Applied Mechanics (ISTAM) an international meet, IIT, Guwahati, India, December 23-26, 2002, pp 64-66.
45.	Correlation between Flexibility and Technology Management	<b>J.S. Khamba</b> T.P. Singh Sushil	Proceedings of the 1 <sup>st</sup> Global Conference on Flexible Systems Management (GLOGIFT’2000) New Delhi, India, Dec. 17-20, 2000, pp 373-379.
46.	Key issue in adoption and adaptation of new technology	IPS Ahjua <b>J.S. Khamba</b> T.P. Singh	Proceedings of the First Global Conference on Flexible Systems Management (GLOGIFT’2000) New Delhi, India, Dec. 17-20, 2000, pp 425-431.
47.	Supply Chain Management	HS Lotey <b>J.S. Khamba</b> TP Singh	Proceedings of the First Global Conference on Flexible Systems Management (GLOGIFT’ 2000), New Delhi, India, Dec. 17-20, 2000, pp 631-640.
48.	Implementing World Class Manufacturing in an Engineering Organization	J.S. Oberoi <b>J.S. Khamba</b> T.P. Singh	Proceedings of the First Global Conference on Flexible Systems Management (GLOGIFT’2000), New Delhi, India, Dec. 17-20, 2000, pp 801-810.
49.	Total Quality Development	AS Sethi <b>J.S. Khamba</b> TP Singh	Proceedings of the First Global Conference on Flexible Systems Management (GLOGIFT’ 2000), New Delhi, India, Dec. 17-20, 2000, pp 869-886.
50.	Technology Upgradation for Cost effective competitiveness	IPS Ahjua <b>J.S. Khamba</b> T.P. Singh	Proceedings of 12 <sup>th</sup> International Congress & Exhibition on Research and Development, New Delhi, India, Jan.99, pp121-126.
51.	Structural Imperatives of managing New Technology	<b>J.S. Khamba</b> T.P. Singh Sushil	Proceedings of the 15 <sup>th</sup> International Conference on CAD/CAM, Robotics and Factories of the Future, Auguas De Lindoia, BRAZIL Aug. 18-20, 1999, pp MF6-13 to MF6-18.
52.	Implementation of Total Productive	<b>J.S. Khamba</b>	Proceedings of the International Conference on

	Maintenance (TPM) in an Engineering Organization	IPS Ahjua T.P. Singh	Productions and Operations Management (POMS'99) IIT Delhi, India, Dec. 21-24, 1999, pp 685-691.
53.	Management of Technology Utilization in an Engineering Organization	<b>J.S. Khamba</b> T.P. Singh	Proceedings of the International Conference on CAD/CAM, Robotics & factories of future (CAR & FOR'98) PSG College of Technology, Coimbtore, India, Dec. 1-3, 1998, pp 733-740.
54.	Application of System Dynamics Methodology to Technology Management	<b>J.S. Khamba</b> T.P. Singh	Proceedings of the International Conference on System Dynamics (ICSD'98), IIT Kharagpur, India, Dec. 17-18, 1998, pp 126-132.
55.	Curve & Surface Generation Using Dynamic Modification Technique	H.N. Chandrawat <b>J.S. Khamba</b>	Proceedings of the International Conference on Advances in Mechanical & Industrial Engineering, UOR, Roorkee, India, Vol..I, Feb. 6-8, 1997, pp 325-332.
56.	Application of Flexible System Methodology to Technology Management	<b>J.S. Khamba</b> T.P. Singh	Proceedings of the International Conference on Management of Technology, ICMOT'97, IIT Delhi, India, Dec. 21-24, 1997, pp 460-466.
57.	A Framework for Flexible Management of Technology.	T.P. Singh <b>J.S. Khamba</b> Sushil	Proceedings of the International Conference on Technology Management Istanbul, TURKEY, June 24-26, 1996, pp 608-613.

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### THE PROCEEDINGS OF NATIONAL CONFERENCES (37)

S. No.	Title of Paper	Author(s)	Conference Details
1.	Investigation of developed agglomerated fluxes from waste flux dust for submerged arc welding	Kumar, Vinod., Mohan, Narendra., and <b>Khamba, J.S</b>	Proceedings of National Conference on Global Trends in Mechanical Engineering, Rayat & Bahra institute of Engineering and Bio-Technology, Mohali, April 16-17, 2010, pp.91-95.
2.	Optimization techniques in the Field of Submerged Arc Welding- An overview	Kumar, Vinod., Mohan, Narendra., and <b>Khamba, J.S</b>	Proceedings of National Conference on Global Trends in Mechanical Engineering , Rayat & Bahra institute of Engineering and Bio-Technology, Mohali, April 16-17, 2010, pp.102-106.
3.	The effects of process variables on the penetration of submerged-arc weld deposits	Kumar, Vinod., Mohan, Narendra., and <b>Khamba, J.S</b>	Proceedings of National Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering , Yadwindra College of Engineering, Talwandi sabo, February 19-20, 2010, pp 43-48.
4.	Effect of chromium and silicon addition on wear resistance of aluminum alloy: LM13	Rupinder Singh, <b>J. S. Khamba</b>	Proceedings of 11 <sup>th</sup> Punjab Science congress (Punjab Academy of Sciences) at Thapar University, Patiala Feb. 7-9, 2008, pp 213-18
5.	Modeling of tool wear rate in Ultrasonic machining of titanium: Robust design approach	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of 10 <sup>th</sup> Punjab Science congress (Punjab Academy of Sciences) at DAVIET Jalandhar, India, Feb. 7-9, 2007, pp 134-139.
6.	An experimental investigation into the ultrasonic machining of pure Titanium	Jatinder Kumar <b>J.S. Khamba</b> S.K. Mohapatra	Proceedings of National conference on Advances in Materials and Manufacturing Technologies, PEC, Chandigarh, India, Sept. 21-22, 2007, pp 316-320.
7.	An Assessment of contributions of TPM Implementation in Indian Manufacturing Enterprises.	I.P.S. Ahuja <b>J.S. Khamba</b>	National Conference on Futuristic Trends in Mechanical Engineering, Shaheed Udham Singh College of Engineering & Technology, Tangori, India, Sept. 13-14, 2007, pp 229-234.
8.	Ultrasonic machining of pure titanium	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of National conference on Nanotechnology, Bhai Maha Singh College of Engineering, Muktsar, Feb 23-24, 2007, pp 137-142
9.	Building a Technology Index to assess Technological Capabilities of Large and Medium Scale Manufacturing Industries.	A.P.S. Sethi <b>J.S. Khamba</b>	Proceedings of International Conference on Advances in Mechanical Engineering at Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib, Dec 1-3, 2006, pp 236-241
10.	Development in USM for drilling of titanium alloys	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of National Conference ACMP-05 conference at T.I.E.T. Patiala India, Feb.11-12, 2005, pp 333-339.
11.	Managing for flexibility: a Manufacturing Perspective”	J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of National conference on Energy, Environment, Ecosystem and Sustainable Development held at BBSBEC, Fatehgarh Sahib, Aug.4-5, 2005, pp 99- 103
12.	Adoption of Environmental Friendly Technologies.	A.P.S. Sethi J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of National Conference on Energy, Environment , ecosystem and Sustainable Development at Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib, August 4-5, 2005, pp 176-181
13.	Outsourcing manufacturing to suppliers: A conceptual framework.	J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of National Seminar on Emerging Trends In Mechanical Engineering, SLIET, Longowal, India, Jan 12, 2004, pp 232-236
14.	Reengineering Engineering education.	J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of National seminar on Reaching the Unreached – A challenge to technical education, BBSBEC, Fatehgarh Sahib, India. March 12, 2004, pp 165-170
15.	Kaizen and TQM- Implications for technical institutions.	J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of National seminar on Reaching the Unreached – A challenge to technical education,



			BBSBEC, Fatehgarh Sahib, India, March 12, 2004, pp 78-84
16.	Role of Manufacturing Flexibility in achieving e business flexibilities and competitive excellence.	J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of National Conference on Advanced Manufacturing Systems, BBSBEC, Fatehgarh Sahib, India, March 26-27, 2004, 148-153
17.	Strategic Sourcing: Reducing Cost and Achieving Competitive Advantage”	J.S. Oberoi A.P.S. Sethi <b>J.S. Khamba</b>	Proceedings of National Conference on Precision Manufacturing at SLIET, Longowal, December 11-12, 2004, pp 279-284
18.	Innovation: Management Process or Unmanageable Events?”	J.S. Oberoi A.P.S. Sethi <b>J.S. Khamba</b>	Proceedings of National Seminar and 34 <sup>th</sup> National Convention of ISTE at NSIT, New Delhi, December 19-20, 2004, pp 48-53
19.	Technology adoption in manufacturing industry: Key factors and expected propositions”	A.P.S. Sethi J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of Third Global Conference on Innovation Flexibility and Technology Transfer at Jamia Milia Islamia, New Delhi, March 13-15, 2004, pp 247-254.
20.	Latest in brazing for Tool making in USM Process	Rupinder Singh <b>J.S. Khamba</b> Navpreet Singh	Proceedings of Annual Convention of ISTE section & National seminar, at BBSBEC, Fatehgarh Sahib., March 12, 2004, pp 77-79.
21.	Role of Manufacturing Flexibility in achieving e business flexibilities and competitive excellence.	J.S. Oberoi A.P.S. Sethi <b>J.S. Khamba</b>	Proceedings of National Conference on Advanced Manufacturing Systems at Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib, March 26-27, 2004, pp 28-37.
22.	Working Smarter: A key to Productivity.	A.P.S. Sethi J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of Fourth Global Conference on Flexible System Management at Institute of Technology Management, DRDO, Mussoorie, Dec. 26-29, 2004, pp 316-321
23.	Role of Sourcing Practices in Manufacturing Paradigmatic System Shift.	J.S. Oberoi A.P.S. Sethi <b>J.S. Khamba</b>	Proceedings of Fourth Global Conference on Flexible System Management, Institute of Technology Management, DRDO, Mussoorie, Dec. 26-29, 2004, pp 271-276
24.	Outsourcing manufacturing to Suppliers: A conceptual framework	J.S. Oberoi A.S. Sethi <b>J.S. Khamba</b>	Proceedings of the National Conference on Emerging Trends in Mechanical Engineering, SLIET, Longowal, India, Jan. 2004, pp 359-371.
25.	Role of Manufacturing Flexibility in Achieving Business flexibilities and Competitive excellence.	A.S. Sethi J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of the National Conference on Advanced Manufacturing Systems, March 26-27, 2004, India, pp 28-37.
26.	Study of machining characteristics of Titanium alloys in Ultrasonic Machining	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of the 21 <sup>st</sup> AIMTDR conference, Vellore Institute of Tech., Vellore, India, Dec. 20-22, 2004, pp 155-160.
27.	Effect of slurry temperature on ultrasonic machining of titanium alloys	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of the 18 <sup>th</sup> National convention of Metallurgical and materials engineers, Institution of engineers Local center, Jaipur, Oct. 11-12, 2004, pp 213-219
28.	Silver brazing for tool preparation in Ultrasonic machining process	Rupinder Singh, <b>J.S. Khamba</b>	Proceedings of National Workshop on Welding Technology in India-Present status and future trends; at SLIET, Longowal, Punjab, India, April, 25-26, 2003, pp 61-63.
29.	Role of Outsourcing in Managing Manufacturing Flexibilities.	J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of National Conference on Recent Developments in Mechanical Engineering (NCME-2003), TIET, Patiala, India, Oct. 31-Nov. 1, 2003, pp 231-236
30.	Effect of Alumina (White, Fused) Slurry in Ultra-sonic assisted drilling of Titanium Alloys (TITAN 15)	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of the National Conference on Material related technologies (NCMERT), TIET, Patiala, India, Sept, 19-20, 2003, pp 75-79.
31.	Comparing the machining characteristics of Titanium Alloys with cylindrical and conical horn in ultrasonic drilling	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of the National Conference on Recent developments in Mechanical Engineering, TIET, Patiala, Oct. 31-Nov. 1, 2003, pp 619-621.
32.	Investigating the machining characteristics of Titanium alloy using ultra-sonic machining.	Rupinder Singh <b>J.S. Khamba</b>	Proceedings of the 13 <sup>th</sup> National Conference of ISME 2003, IIT, Roorkee, India, Dec. 30-31, 2003, pp 59-61.

33.	Role of Outsourcing in Managing Manufacturing Flexibilities	J.S. Oberoi A.S. Sethi <b>J.S. Khamba</b>	Proceedings of the National Conference on Recent Trends in Mechanical Engineering, TIET, Patiala, India, Oct. 31-Nov. 1, 2003, pp 391-397.
34.	Technological Complexity and Ethical Control.	J.S. Oberoi <b>J.S. Khamba</b>	Proceedings of National Seminar on “Integrating Human Values in Technical Education,” at BBSBEC, Fatehgarh Sahib, India, April 26, 2002, pp 91-96
35.	Developing New Technology for Sustainable Habitat	<b>J.S. Khamba</b>	Proceedings of 5 <sup>th</sup> Punjab Science Congress, TIET, Patiala, India, Feb. 7-9, 2002, pp 34-38.
36.	Correlating Technology Management to its Related Areas	<b>J.S. Khamba</b> T.P. Singh	Proceedings of the National Conference on Mathematical and Statistical Techniques, TIET, Patiala, India, Dec. 6-8, 2001, pp 30-31.
37.	Total Quality Development	A.P.S. Sethi <b>J.S. Khamba</b> T. P. Singh	Proceedings of First Global Conference on Flexible System Management (GLOGIFT 2000), Hotel Le-Meridian, New Delhi, Dec. 17 –20, 2000, pp 869-886.

## ANNEXURE – V

# PATENT

Patent title:

## Cryogenic treatment of brass wire for improved machining characteristics

Published (U/S 11A) by

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(Inventors; Kapoor, J, Khamba, J.S., Singh, S.P., Sangha, B.S.)

**SPONSORED RESEARCH PROJECT(S):      05**

**Undertaken at Thapar University, Patiala**

S. No.	Title of the Project	Principal Investigator(s)	Duration	Amount (in lacs)	Sponsoring Agency
1	Setting-up of a Non-traditional machining centre to carry out research on process parameters. (MAJOR PROJECT)	J.S.Khamba	2 Years (1999-2001)	7.0 + 4.0	All India Council for Technical Education (AICTE) + TIET, Patiala
2	To determine the effect of process parameters on material removal rate, surface finish, accuracy and quality of work in EDM. (MINOR PROJECT)	J. S. Khamba	1 Year (2000-2001)	0.12	University Grants Commission (UGC)
3	Setting up of a cell to provide consultancy for resource waste reduction in the nearby Manufacturing Industry	T.P.Singh J.S.Khamba	2 Years (2001-2003)	6.9	All India Council for Technical Education (AICTE)
4.	Funds for infrastructure development in Science and Technology (FIST-I)	T.P.Singh J.S.Khamba	5 Years (2002-2007)	23.0	Department of Science and Technology (DST)
5.	Special Assistance Programme (SAP) in Non-traditional Machining	T.P.Singh J.S.Khamba	5 Years (2003-2008)	23.0	University Grants Commission (UGC)