

Resume Proforma



1. Name AAS MOHAMMAD
2. Designation: Professor
3. Office Address: Mech. Engg. Dept.
F/o Engg. & Tech. JMI
- Telephone: 01126981259
4. Residential Address: C -153, Shaheen Bagh, Abul Fazal Enclave-II
Jamia Nagar, New Delhi 110025
- Mobile No.: 09891367462
5. Email (office): Email: amohammad1@jmi.ac.in
(Private) : am200647@gmail.com
6. Date of Birth: 10/01/1958
7. Date of Joining Service J.M.I.: 06/09/1984
8. Field of Specialization: Mechanical Engineering (Machine Design)
9. Teaching Experience: Years 33
10. Research Experience: Years 10
11. Employment Profile

Job Title	Employer	From	To
Instructor	University Polytechnic JMI	06/09/1984	22/02/1995
Lecturer	University Polytechnic JMI	23/02/1995	11/08/1999
Lecturer	Mech. Engg. Dept. F/O Engg. & Tech. JMI	12/08/1999	11/08/2005
Lecturer (Senior Scale)	Mech. Engg. Dept. F/O Engg. & Tech. JMI	12/08/2005	04/07/2007
Reader	Mech. Engg. Dept. F/O Engg. & Tech. JMI	05/07/2007	04/07/2010
Associate Professor	Mech. Engg. Dept. F/O Engg. & Tech. JMI	05/07/2010	31/07/2013
Professor	Mech. Engg. Dept. F/O Engg. & Tech. JMI	01/08/2013	Till Date

12. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph. D. (Mechanical Engineering)	JMI	2007	N.A	Mechanism and Machine Design
M. Tech. (Mechanical Engineering)	IIT, Delhi	1999	First	Mechanical Equipment Design
B. E. (Part Time)	JMI	1995	First	Mechanical Engineering
Diploma Drafting & Designing	A.M.U.	1981	First	Mechanical Engineering
Intermediate	U. P. Board	1976	Second	Physics, Chemistry, Biology, Hindi, English
High School	U. P. Board	1974	Second	Physics, Chemistry, Maths, Biology, Hindi, English

13. Awards/Fellowships/Associate ships etc.

- First Position in Diploma in Engineering in Aligarh Muslim University
- B. E. Mechanical Engineering in Jamia Millia Islamia.

14. Details of Academic Work

(i) **Curriculum Development:**

Preparing the syllabus of Post-Graduation program (M.Tech.) of the

- Finite Element Methods
- Theoretical and Experimental stress analysis

(ii) **Courses taught at Postgraduate and Undergraduate levels**

Courses taught at Postgraduate levels:

- Finite Element Methods
- Theoretical and Experimental stress analysis
- Robotics

Courses taught at Undergraduate levels:

- Machine Design, Theory of Machines, Stress Analysis, Mechanics of Solids, Engg. Mechanics, Machine Drawing and Engg. Graphics.

(iii) **Projects guided at Postgraduate level 15+**

(iv) Any other contribution(s)

- Central Superintendent of B.Tech & M.Tech Entrance Test 2002
- Assistant coordinator for Ph. D. Entrance Test 2010
- Assistant superintendent of B. Tech. Entrance Test 4 times
- Identification officer for B. Tech. Entrance Test 2 times
- Incharge, Stress Analysis Laboratory
- Sessional and attendance In charge of M. Tech. Classes
- Laboratory Incharge of Mechanics of Solid.
- Departmental Ph. D. Coordinator

15. Number of PhDs guided

Name of the Ph.D. Scholar	Title of Ph.D. Thesis	Name of Co-Supervisor(s) if any	Status
Mr. Manoj Kumar Lohmi	“Characterization of Planer Kinematic Chains and their Derived Mechanisms”	Prof. I. A. Khan	Awarded 2014
Ms. Suha Karim Shihab	“Experimental Studies in Turning High Hardness Alloy Steel with High Performance Tools”	Prof. Z. A. Khan	Awarded 2015
Mr. Dharmendra Singh	“Identification and Synthesis of Kinematic Chains and their Derived Mechanisms”	Prof. I. A. Khan	Awarded 2016
Mr.Khalid Nafees	“Some Studies On Dimensional Synthesis Of Planar Kinematic Linkages”	-	Awarded 2017
Mr.Hasan Zakir Jafri	“Experimental Modal Analysis of Mechanical Systems”	-	Awarded 2018
Mohammad Mohsin	Characterization and Role of Compaction Pressure on Green and Sintered Properties of Synthesise Aluminium Composites (ACs)	Prof. Mohd. Suhaib	Awarded 2018
Vipin Kaushik	A Computational Approach For The Modeling Of Planar Multiple Jointed Kinematic Chain And Mechanisms.	-	Defended in January, 12 2021

Mohd. Rashid Akhtar	Analysis And Optimization Of Composite Leaf Spring Using Intelligent Techniques	-	Thesis submitted
Naseem Ahamad	A Study on Mechanical Properties of Composites Materials	Dr Pallav Gupta (Amity University, U.P.)	Thesis submitted
Abdul Qaiyum	Some Studies on Dimensional Synthesis of 1-F Planar Linkages	-	In Progress
Sayeed A Khan	Structural Synthesis of Planar Kinematic Chains and their Derived Mechanisms	Prof. Sabah Khan	Continued

16. Membership of Learned/Scientific Societies

Type of Membership (Member/Life Member Any other)	Organization	Membership No. with date
Life Membership	ISTE	

17. Research Publications

Publications in International/National Journals

- [Alihasan, R. A. Khan and Aas Moh'd, 2006] "Characterization and Identification of Complex Kinematic Chains and Mechanisms" Proceeding of The All India Seminar on Advances in Product Development at Institution of Engineers (India) Local Center, Allahabad, February, 17-18, 2006
- [Alihasan, R. A. Khan and Aas Moh'd, 2006] "Identification of Multiple Jointed Kinematic Chains" Journal of Analysis and Computation, Bangalore, India, Vol. 2, No. 2, 2006 accepted for publication.
- [Aas Moh'd, R. A. Khan and V. P. Agrawal, 2006] "Identification of Kinematic Chains and Mechanisms Using [EA] Matrix", Institution of Mechanical Engineering. (UK), Journal of Mechanical Engineering and Science, accepted on 5th June 2006.
- [Alihasan, R. A. Khan and Aas Moh'd, 2006] "Systematic Development of Kinematic Chains and Mechanisms from a Given Assortment of Links", Journal of Institution of Engineers (India) Vol. 88, pp.15-19, 2007.
- [Aas Mohammad, I.A. Khan and M. K. Lohumi, 2008] "Interactive Weighted Distance Approach for Identification of Distinct Mechanisms Derived from the Kinematic Chains", International Journal of Applied Engineering Research, ISSN 0973-4562 Volume 3, Number 9 (2008), pp. 1217–1226.
- [M. K. Lohumi, Aas Mohammad and I. A. Khan, 2010] "A New Identification String for Kinematic Chains and Their Derived Mechanisms", International Journal of Applied Engineering Research ISSN 0973-4562 Volume 5 Number 1 (2010) pp. 121–129.

- 7 [Aas Mohammad and Mohd. Shoeb, 2010] “Some Studies on the Modelling of Kinematic Chain ‘By Using the Concept of Multiple Jointing and Interactive Weighted Distance Matrix” International Journal of Applied Engineering Research ISSN 0973-4562 Volume 5 Number 12 (2010) pp. 2127–2142
- 8 [Haider Faisal Helal; Aas Mohammad , Karim H. Ali, 2012] “A Study on Dynamic Analysis of Multi-Mass Lumped Parameter System By Holzer’s Method”, International J. of Engg. Research & Indu. Appls. (IJERIA), ISSN 0974-1518, Vol. 5, No. II (May 2012), pp 267-286.
- 9 [Saeib A. Alhadi Faroun, Mohd Islam, Aas Mohd, Vajid Ali and Urvashi Vashisht, 2012] “Checking the Viscosity of Caster Oil and Fly Ash Composites for Preparing Polymer Materials” International Journal of Advanced Material Science, ISSN 2231-1211, Volume 3, Number 2, pp. 137-145.
- 10 [Saeib A. Alhadi Faroun, Mohd Islam, Aas Mohd, Vajid Ali and Urvashi Vashisht, 2012] “Selection of Optimum Areas of Water Heaters by Using Dynamic Programming” International Journal of Applied Engineering Research ISSN 0973-4562 Volume 7 Number 3, pp. 303-311.
- 11 [Saeib A. Alhadi Faroun, Mohd Islam, Aas Mohd, Vajid Ali and Urvashi Vashisht, 2013], “Impact Strength Checking of Polyurethane Samples Mixed with Different Fly Ash Percentages”, International Journal of Engineering Studies, Volume 5 No-1 (2013) pp. 107-110.
- 12 [M. K. Lohumi, Aas Mohammad and I. A. Khan, 2012], “ Hierarchical Clustering Approach for Detection of Isomorphism Among Planar Kinematic Chains and Their Derived Mechanisms”, Journal of Mechanical Science and Technology, Springer and KSME, Volume 26, Number 12, pp. 4041-4046.
- 13 [Dharmendra Singh, Aas Mohammad and Prof. R. A. Khan, 2013], “Detection of isomorphism among kinematic chains by assigning type number of different joints”, Int. Journal Of Applied Science And Engineering Research, Vol. 2, 265-271, Issue 3, 2013.
- 14 [Suha, K. Shihaba, Zahid A. Khan, Aas Mohammad And Arshad Noor, Siddiquee, 2013], “Effect Of Cryogenic Cooling On Surface Integrity In Turning Of Hard Alloy Steel”, Indian journal of applied research, Vol. 3, 64-68, Issue 3, July 2013.
- 15 [Suha, K. Shihaba, Zahid A. Khan, Aas Mohammad And Arshad Noor, Siddiquee, 2013], “Application of Response Surface Methodology for Determining Cutting Forces in Hard Turning Using Castrol Coolant”, Int. J. of Advanced Materials Manufacturing & Characterization, Vol 3, Issue 1 (2013).
- 16 [Mohd Shadab Alam, Mohd Suhaib and Aas Mohd, 2013] “Characterization of Distinct Mechanisms from the given Kinematic Chains Using (WSSPD) Matrix”, Interscience Research Network, www.interscience.ac.in
- 17 [Dr. Aas Mohammad, Yogesh Kumar, 2013], “ Dimensional Synthesis Of 6-Bar Linkage For Eight Precision Points Path Generation”, Int. Journal of mechanical engineering and technology, Vol. 4, 279-285, October 2013 .
- 18 [Suha K. Shihab, Zahid A. Khan, Aas Mohammad and Arshad Noor Siddiquee, 2014] “Cryogenic Hard Turning of Alloy Steel with Multilayer Hard Surface Coatings (TiN/TiCN/Al₂O₃/TiN) Insert using RSM” International Journal of Current Engineering and Technology, Special Issue-2, February (2014) 265 – 271

- 19 [Suha K. Shihab, Zahid A. Khan, **Aas Mohammad** and Arshad Noor Siddiquee, 2014] “Investigations on the Effect of CNC Dry Hard Turning Process Parameters on Surface Integrity:A Multi-performance Characteristics Optimization”, J. Manuf. Sci. Prod. 2014; aop, (2014) 1- 8.
- 20 [Suha K. Shihab, Zahid A. Khan, **Aas Mohammad** and Arshad Noor Siddiquee, 2014], “A review of turning of hard steels used in bearing and automotive applications”, Production & Manufacturing Research: An Open Access Journal, January 2014, (2014) 2-26
- 21 [Dharmendra singh, **Aas Mohammad** , R. A. Khan 2014 “Resistance distance method for determination of isomorphism among planar kinematic chains and their derived mechanism" International Journal of Mechanical Engineering and Technology” (**IJMET**) ISSN 0976, Vol-5 Issue 3, (2014) 122-129.
- 22 [Dharmendra singh, **Aas Mohammad**, R. A. Khan, 2016], “Resistance distance method for determination of isomorphism, stiffness and best input link among planar Kinematic chains”, Journal of Mechanical Science and Technology 30 (1) (2016) 221~227.
- 23 [Mohd. Shadab Alam , Mohd. Suhaib and **Aas Mohd** 2016.] “A Method of Isomorphism Detection among the Planar Kinematic Chains Using Invariant of Weighted Squared Shortest Path Distance [WSSPD] Matrix”, Journal of Environmental Science, Computer Science and Engineering & Technology, Vol.5. No.1, 001-009, December 2015- February 2016, E-ISSN: 2278–179X
- 24 [Mohd Shadab Alam, Mohd. Suhaib and **Aas Mohd**, 2016] ,”New Matrix Representation And Isomorphism Identification Among The Planar Kinematic Chains By Skeleton Matrix”, International Journal of Latest Engineering and Management Research (IJLEMR), Volume 02 - Issue 07 , PP. 44-52, July 2017, ISSN: 2455-4847
- 25 [Khalid Nafees and **Aas Mohammad**, 2016], “Dimensional synthesis of six-bar Stephenson III mechanism for 12 precision points path generation”, Int. J. Mechanisms and Robotic Systems, Vol. 3, No. 1, pp 80-90, 2016
- 26 [Khalid Nafees and Aas Mohammad, 2016], “Dimensional synthesis of six-bar StephensonII linkage for fifteen precision points path generation”, Perspectives in Science, Elsevier, vol. 8, pp 485—487, 2016
- 27 [Khalid Nafees and **Aas Mohammad**, 2016], “Synthesis of a Planar Five-Bar Mechanism Consisting of Two Binary Links Having Two Offset Tracing Points for Motion Between TwoExtreme Positions”, Journal of Mechanisms and Robotics Copyright VC 2016 by ASME, Vol. 8 / 044507-1, August 2016
- 28 [Khalid Nafees and **Aas Mohammad**, 2016], “Optimal Dimensional Synthesis Of Six-Bar Stephenson I Mechanism For Path Generation”, International Journal of Mechanical Engineering and Technology (IJMET), Volume 7, Issue 6, pp.535–546, November–December 2016. [Khalid Nafees and Aas Mohammad, 2017],“Dimensional synthesis of a planar five-bar mechanism for motion between two extreme positions”, Australian Journal of Mechanical Engineering, On line, DOI: 10.1080/14484846.2017.1335456 To link to this article: <http://dx.doi.org/10.1080/14484846.2017.1335456>
- 29 [Mohd Shadab Alam , Mohd. Suhaib and **Aas Mohd.**, 2017]”Squared shortest Path Distance [SSPD] Matrix Approach To identify isomorphic and non -isomorphic

- kinematic chains”, International Journal of Latest Technology in Engineering, Management & Applied Science, Volume VI, Issue VII, July 2017.
- 30 [Mohd Shadab Alam , Mohd. Suhaib and **Aas Mohd**, 2017], “Isomorphism identification and Structural Similarity & Dissimilarity Among The Kinematic Chains Based On [WSSP] Matrix”, International Research Journal of Engineering and Technology (IRJET), Volume: 04 Issue: 08, Aug -2017, E-ISSN: 2395-0056,P-ISSN: 2395-0072.
 - 31 [Abdul Qaiyum, **Aas Mohammad** and Hasan Zakir Jafri, 2017], “Dimensional synthesis and optimization of planar linkages for rigid body guidance: A review”, in International Conference on Innovative Product Design & Development, July 2017.
 - 32 [Vipin Kaushik, **Aas Mohammad**, 2017], “A Mathematical Approach to Identify the number of Distinct Mechanisms of Multiple Jointed Kinematic Chains Using Concepts of MATLAB”, International Journal of Control Theory and Applications Vol.10, No.4, pp 1-9. ISSN: 0974-5572.
 - 33 [Vipin Kaushik, **Aas Mohammad**, 2018], “Modeling and Isomorphism verification of Eight Links Base Kinematic chains using MATLAB”, International Journal of Advanced Research in Engineering and Technology (IJAERT) Vol.9, Issue 6, November-December 2018, pp 172-177. ISSN Print: 0976-6480 and ISSN online: 0976-6499.
 - 34 [Naseem Ahamad, **Aas Mohammad**, Kishor Kumar Sadasivuni, Pallav Gupta, 2020] Structural and Mechanical Characterization of Stir Cast Al-Al₂O₃-TiO₂ Hybrid Metal Matrix Composites” Journal of Composite Materials 2020, Vol. 54(21) 2985–2997. <https://doi.org/10.1177/0021998320906207>
 - 35 [Naseem Ahamad, **Aas Mohammad**, Kishor Kumar Sadasivuni, Pallav Gupta, 2020], Phase, Microstructure and Tensile Strength of Al-Al₂O₃-C Hybrid Metal Matrix Composites” Part C: Journal of Mechanical Engineering Science, Vol. 234(13) 2681-2693 2020, <https://doi.org/10.1177/0954406220909846>
 - 36 [Naseem Ahamad, **Aas Mohammad**, Kishor Kumar Sadasivuni, Pallav Gupta, 2020], Wear, Optimization and Surface Analysis of Al-Al₂O₃-TiO₂ Hybrid Metal Matrix Composites” Part J: Journal of Engineering Tribology 2021, Vol. 235(1) 93-102.DOI: 10.1177/1350650120970432
 - 37 [Naseem Ahamad, **Aas Mohammad**, Pallav Gupta, 2020], Wear Characteristics of Al Matrix reinforced Al₂O₃-Carbon Hybrid Metal Matrix Composites” International Conference on Future Learning Aspects of Mechanical Engineering (FLAME-2020), 5th – 7th August 2020, Amity University Uttar Pradesh, Noida India, Materials Today: Proceedings – Elsevier, <https://doi.org/10.1016/j.matpr.2020.05.739>
 - 38 [Abdul Qaiyum, **Aas Mohammad**, 2020] “Optimal synthesis of Stephenson-III linkage using particle swarm optimization”, *International Journal of Mechanical and Production Engineering Research and Development*, Volume 10, Issue 3, **June 2020**, p.p. 15989-15989. (Scopus)
 - 39 [Abdul Qaiyum, **Aas Mohammad**, 2020] “Optimal synthesis of six bar mechanism using particle swarm optimization”, *International Journal of Recent Technology and Engineering*, Volume 8, Issue 6, **March 2020**, p.p. 5287-5292. (Scopus)

Recent Publications in National/International Conferences

- 1 Khalid Nafees and **Aas Mohammad**, “Dimensional Synthesis of Mechanisms_ A Review” Inernational conference on Advancements in Mechanical Engineering”, Alfalah University, Dhauj Faridabad, August 7-8, 2014,
- 2 Khalid Nafees, Zulquernain Mallick and **Aas Mohammad**, “Investigation on Readability Task Under the Varying Level of Text/Background Colour and Font Sizes”” Inernational conference on Advancements in Mechanical Engineering”, Alfalah University, Dhauj Faridabad, August 7-8, 2014,
- 3 Dharmendra singh, **Aas Mohammad**, R. A. Khan “Resistance distance method for determination of isomorphism among planar kinematic chains and their

- derived mechanism“ National Conference on **Ajay Kumar Garg Engg College** 29-30 April 2014.
- 4 Suha K. Shihab, Zahid A. Khan, **Aas Mohammad** and Arshad Noor Siddiquee “RSM Based Study of Cutting Temperature during Hard Turningwith Multilayer Coated Carbide Insert”, 3rd International Conference on Materials Processing and Characterisation (ICMPC 2014), 1233 – 1242.
 - 5 Suha K. Shihab, Zahid A. Khan, **Aas Mohammad** and Arshad Noor Siddiquee, “Optimization of surface integrity in dry hard turning using RSM” Sadhana, Indian Academy of Sciences Vol. 39, Part 5, October 2014, pp. 1035–1053.
 - 6 Mohd Shadab Alam1, Mohd. Suhaib & **Aas Mohd** ,”Isomorphism Recognition Among The Planar Kinematic Chains Using Squared Shortest Path Distance [Sspd] Matrix”, National Conference On Mechanical Engineering – Ideas, Innovations & Initiatives (NCMEI3-2016).
 - 7 Mohd Shadab Alam, Mohd. Suhaib & **Aas Mohd**, “Isomorphism Identification Among The Planar Kinematic Chains By The[WSSPD] Matrix”, An International Conference & Exhibition On Cutting Edge Technological Challenges In Mechanical Engineering.
 - 8 Mohd.Shadab Alam, Mohd.Suhaib, **Aas Mohammad**, “Application of Chromatic polynomials approach for the detection of isomorphism”, Delhi Technical Campus, 10th January, 2018.
 - 9 Vipin Kaushik, **Aas Mohd.**, “A Mathematical Approach to Identify the number of Distinct Mechanisms of Multiple Jointed Kinematic Chains Using Concepts of MATLAB”, 2nd Global Leadership Research Conference (GLRC), Amity Business School, Amity University, Noida 23rd to 24th Feb., 2017.
 - 10 Vipin Kaushik, **Aas Mohd.**, “Modeling of Multiple Jointed Kinematic Chains using the polynomial coefficients derived from the Interactive weighted matrices of kinematic graphs”, International Conference on Emerging Trends in Electro-Mechanical Technologies and Management (TEMT-2019), HMR Institute of Technology and Management New Delhi, India, July 26-27, 2019.