

## CURRICULUM VITAE



**NAME** : **DR. RASHEED AHMED KHAN**

**DESIGNATION** : Professor , Mech. Engg. Deptt.( Former Dean ,Faculty of Engg.& Tech., and Former Head, Mech. Engg. Deptt) Jamia Millia Islamia (A Central University) New Delhi-110025 INDIA.

**SCALE OF PAY/ BASIC PAY** : Rs 37400 – 67000 , Rs 60310

**FATHER’S NAME** : Late Naseer Ahmed Khan

**DATE OF BIRTH** : 24-08-1947

**NATIONALITY** : Indian

**PRESENT POSTAL ADDRESS**  
**Official** : Department of Mechanical Engineering, Faculty of Engineering & Technology Jamia Millia Islamia (A Central University), Jamia Nagar, New Delhi-110025. INDIA  
Ph: 011-26981259  
Mob. 09213827949  
Fax: 011-26981259  
E-mail: [rasheed\\_jmi@hotmail.com](mailto:rasheed_jmi@hotmail.com)

**Residential** : A-5, Bhaskar Compound. Abul Fazal Enclave, Jamia Nagar, New Delhi-110025. INDIA  
Ph : 011-26943808  
Mob. 09213827949  
Fax : 011-26981259  
E-mail : [rasheed\\_jmi@hotmail.com](mailto:rasheed_jmi@hotmail.com)

**EDUCATIONAL & PROFESSIONAL QUALIFICATIONS:**

<b>EXAMINATION PASSED</b>	<b>YEAR</b>	<b>DIV.</b>	<b>GENERAL</b>
High School	1961	Ist	Distinction in English, Maths. & Sanskrit
Intermediate	1963	Ist	Distinction in Physics, Chemistry & Mathematics
B.Sc. Engg. (Mech.)	1967	Ist	Distinction in Ad. Maths. Refrigeration & Air-conditioning
M.Sc. Engg. (Design of Machines)	1974	Ist	Dissertation approved with Distinction
Ph.D.	1983		<b><i>Topic: Analysis and Synthesis of Mechanisms</i></b>

**EXPERIENCE:**

<b>EMPLOYER</b>	<b>POST HELD</b>	<b>FROM</b>	<b>TO</b>
M/s. Geep Flashlight Industries Ltd. Allahabad, India.	Apprentice Engineer	August 1967	April 1969
National Institute of Technology, Kurukshetra, India	Associate Lecturer	July 1969	October 1973
National Institute of Technology, Kurukshetra, India	Lecturer	October 1973	July 1981
National Institute of Technology, Kurukshetra, India	Assistant Professor	July 1981	August 1989
Al-Anbar University, Ramadi, Iraq.	Assistant Professor	August 1989	August 1990
National Institute of Technology, Kurukshetra, India	Assistant Professor	August 1990	November 1990
National Institute of Technology, Kurukshetra, India	Professor	November 1990	February 1992
Jamia Millia Islamia, New Delhi, India	Professor & Head	February 1992	March 1995
Jamia Millia Islamia New Delhi, India	Professor	March 1995	February 1996
Jamia Millia Islamia New Delhi, India	Professor & Dean Faculty of Engg. & Tech.	February 1996	February 1999
Jamia Millia Islamia New Delhi , India	Professor & Head	February 1998	February 2001
Jamia Millia Islamia New Delhi, India	Professor	February 2001	February 2004
Jamia Millia Islamia New Delhi , India	Professor & Head	February 2004	January 2007

Jamia Millia Islamia New Delhi, India	Professor	February 2007	To date
--	-----------	------------------	---------

**NATURE OF EXPERIENCE:**

1. Industry : 2 years (1967 – 1969)
2. Teaching : 43 years (1969 – till date)
3. Research : 35 years
4. Administration : 20 years
  - Dean, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi ( 1996-1999 )
  - Head, Dept. of Mechanical Engineering Jamia Millia Islamia, New Delhi. (Three terms of three years each).
  - Chairman, Admission Committee
  - Chief Coordinating Superintendent, Entrance Tests-2003, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi.
  - Workshop Superintendent , NIT, Kurukshetra
  - Member, Court, Jamia Millia Islamia
  - Member , Executive Council , Jamia Millia Islamia.
  - Member , Academic Council, Jamia Millia Islamia.
  - Member Board of Studies of various Universities.
  - Warden at NIT, Kurukshetra.
5. Institute-Industry Interaction/Consultancy : 40 years

**FIELD OF SPECIALIZATION** : Mechanisms (Machine Design)  
Mechanical Engineering

**SUBJECTS TAUGHT** : Machine Dynamics, Theory of Machines, Solid Mechanics, Applied Mechanics and Automation.

**PUBLICATIONS** : 136 papers in international and national Journals/conferences.

### BOOKS PUBLISHED:

S.N.	Title of The Book	Year	Publisher
1	Fundamental of Engg. Mechanics	2010	Acme Learning Pvt. Ltd, Delhi, India
2	Experiments And Exercises In Engg. Mechanics	2010	Acme Learning Pvt. Ltd, Delhi, India
3	Mechanical Engineering	2009	Atlantic Publishers Delhi, India
4	Manufacturing Processes & Workshop Practice	2008	SCITECH Publications (India) Pvt. Ltd. Chennai, India
5	Advances in Mechanical Engineering	2006	Ane Books India, New Delhi
6	Fundamentals of Engg. Drawing and Auto Cad	2005	Galgotia Publications Pvt.Ltd, New Delhi, India
7	Machine Drawing	2004	Galgotia Publications Pvt.Ltd, New Delhi, India

### RESEARCH SUPERVISION:

11 Ph. D. have been awarded and 3 research scholars are working for their Ph.D.under my supervision.

**LABORATORY / COURSE DEVELOPMENT:** 1. I have established a state of art "Automation and Computer Integrated Manufacturing Laboratory" at Jamia Millia Islamia with the financial assistance from M.H.R.D./A.I.C.T.E. under TAPTAC / MODROB schemes.

2. Started M. Tech. Program in Mechanical Engg. (Machine Design/ Thermal Engineering / Production-Industrial Engineering).

### INVITED LECTURES:

:I have delivered invited lectures/key note addresses at many Engg. Colleges /Conferences/Seminars in the area of Automation, Mechanisms and Robotics etc.

### HONOURS

1. Recipient of National Merit Scholarship from Govt. of India during Intermediate and B.Sc. Engineering Courses.
2. Nominated as "International Educator of the year 2006 by International Biographical Center, Cambridge, England.
3. Member, All India Board of Post-graduate Education and Research in Engineering & Technology, constituted by All India Council for Technical Education, New Delhi. India
4. Chairman, AICTE Committee to review the deemed to be university status
5. Chairman, National Board Of Accreditation Committee
6. Reviewer of research papers in International Journal "Mechanism and Machine Theory"

**MEMBERSHIP OF PROFESSIONAL BODIES:**

1. Founder Member (Life Member) of Association for Mechanisms and Machines (AMM), India
2. Founder member (Life Member) of Indian Management Science Association (IMSA), India

**GENERAL**

- :
1. Have helped MHRD, AICTE, UGC and UPSC as expert member in different Committees/Boards.
  2. Helping many universities, state public service commissions and Industries as expert member/consultant.
  3. Organised National Conference on “ Advances in Mechanical Engineering “ ( AIME-2006) as Chairman Jan. 20-21 ,2006 ,Department of Mechanical Engineering, Jamia Millia Islamia , New Delhi

### **LIST OF PUBLICATIONS**

1. Paper entitled "Synthesis of four-bar linkage for position, velocity and acceleration coordination by geometric programming" was presented at the 16<sup>th</sup> A.S.M.E. (American Society of Mechanical Engineers) conference, Sept. 28-Oct. 1, 1980 California, USA and subsequently published, paper No. 80-DET-80.
2. Paper entitled "Synthesis of four-bar mechanism with control on the transmission angle" was presented at the First National Conference on Mechanisms and Machines, Dec. 2-3, 1981, IIT Bombay, India and subsequently published in the proceedings, Paper No. DS-13.
3. Paper entitled "Synthesis of a four-bar drag-link type mechanism with optimum transmission angle" was presented at the 26<sup>th</sup> Conference of ISTAM (Indian Society of Theoretical and Applied Mechanics), Dec. 28-31, 1981 Coimbatore Institute of Technology, Coimbatore, India Paper No. 7013.
4. Paper entitled "Synthesis of four-bar function generating mechanism for minimum error" was presented at the 27<sup>th</sup> Congress of ISTAM (Indian Society of Theoretical and Applied Mechanics), Dec. 27-30, 1982 Jadavpur University, Calcutta, India, Paper No. 3.10.
5. Paper entitled "Synthesis of a four bar mechanism with optimum transmission angle" was presented at the Sixth World Congress of IFTOMM (International Federation of Theory of Machines and Mechanisms) Dec. 15-20, 1983, IIT Delhi, India and subsequently published in the proceedings, Paper No. IN-33.
6. Paper entitled "Synthesis of a four-bar mechanism for specified positions and velocities of cranks (R-S-S-R type)" was presented at the Third National Conference on Mechanisms and Machines, Dec. 10-11, 1987, Victoria Jubilee Technical Institute, Bombay, India and subsequently published in the proceedings, paper No. G-2.
7. Paper entitled "Robots: why and where?" was presented at the National Seminar on Automation in Industry, Oct. 28-29, 1988, Regional Engineering College, Kurukshetra, India, and subsequently published in the proceedings, pp.216-223, Vol.2.
8. Paper entitled "Economic Justification of a Robot's Use in Industry" was presented at the National Seminar on Automation in Industry, Oct. 28-29, 1988,

Regional Engineering College, Kurukshetra, India and subsequently published in the proceedings, pp.203-215, Vol. 2.

9. Paper entitled "Robots in Material Handling" was presented at the National Workshop on Mechanical Handling Devices under 'Industrial Problems in Machines and Mechanisms-88 (IPROMM-88), Jan. 11-12, 1989 Visvesvarya Regional College of Engineering, Nagpur, India and subsequently published in the proceedings, pp. 6-9.
10. Paper entitled "The Future Factory" was presented at the Fourth International Conference on CAD, CAM, Robotics and Factories of the future, Dec. 19-22, 1989 IIT Delhi, India.
11. Paper entitled "Automation in Assembly" was presented at the seventh National Convention of Production Engineers organised by the Institution of Engineers (India), Sept. 15-17, 1991, Hyderabad. India
12. Paper entitled "Force Analysis of Plough Mechanism of Tractor" was presented at IPROMM-92 (Industrial Problems in Machines and Mechanism at the National Workshop on Pumps, Agricultural Machinery and Domestic Appliances, Feb. 7-8, 1991 P.S.G. College of Technology Coimbatore. India
13. Paper entitled "Automation for low-cost Housing" was presented at the National seminar on "Low Cost Housing for Agrobased Rural Population" Feb. 22-23, 1991, Regional Engg. College, Kurukshetra and has been subsequently published in the proceedings.
14. Paper entitled "Energy Management in Industry" was presented at National Seminar on Energy Conservation & Management, Oct. 10-11, 1991 Regional Engg. College, Kurukshetra and was subsequently published in the proceedings.
15. Paper entitled "Robots for Assembly" was presented at the National Workshop on CAD/CAM, Jan. 28-29 1993, Kamla Nehru Institute of Technology, Sultanpur.
16. Paper entitled "Environmental Imperatives - Role of Solar Energy" presented at the National Programme on 'Management of Environment' Feb. 10-11, 1994, Delhi College of Engg., Delhi.
17. Paper entitled "Energy saving by employing the concept of passive solar designs in buildings" was presented at the seminar on 'Energy saved is energy generated' Oct. 5, 1994, Regional Engg. College, Kurukshetra.
18. Paper entitled "Productivity improvement through layout planning in a lock manufacturing industry" was presented and subsequently published in the proceedings of the All India Seminar on Advances in Industrial Engg. and Productivity Improvement Techniques' Feb. 25-26, 1995 organised by the Institution of Engineers (I) and M.N.R. Engg. College, Allahabad.



19. Paper entitled "Performance studies of Inverted absorber solar distillation systems" was presented at the National Convention on 'Solar Energy' Jan. 4-5, 1995, Central Electro-Chemical Research Institute, Karaikudi.
20. Paper entitled "Effect of pollution on Materials and structures" was presented at the symposium on conservation of Monuments, Jan. 13, 1996, Jamia Millia Islamia, New Delhi.
21. Paper entitled "Services Marketing" was presented at the First Annual Conference of Indian Management Science Association Oct. 11-12, 1996. Thapar Institute of Engg. & Tech. Patiala.
22. Paper entitled "Concurrent Engineering Approach to Support CIM through T.Q.M." was presented and subsequently published in the proceedings of International Conference on CAD, CAD, ROBOTICS AND FACTORIES OF FUTURE (INCARF-96) DEC. 17-20, 1996 Jamia Millia Islamia, New Delhi.
23. Paper entitled "Design Proposals for new type of clutches essential for process machines with manually energised flywheel motor as an energy source" was presented at "International Symposium on Machines and Mechanisms, University of Belgrade, Belgrade, Yugoslavia, September 2-5, 1997.
24. Paper entitled "Implementation of TQM in Indian Industries - A Survey" was presented at the National Seminar on Upgrading Professional Practice Through Total Quality" jointly organised by M.N.R. Engg. College Allahabad, The Institution of Engineers (I) Allahabad Local Centre and Allahabad Management Association, Allahabad, September 15-16, 1998.
25. Paper entitled "Indian Iron & Steel Industry : Transition Under Economic Reforms" has been published in "Productivity" December 1998 issue.
26. Paper entitled "Innovative Anaerobic Digestion Process Techniques for Converting Waster to Energy and Other Useful Products" was presented at the XIIth International Congress & Exhibition on Research & Development, organised by National Foundation of Indian Engineers (NAFEN) January 15-16 1999, Hotel Samrat, New Delhi.
27. Paper entitled "Software Development for the Estimation of Ground Level Concentration of a Pollutant" was presented at the XIIth International Congress & Exhibition on Research & Development, organized by National Foundation of Indian Engineers (NAFEN) January 15-16 1999.
28. Paper entitled "Pollution Due to electroplating in Lock Industry at Aligarh City" was presented at the XII International Congress & Exhibition on Research & Development, organized by National Foundation of Indian Engineers (NAFEN), January 15-16, 1999

29. Paper entitled "Mechanical Engineering Education – Challenges Ahead – Technology Management" was presented and subsequently published in the Proceedings of 11th ISME Conference at IIT Delhi February 3-5, 1999
30. Paper entitled "Role of T.Q.M. in Metrological Industries" was presented and subsequently published in the proceedings of 2nd International Conference on Metrology, Quality and Global Trade (MQGT-99) organized by National Physical Laboratory, New Delhi-24-25, February 1999.
31. Paper entitled "Industrial Robotics & Technical Hurdles: A Perspective" was presented at RIMS-99 organized by Institution of Engineers at HMT Pinjore, April 24, 1999 and subsequently published in its proceedings.
32. Paper entitled "Lethality of Environment –Killing us Softly" was presented at the International Conference on Environmental Challenges for the New Millenium, Jamia Millia Islamia, New Delhi, November 25-27, 1999.
33. Paper entitled "Introduction of CIM in Engineering Colleges: Experimental Hurdles" was presented and subsequently published in the proceedings of National Conference on World Class Manufacturing System-2000 at BEIT Jhansi, August 18-19, 2000.
34. Paper entitled "Kinematic Analysis of Robotic arm ER-VIII" was presented and subsequently published in the proceedings of IPROM-2000 at Priyadarshini College of Engineering & Architecture, Nagpur, January 17-20, 2001.
35. Paper entitled "Generation of part program and profile cutting on CNC Machines" was presented and subsequently published in the proceedings of Indian National Conference on applications of computer in Engineering and communication, 2001, College of Engineering, Osmanabad, March 24-25, 2001.
36. Paper entitled "Modern Manufacturing Technique-OPEN CIM" was presented and subsequently published in the proceedings of Recent Advances in Materials Processing RAMP-2001, Annamalai University, Annamalai Ngr, Tamil Nadu, Sept 7-8, 2001.
37. Paper entitled "Robotic Grasping –Some Challenging issues" was presented and subsequently published in the proceedings of National Conference on Advanced Trends in Mech. Engg Research and Development, Deptt. Of Mech. Engg. J.N.T.U College of Engg., Anantapur, A.P. Oct-18, 2001.
38. Paper entitled "Robotic Manipulation-An Important Issue" was presented and subsequently published in the proceedings of Institution of Engineers, All India Seminar, Deptt. of Mech. Engg. REC Rourkela, Orissa, Nov 17-18, 2001.
39. Paper entitled "CIM laboratory – A Requirement of Engineering Colleges", was presented and subsequently published in the proceedings of IV International conference on Mech. Engg. -2001, BUET Dhaka, Dec-26-28, 2001.
40. Paper entitled "Developing Trends in Computer Aided Manufacturing" was presented and subsequently published in the proceedings of National conference

- on Recent Trends In Manufacturing Technology and Management, Deptt of Production Engg., Adhiyamaan college of Engg. Housur Tamil Nadu, Jan 28—29,2002
41. Paper entitled "Robotic Grasping properties – A Review" was presented and subsequently published in the proceedings of National conference on Recent Trends in CAD/CAM, Deptt. Of Mech. Engg., J.N.T.U. College of Engg. Kakinada, A.P, 30th March 2002.
  42. Paper entitled "Dexterous Rotation of Cube by Multi Fingered Robotic Hand" was presented and subsequently published in the proceedings of National Conference on TIME-2003, KITS Warangal, Aug.-2003.
  43. Paper entitled "Optimization of clean environment parameters through renewable energy sources" was published in International journal of Ambient Energy, Vol.24, No.2, April-2003, pp67-74
  44. Paper entitled "Simulation of Multifingered Robotic Hand" was presented and subsequently published in the proceedings of XIIth ISME National Conference IIT Roorkee, Dec 30-31,2003.
  45. Paper entitled "Rapid Design & Manufacturing: An Emerging Technology in Product Development" was presented and subsequently published in the proceedings of International Conference on Innovation, Flexibility and Technology Transfer JMI New Delhi 13-15 March 2004.
  46. Paper entitled "Some Studies on Grasp stability of Multifingered Robotic Hand" was presented and subsequently published in the proceedings of National conference on Development and challenges in Manufacturing Engineering-2004. Deptt. of Mech. Engg. MIT Manipal, March 18-20, 2004.
  47. Paper entitled "Screw Motion and Mechanics of Robotic Grasping" was presented and subsequently published in the proceedings of International conference on Industrial and Applied Mathematics, at India International Centre, New Delhi December 04-06, 2004.
  48. Paper entitled "An Evaluation of Shot-Peening on Fatigue Design of Discontinuously Reinforced Composites" was presented and subsequently published in the proceedings of International conference on Recent Advances in Composite Materials, at Department of Mechanical Engineering, Institute of Technology, Banaras Hindu University, Varanasi, 17-19 December 2004.
  49. Paper entitled "Effect of Surface Roughness on Fretting Fatigue Behaviour of EN45A Spring Steel Leaf Springs" was presented and subsequently published in the proceedings of Third International conference on Theoretical, Applied, Computational, Experimental Mechanics, at Department of Mechanical Engineering, IIT, Kharagpur, 28-30 December 2004.
  50. Paper entitled "Material Handling Equipments-A Review" was presented and subsequently published in the proceedings of National Conference on Recent Trends in Design and Manufacturing Technologies (RTDMT - 2005), at

Department of Mechanical Engineering, Kumaraguru College of Technology, Coimbatore, 17-18 March 2005.

51. Paper entitled "Grasp Frictional Equilibrium Analysis of Multifingered Robotic Hand" was presented and subsequently published in the proceedings of National Conference on Recent Trends in Design and Manufacturing Technologies (RTDMT - 2005), at Department of Mechanical Engineering, Kumaraguru College of Technology, Coimbatore, 17-18 March 2005.
52. Paper entitled "Ship Ports Handling Equipments-A Review" was presented and subsequently published in the proceedings of National Conference on Emerging Trends in Manufacturing Systems (ETMS-2005), at Department of Mechanical Engineering, Seth Jai Prakash Mukand Lal, Institute of Engineering & Technology (JMIT), Radaur (Yamuna Nagar), 15-16 March 2005.
53. Paper entitled "Some Aspects in Design of Multifinger Robotic Gripper" was presented and subsequently published in the proceedings of National Conference on Emerging Trends in Manufacturing Systems (ETMS-2005), at Department of Mechanical Engineering, Seth Jai Prakash Mukand Lal, Institute of Engineering & Technology (JMIT), Radaur (Yamuna Nagar), 15-16 March 2005.
54. Paper entitled "Investigation into the Effects of Shot Peening on the Fretting Fatigue Behaviour of 65 Si7 Spring Steel Leaf Springs" has been published in the Journal of Materials: Design and Applications, U.K., issue 1.2, vol. 219, 2005, pp139-147.
55. Paper entitled "Optimization of Smart Paint Thickness in Structures" was presented and subsequently published in the proceedings of ISSS International Conference on Smart Materials, Structures and Systems, July 28-30, 2005, Bangalore, India.
56. Paper entitled "Smart System for Measurement of Compressive Residual Stress Field in Shot Peened Components" was presented and subsequently published in the proceedings of ISSS International Conference on Smart Materials, Structures and Systems, July 28-30, 2005, Indian Institute of Science, Bangalore, India.
57. Paper entitled "Technologies for containers movement in container terminal" was presented and subsequently published in the proceedings of International conference on Advances in Materials, Product Design and Manufacturing Systems (ICMPM 2005), December 2005, Bannari Amman Institute of Technology Sathyamangalalam, Tamil Nadu, India.
58. Paper entitled "Algorithm for Loading/Unloading operations at container terminal-A Survey" was presented and subsequently published in the proceedings of 14th International Conference on Mechanical Engineering in Knowledge Age, December 12-14, 2005, Department of Mechanical Production and Industrial Engineering, Delhi College of Engineering, Bawana Road, Delhi-42, India.

59. Paper entitled "Influence of shot peening parameters on fatigue design of 65Si7 spring steel" has been published in Indian Journal of Engg. & Material Science (paper No. 1160/04), Vol 12(6). 2005.pp515-520.
60. Paper Entitled "A stress based approach for prediction of fatigue life of EN-45A spring steel" has been published in International Journal of Fatigue USA (Paper No. NA463) 2005.
61. Paper entitled "Influence of shot peening intensity on fatigue design reliability of 65Si7 spring steel" has been published in National Journal of Engg. & Materials Science, NISCAIR, 12(6), December 2005, pp515-520.
62. Paper entitled "Fatigue design of shot peened leaf springs", was presented and subsequently published in the National Conference on Advances in Mechanical Engineering (AIME-2006) January 20-21, 2006, Mechanical Engg. Department, Jamia Millia Islamia, New Delhi.
63. Paper entitled "Faults, Diagnosis And Their Remedies In U-Tube Bundle Assembly of A Heat Exchanger: A Case Study" has been published in Industrial Engineering Journal of Indian Institution of Industrial Engineering, Mumbai (2006).
64. Paper entitled "Some Aspects of Flexible Manufacturing System (FMS) In Indian Manufacturing Industries" was presented and subsequently published in the proceedings of the National Conference on Advances in Mechanical Engineering (AIME-2006) January 20-21, 2006, Mechanical Engg. Department, Jamia Millia Islamia. , New Delhi.
65. Paper entitled "Systematic Development of Kinematic Chains From A Given Assortment Of Link" was presented and subsequently published in the proceedings of the National Conference on Advances in Mechanical Engineering (AIME-2006) January 20-21, 2006, Mechanical Engg. Department, Jamia Millia Islamia, New Delhi.
66. Paper entitled "Characterization And Identification Of Complex Kinematic Chains And Mechanisms" was presented and subsequently published in the proceedings of All India Seminar on Advances in Product Development (APD-2006) February 17-18, 2006 at Motilal Nehru National Institute of Technology, Allahabad, India.
67. Paper entitled "Optimization of Microwelds Tendency in Leaf Springs" has been published in Journal of Engg. & Materials Science, Vol 13(6), 2006,pp217-220
68. Paper entitled "A Novel Approach for Improving Fatigue Strength of Shot Peened Surfaces by Damping Measurements" has been published in the Int. Journal of Manufacturing Technology & Research, Vol. 2, No. 1 & 2, June 2006, pp 30-34.
69. Paper entitled "Numerical Optimization for Stable Grasp Using MATLAB" was presented and subsequently published in the proceedings of National Conference on Recent Advances in Computer Aided Engineering (RACE-2006) March 3-4, 2006 at Department of Mechanical Engineering, Osmania University, Hyderabad, India.

70. Paper entitled "Effect of Surface Roughness on Fretting Fatigue Behaviour of EN-45A spring Steel Leaf Springs" has been published in Journal of Engg. Manufacture, Institution of Mechanical Engineers UK, Vol.220, 2006, pp1325-1333.
71. Paper entitled "Identification of Multiple Jointed Kinematic Chains" has been published in Journal of Analysis and Computation, Vol.2, No.2, pp175-182 (2006).
72. Paper entitled "Identification of Kinematic Chains and Distinct Mechanisms Using [EA] Matrix" has been published in Journal of Mechanical Engineering Science, U.K. (2006)
73. Paper entitled "Identification of Kinematic Chains And Distinct Mechanisms" has been published in International Journal Of Applied Engg. Research (IJAER), Jordan, vol.1, no2, pp251-264, August 2006.
74. Paper entitled "A New Method for Mechanism/Kinematic Chain Isomorphism Identification" was presented and subsequently published in the proceedings of National Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME' 06), October 13-14, 2006 at GZS College of Engineering and Technology, Bhatinda (Punjab), India.
75. Paper entitled "A New Method to Identify Isomorphism in Kinematic Chains using Joint-Joint Matrix" was presented and subsequently published in the proceedings of National Conference on Recent Developments in Mechanical Engineering (NCME-2006), Thaper Institute of Engineering & Technology, Patiala (Punjab), Nov. 10-11, 2006.
76. Paper entitled "A New Method to Detect Isomorphism in Kinematic Chains" has been published in 'Katmandu University Journal of Science, Engineering and Technology', Volume 1, No. 3, 2006.
77. Paper entitled "A Method to determine Distinct Mechanism from a given Mechanism/ Kinematic Chain" was presented and subsequently published in the proceedings of International Conference on Advances in Mechanical Engineering (AME 2006), December 1-3, 2006, Fatehgarh Sahib, Punjab, India.
78. Paper entitled "Distinct Mechanisms from Multiple Jointed Kinematic Chains" was presented and subsequently published in the proceedings of International Conference on Advances in Mechanical Engineering (AME 2006), December 1-3, 2006, Fatehgarh Sahib, Punjab, India.
79. Paper entitled "Generalized Presentation and Characterization of Kinematic Chains and Mechanisms having Simple Jointed, Different Kinematic Pairs" was presented and subsequently published in the proceedings of International Congress on Computational Mechanics and Simulation (ICCMS 06), IIT Guwahati, December 8-10, 2006.
80. Paper entitled "Identification of Distinct Mechanisms from Multiple Jointed Kinematic Chains" was presented and subsequently published in the proceedings

- of International Congress on Computational Mechanics and Simulation (ICCMS 06), IIT Guwahati, December 8-10, 2006.
81. Paper entitled "Reverse Engineering of Pillion Step Holder of Hero Honda CBZ Motorbike" was presented and subsequently published in the proceedings at National Conference on Recent Advances in Mechanical Engineering, at Department of Mechanical Engineering, RIEIT, Railmajra, Nawanshahr, Punjab, Sept. 8-9, 2006, India.
  82. Paper entitled "Reverse Engineering of Pillion Step Holder of Hero Honda CBZ Motorbike using CATIA V5" was presented and subsequently published in the proceedings of the conference proceedings of RDFTME 2006 to be held at NIT Hamirpur, Nov. 3-4, 2006.
  83. Paper entitled "A Method to Identify Distinct Mechanisms from A Given Kinematic Chain Using the Concept of Kinematic Pairs" was presented and subsequently published in the proceedings of 'First International Manufacturing Technology Design and Research Conference (22nd AIMTDR), 21-23 December, IIT Roorkee, India, 2006.
  84. Paper entitled "Isomorphism of Mechanism Kinematic Chains Using Joint-Joint Matrix" has been published in 'the Journal of Mechanical Engineering, Slovak Republic, VOL.57, pp1-9, 2006.
  85. Paper entitled "Structural Synthesis of Planar Kinematic Chains Using [JJ] Matrix" has been published in 'Journal of Intelligent System Research' pp11-23, 2006.
  86. Paper entitled "Isomorphism in Kinematic Chains Using Path Matrix" has been accepted in 'the Journal of Institution of Professional Engineers (IPENZ), New Zealand, 2007.
  87. Paper entitled "Developing Trend of Multifingered Robotic Hands" was presented and subsequently published in the proceedings of National Seminar on Intelligent Technologies in Mechanical & Automotive Industries, Department of Mechanical Engineering, Institute of Technology & Management, Gurgaon, Haryana India, Jan 5-6, 2007.
  88. Paper entitled "Four fingered Robotic hand- An Animated Simulation" was presented and subsequently published in the proceedings of International conference on Advances in Machine Design & industry Automation, at Department of Mechanical Engineering, College of Engineering Pune-411005, Maharashtra, India, Jan 10-12, 2007.
  89. Paper entitled "Grasp Stability of Four Fingered Robotic Gripper by Numerical Optimization" was presented and subsequently published in the proceedings of International conference on control, Instrumentation & Mechatronics 28-29 May 2007 at PJ International convention centre, Johar Malaysia.

90. Paper entitled "Influence of Shot Peening Intensity on Fatigue Design Reliability of Discontinuously Reinforced Composites" was presented and subsequently published in the proceedings of "Recent Advances in Composite Materials (ICRACM-2007)" Feb.20-23, 2007, India Habitat Centre, New Delhi, India, jointly organized by IT B.H.U. and Defence Department, U.S.A.
91. Paper entitled "Effect of Shot Peening on the Mechanical Properties of Nitrogen Austenitic Stainless Steel" has been published in Journal of Materials: Design and Applications ' March 2007.
92. Paper entitled "Systematic Development of Kinematic Chains from a Given Assortment of Links " has been published in ' Journal of Institution of Engineers (India), Vol.88, pp.15-19, 2007.
93. A Paper entitled "Computer Integrated Manufacturing of Valve-Pin ", has been published in Lingaya Journal of Professional Studies, Vol.1, pp 95-106, 2007
94. Paper entitled "Softening due to Case Carburizing of Austenitic Stainless Steel" has been presented subsequently published in the proceedings of National Conference on "Futuristic Trends in Mechanical Engineering" at SUSCET, Tangori (Punjab), 2007.
95. Paper entitled "Effect of Shot Peening on the Mechanical Properties of Nitrogen Austenitic Stainless Steel" has been published in Journal of Materials: Design and Applications ,1 March 2007.
96. Paper entitled "Replacement of Solid Carburizing by Shot Peening" has been published in International Journal of Manufacturing Research (Inder Scinece), May 2007.
97. Paper entitled "Selection of Material Handling Equipment Using Expert System" has been presented in International Conference on "Advances in Manufacturing Engineering (ICAME), 2007, Manipal University, Manipal.
98. Paper entitled "Some Dimensions of Flexibility in FMS" has been presented in "GLOGIFT 07" Seventh Global Conference on Flexible Systems Management , JSS Academy Sector - 62, Noida ,15 -17 November, 2007
99. Paper entitled "HFMS: A New Concept in Context of Flexible Manufacturing Systems" has been presented in 'GLOGIFT' 07- Seventh Global Conference on Flexible Systems Management, JSS Academy, Sector-62, Noida, November 15-17, 2007.
100. Paper entitled "Isomorphism and Inversions of Kinematic Chains Up to 10-Links" has been presented in 'the 13th National Conference on Mechanisms and Machines (NACOMM 2007), December 12-13, 2007 in IISc, Bangalore, India.
101. Paper entitled "When shot peening does not enhance fatigue life of leaf springs" has been published in International Journal of Surface Science and Engineering, vol.2, Nos.3/4, 2008.



102. Paper entitled "Influence of Process Parameters on Axial Force during Drilling of Austenitic Stainless Steel a Taguchi Approach" was presented and subsequently published in the proceedings of the 'International conference (ICRDME-2008) at SUS College of Engg. & Technology, Tangori (Mohali), Punjab, India.pp 521-525, 2008
103. Paper entitled "Isomorphism and Inversions of Kinematic Chains Up to 10 Links Using Degrees of Freedom of Kinematic Pairs",has been published in 'International Journal of Computational Methods (IJCM)', Volume: 5, issue: 2 (June 2008) pp.329-339.
104. Paper entitled "Mathematical Model Simulation To Study The Dynamic Response Of Railway Carriage Moving on Tangent Track ", has been communicated to International Journal of Vehicle Dynamics, 2008.
105. Paper entitled "Robotic Hand Dexterity in Finger Manipulation ", was presented and subsequently published in the proceedings of the 'International conference (FAME-2008) at MEPCO Schlenk Engineering College Sivakasi, Dec.2008.
106. Paper entitled "A Graph Theoretic Approach to Evaluate the Intensity of Barriers in the Implementation of FMS ", has been accepted for publication in 'International Journal Of Sciences And Operations Management" Dec.2008.
107. Paper entitled "Identification Of Distinct Mechanisms Of Kinematic Chains" was presented and subsequently published in the proceedings of the National Conference on "Emerging Trends in Mechanical Engineering", ETME-2009,MED,MMM Engineering College, Gorakhpur (U.P.), India, October 12-13
108. Paper entitled "Detection Of Isomorphism Among Kinematic Chains Using Flow Path Matrix" was presented and subsequently published in the proceedings of the National Conference on "Emerging Trends in Mechanical Engineering" ' ETME-;2 009 ,MED,MMM Engineering College, Gorakhpur (U.P.), India,October 12-13
109. Paper entitled "A New Method for Mechanisms Identification" was presented and subsequently published in the proceedings of the International Conference on "Advances in Mechanical Engineering , August 3-5, 2009, S.V. National Institue of Technology, Surat-395007, Gujrat, India
110. Paper entitled "Identification of Isomorphism among kinematic chains and inversions using link adjacency values" has been published in International Journal of Mechanical and Materials Engineering (IJMME) ,Vol. 4(2009),No.3,309-315
111. Paper entitled " Isomorphism in Compound Kinematic Chain " has been accepted for publication in International Journal of Mechanical and Automobile Engineering
112. Paper entitled " A new method to identify isomorphism of kinematic chains" has been accepted for publication in International Journal of Design Engineering

113. Paper entitled “ The influence of single wheelset geometry on dynamic stability of railway conventional carriage moving on tangent track “ was presented and subsequently published in the proceedings of International Conference on” Emerging Technologies in Environmental Science and Engineering”, Department of Civil Engineering,A.M.U. Aligarh, Oct. 26-28, 2009
114. Paper entitled “Study of dynamic behavior of railway single wheelset on curved tracks with single-point and two-point wheel-rail contact “ has been published in International Journal Of Applied Engineering Research (IJAER),ISSN 0973-4562,Volume 5 No. 10,2010 pp.1737-1756
115. Paper entitled “A method of identification kinematic chains and distinct mechanisms” has been published in International Journal of Computer Assisted Mechanics and Engineering Sciences,16:133-141,2009 Polish Academy of Sciences.
116. Paper entitled “Numerical Simulation Model to study the Dynamic Behavior Railway Single Wheelset On Tangent Tracks with Single-point and Two-point Wheel-rail Contact” has been published in International Journal of Applied Engineering Research, Vol.4 No.9(2009), pp.1743-1764
117. Paper entitled “ A graph-theoretic approach to evaluate the intensity of barriers in the implementation of FMS ‘ has been published in international journal of Services and Operation Management,Vol 7,No.1,2010
118. Paper entitled” Simulation Model to Improve Hunting Instability of Railway Carriage Moving on tangent Tracks Using Lateral Semi-active Secondary Suspension” was presented at International Conference on System Dynamics and Control (ICSDC-2010) ,Deptt. Of Instrumentation and Control Engg.,M.I.T. Manipal ,August 20-21,2010.
119. Paper entitled “ Improving Hunting Phenomenon of Railway Carriage Moving on Curved Tracks Using Lateral Semi-active Secondary Suspension “ was presented at International conference on System Dynamics and Control (ICSDC 2010),M.I.T.Manipal,August 20-21,2010
120. Paper entitled “Hunting Phenomenon Study of Railway Carriage on tangent Tracks due to Change in Rail Wheel Geometry” has been published in Journal of Engineering Science and Technology (JESTEC), ME 10-22 ,Taylor University ,Malaysia ,ISSN 1823-4690 ,Vol. 6, No. 2, April 2011
121. Paper entitled “Influence of Vertical Primary Suspension Stiffness Parameter on Dynamic Response Railway Bogie” has been published in International Review of Mechanical Engineering(IREME);Napoli, Italy .
122. Paper entitled”Relationship between damping factor and compressive residual stress for shot-peened austenitic stainless steel” has been published in international journal ISRN Mechanical Engineering , Paper No. ME/867484 ,2011

123. Paper entitled "Investigation to improve hunting stability of railway carriage using semi-active longitudinal primary stiffness suspension" has been published in Journal of Mechanical Engineering Research (JMER) ,Vol.2(2), March 2010
124. Paper entitled " Nonlinear Simulation Model to study vertical and roll dynamic stability of railway single wheelset moving on curved tracks" was presented and subsequently published in the proceedings of 3<sup>rd</sup> International Conference on Advances in Mechanical Engineering (ICAME-2010), January 4-6,2010 at S.V. National Institute of Technology, Surat
125. Paper entitled "Investigation to study the dynamic behavior of railway carriage components moving on curved tracks at critical hunting velocity" has been published in International Journal of Engineering Research and Industrial Applications (IJERIA), ISSN:0974-1518
126. Paper entitled "Improving Hunting Stability of Railway Carriage Model using semi-active longitudinal primary stiffness suspension" has been published in International Journal of Multidisciplinary Research and Advances in Engineering,ISSN:0975-7074 , Vol. 3,No.1, January 2011, pp 107-128
127. Paper entitled" Contact Force Optimization For Stable Grasp Of Multifingered Robotic Grippers" has been accepted for presentation and subsequent publication in the proceeding of "The World Congress on Engineering (WCE 2011), organized by International Association of Engineers, London,U.K.,July 6-8,2011
128. Paper entitled"Railway carriage model to study the influence of vertical secondary stiffness on ride comfort of railway carbody running on curved tracks" has been published in International Journal "Modern Applied Science" , Canadian Center of Science and Education , (CCSE), Vol.5,No.2, pp. 11-25 ,April 2011.
129. Paper entitled "Influence of vertical primary suspension stiffness parameter on dynamic response of railway bogie " has been published in "International Review of Mechanical Engineering (IREME)
130. Paper entitled " Railly carriage simulation model to study the influence of vertical secondary suspension stiffness on ride comfort of railway carbody" has been published in the Proceedings of Institution of Mechanical Engineers, Vol.225 Part C: Journal of Mechanical Engineering Science ,pp. 1349-1359 , U.K.
131. Paper entitled " Modeling and Simulation to study the Dynamic Response of a Railway Carriage Components Moving on Tangent Tracks at Critical Hunting

Velocity “ has been published in Australian Journal of Mechanical Engineering (AJME) 2011.

132. Paper entitled “ Application of link adjacency values to detect isomorphism among kinematic chains” has been published in International Journal of Mechanics and Materials in Design “ ,Vol.6,pp 157-162 ,2010
133. Paper entitled “ A method for identification of isomorphism and structural properties of kinematic chains “ has been published in International journal of Materials and Structural Integrity ( IJMSI ) ,Vol. 5,N0.4,pp 376-388 ,2011
134. Paper entitled “ Influence of Residual Stress on Fatigue Design of AISI 304 Stainless Steel” has been published in Journal of Engineering Research (IJER) ,Vol. 8,No. 1,January 2011
135. Paper Entitled “ Dynamic Response of Railway Bogie Due To Change In Vertical Primary Suspension Stiffness Parameters “ has been published in “ Journal of Engineering Sciences , Sudan ,pp. 23-41, 2011.
- 136 Paper entitled “ Isomorphism Identification Among Kinematic Chains Having Upto 2 Prismatic Pairs” has been sent to ASME International Conference IMECE-2012