

# Dr. Azher Jameel

Assistant Professor

Department of Mechanical Engineering

Islamic University of Science and Technology, Awantipora, J&K, India.

Phone: 01933-247954 ; Mobile: 8715028970

E-mail: jameelazher@gmail.com, azher.jameel@islamicuniversity.edu.in

## Areas of Interest

1. Fracture and Fatigue in Structures
2. Computational Solid Mechanics
3. FEM, XFEM and Meshfree Methods
4. Large Deformation Analysis
5. Elasto-Plastic Analysis

## Professional Experience

S.No	Position Held	University	Responsibility	From	To
1.	Assistant Professor	IUST Awantipora	Teaching and Research	05-05-2018	Till Date
2.	Assistant Professor	SMVDU Katra	Teaching and Research	01-01-2015	04-05-2018

## Educational Qualifications

S.No	Class/Degree	University	Year of passing	CGPA (percentage)	Remarks
1.	PH.D (Computational Mechanics)	N.I.T Srinagar	2017	--	Awarded
2.	M.TECH (CAD, CAM & Robotics)	I.I.T Roorkee	2013	9.0 (90%)	Topper (Distinction)
3.	B.TECH (Mechanical Engineering)	N.I.T Srinagar	2010	7.194 (71.94%)	1 <sup>st</sup> Division
4.	12 <sup>TH</sup> STANDARD	JK BOSE	2006	80.0 %	Distinction
5.	10 <sup>TH</sup> STANDARD	JK BOSE	2004	85.6 %	Distinction

## GATE Qualification

Year	Marks obtained	Max. Marks	Percentile
GATE 2011	60.67	100	99.2

## Ph.D / M.Tech / B.Tech Thesis Details

Degree	Thesis / project Title	Supervisor
Ph. D	Applications of Enriched Methods in Solving Problems Containing Discontinuities	Prof. G. A. Harmain (NIT Srinagar)
M. Tech	Numerical Simulation of Contact Problems Using XFEM/EFGM	Prof. I. V. Singh, Prof. B. K. Mishra (IIT Roorkee)
B. Tech	Design of a Safety System for Blind Curved Roads	Prof. G. A. Harmain (NIT Srinagar)

## Publications / Research Papers

	Published/Accepted	Under-Review	Total
Journals	22	1	23
Conferences	29	0	29
Total	51	1	52

## Computer / Software Skills

1. SOLIDWORKS
2. MATLAB
3. ANSYS
4. ABAQUS

## Member of Professional Bodies

1. Life Member, Indian Society of Theoretical and Applied Mechanics (ISTAM).
2. Life Member, Indian Institution of Industrial Engineering (IIIE).

## Reviewer of Journals

1. Fatigue and Fracture of Engineering Materials and Structures (*John-Wiley*).
2. Mechanics of Advanced Materials and Structures (*Taylor and Francis*).
3. Archive of Applied Mechanics (*Springer*).
4. Indian Journal of Engineering and Materials Sciences.
5. The Open Materials Science Journal (*Bentham Open*).

## Member of Editorial Boards

1. International Journal of Scientific Engineering and Science.
2. Asian Journal of Applied Science and Technology.
3. International Journal of Materials Science Applications.

## Session Chair in Conferences

1. National Conference on “Innovative Trends in Mechanical Engineering -2017 (NCITME-2017)” held at the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India, March 3-4, 2017.

## Invited Lectures

1. Delivered eight expert lectures on “Fundamentals and Applications of Finite Element Methods” in the Department of Mechanical Engineering, National Institute of Technology Srinagar, from 16<sup>th</sup> – 20<sup>th</sup> October, 2017.

## Foreign Universities Visited

1. Visited Imperial College London, King’s College London from 12<sup>th</sup> – 13<sup>th</sup> March, 2017.
2. Visited University of Birmingham from 16<sup>th</sup> – 17<sup>th</sup> March, 2017.

## Conferences / Workshops Organized

1. Member, International Scientific Committee, “4th International Conference on Applied Materials and Manufacturing Technology (ICAMMT 2018)” held at the Kunming, China, September 21-23, 2018.
2. Member, Organizing Committee, “6<sup>th</sup> World Conference on Applied Science, Engineering and Technology-2018 (WCASET-2018)” held at the Goa, India, January 2-3, 2018.
3. Member, Organizing Committee, “One Week Workshop on Ultrasonic Testing (Level-II)” held at the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India, November 29-December 03, 2017.
4. Member, Organizing Committee, “National Seminar on Research Opportunities and Challenges in Mechanical Engineering” held at the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India, April 8, 2017.
5. Member, Organizing Committee, “National Conference on Innovative Trends in Mechanical Engineering -2017 (NCITME-2017)” held at the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India, March 3-4, 2017.

## Courses Taught

1. Mechanics of Solids (UG)
2. Mechanical Vibrations (UG)
3. Machine Design (UG)
4. Fracture Mechanics (UG)
5. Computer Aided Design (PG)
6. Finite Element Methods (PG)
7. Computer Integrated Manufacturing Systems(PG)
8. Mechatronics (PG)

## Conferences / Workshops / Short Term Courses Attended

1. Attended four weeks “*General Orientation Course*” at the Human Resource Development Center, University of Kashmir, Hazratbal, from 25-02-2019 to 26-03-2019 (4 weeks).
2. Attended one day workshop on “*NPTEL Awareness*”, organized by IIT Kanpur at Islamic University of Science & Technology Awantipora on 30th November, 2018.
3. Attended three days workshop on “*A Roadmap to Growth of Teaching, Learning and Research*”, organized by Department of Management Studies, Islamic University of Science and Technology Awantipora in association with IIT Roorkee, from 16-08-2018 to 18-08-2018.
4. Attended one week faculty development program on “*Sustainable Design and Manufacturing*”, organized by Department of Mechanical Engineering, Shri Mata Vaishno Devi University Katra, from 12-02-2018 to 16-02-2018 (1 Week).
5. Attended one day workshop on “*Patent Drafting and Filing*”, organized by Department of Biotechnology, Shri Mata Vaishno Devi University, Katra in collaboration with Technology Information, Forecasting and Assessment Council (TIFAC), Department of Science & Technology (DST), Govt. of India on 20th October, 2016.
6. Attended an ICT based short term course on “*Optimization Using MATLAB*”, organized by Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra in collaboration with NITTTR, Chandigarh from 24-10-2016 to 28-10-2016 (1 Week).
7. Attended an ICT based short term course on “*Recent Trends in Automobile Engineering*”, organized by the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra in collaboration with NITTTR, Chandigarh from 29-02-2016 to 04-03-2016 (1 Week).
8. Attended and presented a paper in the *19<sup>th</sup> International Conference on Theoretical and Computational Mechanics (ICTCM-2017)*, held at London, United Kingdom, March 14-15, 2017
9. Attended and presented a paper in the *International Conference on Advanced Material Technologies (ICAMT-2016)*, held at Dadi Institute of Engineering and Technology, Vishakapatnam, Andhra Pradesh, India, December 27-28, 2016.
10. Attended and presented a paper in the *1<sup>st</sup> International Conference on Innovative Advancements in Engineering and Technology (IAET-2014)*, held at Jaipur National University, Jaipur, India, March 7-8, 2014.



11. Attended and presented two papers in the 59<sup>th</sup> Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2014), held at Alliance University, Anekal, Karnataka, India, December 17-20, 2014.
12. Attended and presented two papers in the 58<sup>th</sup> Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2013), held at Bengal Engineering and Science University, Shibpur, India, December 18-21, 2013.
13. Attended and presented a paper in the 57<sup>th</sup> Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2012), held at Defense Institute of Advanced Technology, Pune, India, December 17-20, 2012.

### New Techniques Developed

1. Developed a new novel technique based on the coupling of the conventional finite element method with iso-geometric analysis. The proposed technique is called as the “The Coupled FE-IGA method” and was first published by “Mechanics of Advanced Materials and Structures” in 2018.

### Ph. D Thesis Guidance

S. No.	Name of Candidate	Research Area	Co-guide (if any)	Year of Completion
1.	Showkat Ahmed	Advanced Computational Mechanics	Prof. G. A. Harmain (NIT Srinagar)	In Progress
2.	Aazim Shafi Lone	Advanced Computational Mechanics	Prof. G. A. Harmain (NIT Srinagar)	In Progress
3.	Ummer Amin Sheikh	Experimental Solid Mechanics	-	In Progress
4.	Vibushit Gupta	Advanced Computational Mechanics	Dr. Yatheshth Anand (SMVDU Katra)	In Progress

### M. Tech Thesis Guidance

S. No.	Name of Candidate	Dissertation Title	Co-guide (if any)	Year of Completion
1.	Abhinav Sharma	Behavior of Interfacial Cracks Under Static and Dynamic Thermo-elastic Loads.	Er. Amit Kumar Sinha	May, 2017
2.	Ummer Amin Sheikh	Elasto-Plastic Crack Growth Analysis by FEM	--	May, 2018

## B. Tech Project Guidance

S. No.	Name of Candidate	Project Title	Year of Completion
1.	Akshay Bhat, Ashutosh Jha, Peeyush Singhal, Vikas Maurya	Estimation of Crack Tip Plastic Zones by XFEM.	June, 2016
2.	Mayank Khajuria, Charanjeet Jolly, Neeraj Sharma, Rajeev Bali, Vikash Jutsi	Behavior of Static and Dynamic Cracks in Presence of Inclusions and Holes.	May, 2017
3.	Avnish Kumar, Danish Ali	Development of Level Set Methodologies for Complex Material Irregularities	May, 2018

## Administrative Responsibilities held

S. No.	Position Held	University	From	To
1.	I/c Head, Department. of Mech. Engg.	IUST Awantipora	Nov. 2018	Till Date
2.	Coordinator, B. Tech (First Year)	IUST Awantipora	July. 2018	Till Date
3.	Incharge, Acad. Counselling & Mentoring	IUST Awantipora	July. 2018	Till Date
4.	Member, DRC, DoME	IUST Awantipora	July. 2018	Till Date
5.	Nodal Officer, DIQA	IUST Awantipora	July. 2018	Dec. 2018
6.	Member, Finance Committee, TEQIP-III	IUST Awantipora	July. 2018	Till Date
7.	Incharge, Strength of Materials Lab.	IUST Awantipora	July. 2018	Till Date
8.	Member, DRC, DoME	SMVDU Katra	Jan. 2017	Dec. 2017
9.	Incharge, Mechatronics Lab.	SMVDU Katra	Jan. 2015	Dec. 2018
10.	Member, NBA Committee	SMVDU Katra	July. 2016	June. 2017
11.	Member, School Quality Committee	SMVDU Katra	June. 2015	Dec. 2018

## Publications / Research Papers

### International Journals:

1. A. S. Lone, **Azher Jameel**, G. A. Harmain, “Penalty Based Extended Finite Element Method for Modelling Contact Interfaces in Engineering Specimens”, *Computational Materials Science (Elsevier)*, **Under Review**.
2. S. A. Kanth, **Azher Jameel**, G. A. Harmain, “Investigation of Fatigue Crack Growth in Engineering Components Containing Different Types of Material Irregularities by XFEM”, *Mechanics of Advanced Materials and Structures (Taylor and Francis)* Vol. 0, pp. 1–13, **2021**.
3. **Azher Jameel**, G. A. Harmain, “Large Deformation in Bi-material Components by XIGA and Coupled FE-IGA Techniques”, *Mechanics of Advanced Materials and Structures (Taylor and Francis)* Vol. 0, pp. 1–13, **2020**.
4. V. Gupta, **Azher Jameel**, S. Anand, Y. Anand, “Analysis of composite plates using isogeometric analysis: A discussion”, *Materials Today: Proceedings (Elsevier)*, Vol. 44, pp. 1190–1194, **2021**.
5. **Azher Jameel**, G. A. Harmain, “Effect of Material Irregularities on Fatigue Crack Growth by Enriched Techniques”, *International Journal for Computational Methods in Engineering Science and Mechanics (Taylor and Francis)*, Vol. 21, pp. 109–133, **2020**.
6. A. S. Lone, S. A. Kanth, **Azher Jameel**, G. A. Harmain, “XFEM Modelling of frictional contact between elliptical inclusions and solid bodies”, *Materials Today: Proceedings (Elsevier)*, Vol. 26, pp. 819–824, **2020**.
7. S. A. Kanth, A. S. Lone, G. A. Harmain, **Azher Jameel**, “Modelling of embedded and edge cracks in steel alloys by XFEM”, *Materials Today: Proceedings (Elsevier)*, Vol. 26, pp. 814–818, **2020**.
8. U. A. Sheikh, **Azher Jameel**, “Elasto-plastic large deformation analysis of bi-material components by FEM”, *Materials Today: Proceedings (Elsevier)*, Vol. 26, pp. 1795–1802, **2020**.
9. S. A. Kanth, A. S. Lone, G. A. Harmain, **Azher Jameel**, “Elasto Plastic Crack Growth by XFEM: A Review”, *Materials Today: Proceedings (Elsevier)*, Vol. 18, pp. 3472–3481, **2019**.
10. A. S. Lone, S. A. Kanth, **Azher Jameel**, G. A. Harmain, “A state of art review on the modeling of Contact type Nonlinearities by Extended Finite Element method”, *Materials Today: Proceedings (Elsevier)*, Vol. 18, pp. 3462–3471, **2019**.
11. A. K. Singh, **Azher Jameel**, G. A. Harmain, “Investigations on crack tip plastic zones by the extended iso-geometric analysis”, *Materials Today: Proceedings (Elsevier)*, Vol. 5, pp. 19284–19293, **2018**.
12. S. A. Kanth, G. A. Harmain, **Azher Jameel**, “Modeling of Nonlinear Crack Growth in Steel and Aluminum Alloys by the Element Free Galerkin Method”, *Materials Today: Proceedings (Elsevier)*, Vol. 5, pp. 18805–18814, **2018**.
13. A. S. Lone, **Azher Jameel**, G. A. Harmain, “A Coupled Finite Element-Element Free Galerkin Approach for Modeling Frictional Contact in Engineering Components”, *Materials Today: Proceedings (Elsevier)*, Vol. 5, pp. 18745–18754, **2018**.



14. **Azher Jameel**, G. A. Harmain, “A Coupled FE-IGA Technique for Modeling Fatigue Crack Growth in Engineering Materials”, *Mechanics of Advanced Materials and Structures (Taylor and Francis)*, Vol. 00, pp. 1–12, **2018**.
15. **Azher Jameel**, G. A. Harmain, “Extended Iso-Geometric Analysis for modeling Three Dimensional Cracks”, *Mechanics of Advanced Materials and Structures (Taylor and Francis)*, Vol. 00, pp. 1–10, **2018**.
16. **Azher Jameel**, G. A. Harmain, “Fatigue crack growth analysis of cracked specimens by the coupled finite element-element free Galerkin method”, *Mechanics of Advanced Materials and Structures (Taylor and Francis)*, Vol. 00, pp. 1–14, **2018**.
17. G. A. Harmain, **Azher Jameel**, F. A. Najar, J. H. Masoodi, “Large Elasto-Plastic Deformations in Bi-material Components by Coupled FE-EFGM”, *IOP Conference Series: Material Science and Engineering*, Vol. 225, No. 012295, pp. 1–7, **2017**.
18. **Azher Jameel**, G. A. Harmain, Y. Anand, J. H. Masoodi, F. A. Najar, “Effect of Inclusions on the Shape and Size of Crack Tip Plastic Zones by Element Free Galerkin Method”, *International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering*, Vol. 11, No. 3, pp. 414–419, **2017**.
19. **Azher Jameel**, G. A. Harmain, “Modeling and Numerical Simulation of Fatigue Crack Growth in Cracked Specimens Containing Material Discontinuities”, *Strength of Materials (Springer)*, Vol. 48, No. 2, pp. 294–307, **2016**.
20. **Azher Jameel**, G. A. Harmain, “Fatigue Crack Growth in Presence of Material Discontinuities by EFGM”, *International Journal of Fatigue (Elsevier)*, Vol. 81, pp. 105–116, **2015**.
21. **Azher Jameel**, Tarlochan Singh, “Modeling and Simulation of Large Deformation Bi-material Problems Using EFGM”, *INROADS (An International Journal)*, Vol. 3, No. 1, pp. 48–53, **2014**.
22. **Azher Jameel**, “A Comparative Study of XFEM and EFGM in Solving Frictional Contact Problems”, *International Journal of Engineering and Advanced Technology*, Vol. 3, Issue: 4, pp. 324–331, **2014**.
23. **Azher Jameel**, Qazi Junaid, Suhail Ahmed, “Large Sliding Frictional Contact Problems by a Penalty Based Approach”, *International Journal of Innovative Technology and Exploring Engineering*, Vol. 3, Issue: 12, pp. 46–55, **2014**.

### International Conferences:

1. A. K. Singh, **Azher Jameel**, G. A. Harmain, “Investigations on crack tip plastic zones by the extended iso-geometric analysis”, *8<sup>th</sup> International Conference on Materials Processing and Characterization (ICMPC-2018), held at GRIET, Hyderabad, India, March 16-18, 2018*.
2. S. A. Kanth, G. A. Harmain, **Azher Jameel**, “Modeling of Nonlinear Crack Growth in Steel and Aluminum Alloys by the Element Free Galerkin Method”, *8<sup>th</sup> International Conference on Materials Processing and Characterization (ICMPC-2018), held at GRIET, Hyderabad, India, March 16-18, 2018*.





3. A. S. Lone, **Azher Jameel**, G. A. Harmain, “A Coupled Finite Element-Element Free Galerkin Approach for Modeling Frictional Contact in Engineering Components”, *8<sup>th</sup> International Conference on Materials Processing and Characterization (ICMPC-2018)*, held at GRIET, Hyderabad, India, March 16-18, **2018**.
4. A. Kumar, D. Ali, **Azher Jameel**, G. A. Harmain, “Effect of Inclusions on the Behavior of Cracks in Three Dimensional Engineering Components”, *Proceedings of the 62<sup>nd</sup> Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2017)*, organized by IIT Kharagpur at University College of Engineering, Osmania University, Hyderabad, India 62-istam-sm-fp-93, pp. 1–9, December 15–18, **2017**.
5. D. Ali, A. Kumar, **Azher Jameel**, G. A. Harmain, “Three Dimensional Analysis of Cracks in Presence of Holes by FEM”, *Proceedings of the 62<sup>nd</sup> Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2017)*, organized by IIT Kharagpur at University College of Engineering, Osmania University, Hyderabad, India, 62-istam-sm-fp-92, pp. 1–8, December 15–18, **2017**.
6. S. A. Kanth, G. A. Harmain, **Azher Jameel**, “Level Set Methodology for Representing Different Discontinuities in Engineering Materials”, *Proceedings of the 62<sup>nd</sup> Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2017)*, organized by IIT Kharagpur at University College of Engineering, Osmania University, Hyderabad, India, 62-istam-sm-fp-102, pp. 1–10, December 15–18, **2017**.
7. A. S. Lone, G. A. Harmain, **Azher Jameel**, “A state of Art Review on the Level Set Method for Modeling Discontinuities in Engineering materials”, *Proceedings of the 62<sup>nd</sup> Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2017)*, organized by IIT Kharagpur at University College of Engineering, Osmania University, Hyderabad, India, 62-istam-sm-fp-103, pp. 1–8, December 15–18, **2017**.
8. A. K. Singh, **Azher Jameel**, G. A. Harmain, “Modeling of Large Elasto-Plastic Deformations in Two Dimensional Bi-material Components by FEM”, *Proceedings of the 7<sup>th</sup> International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM-2017)*, held at IIT Kharagpur, India, ICTACEM-2017/226, pp. 1–10, December 28–30, **2017**.
9. U. A. Sheikh, A. K. Singh, **Azher Jameel**, G. A. Harmain, “Three Dimensional Large Deformation Analysis by FEM Using Total Lagrangian Approach”, *Proceedings of the International Conference on Composite Materials and Structures- (ICCMS 2017)*, held at IIT Hyderabad, India, pp. 1–11, December 27-29, **2017**.
10. J. H. Masoodi, G. A. Harmain, M. Z. Din, I. Maekai, F. A. Najjar, **Azher Jameel**, A. M. Khan, Q. J. Ashraf, Y. Iqbal, “A CFD Approach for Prediction of Sediment Erosion for Dulhasti Power Station”, *Proceedings of the 7<sup>th</sup> International Symposium on Energy (Energy7)*, held at Manchester, United Kingdom, August 13-17, **2017**.
11. **Azher Jameel**, G. A. Harmain, Y. Anand, J. H. Masoodi, F. A. Najjar, “Effect of Inclusions on the Shape and Size of Crack Tip Plastic Zones by Element Free Galerkin Method (EFGM)”, *Proceedings of the 19<sup>th</sup> International Conference on Theoretical and Computational Mechanics (ICTCM-2017)*, held at London, United Kingdom, Vol. 19 (3), pp. 1267–1272, March 14-15, **2017**.

12. G. A. Harmain, **Azher Jameel**, F. A. Najar, J. H. Masoodi, “Large Elasto-Plastic Deformations in Bi-material Components by Coupled FE-EFGM”, *International Conference on Advanced Material Technologies (ICAMT-2016)*, held at DIET, Visakhapatnam, Andhra Pradesh, India, December 27-28, **2016**.
13. **Azher Jameel**, G. A. Harmain, “Fatigue Crack Growth Analysis of Cracked Specimens by XFEM and EFGM”, *Proceedings of the 61<sup>st</sup> Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2016)*, organized by IIT Kharagpur at VIT University, Vellore, India, 61-istam-sm-fp-317, pp. 1–10, December 11–14, **2016**.
14. **Azher Jameel**, G. A. Harmain, “Estimation of Crack Tip Plastic Zones by XFEM, EFGM and Coupled FE-EFG Techniques”, *Proceedings of the 61<sup>st</sup> Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2016)*, organized by IIT Kharagpur at VIT University, Vellore, India, 61-istam-sm-fp-347, pp. 1–10, December 11–14, **2016**.
15. **Azher Jameel**, G. A. Harmain, “Applications of XFEM, EFGM and Coupled FE-EFG Techniques in Solving Fracture Mechanics Problems”, *Proceedings of the 60th Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2015)*, organized by IIT Kharagpur at National Institute of Technology, Jaipur, India, 60-istam-sm-fp-48, pp. 1–8, December 16–19, **2015**.
16. Basharat Mubeen, Ikhlas Ahmed, **Azher Jameel**, “Study of Mechanical Properties of Bones and Mechanics of Bone Fracture”, *Proceedings of the 60th Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2015)*, organized by IIT Kharagpur at National Institute of Technology, Jaipur, India, 60-istam-sm-fp-162, pp. 1–7, December 16–19, **2015**.
17. **Azher Jameel**, G. A. Harmain, “EFGM Simulation of Large Sliding Frictional Contact Problems”, *Proceedings of the 59th Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2014)*, organized by IIT Kharagpur at Alliance University, Bangalore, India, 59-istam-sm-fp-16, pp. 1–7, December 17–20, **2014**.
18. **Azher Jameel**, G. A. Harmain, “Modeling and Simulation of Fatigue Crack Growth Using XFEM ”, *Proceedings of the 59th Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2014)*, organized by IIT Kharagpur at Alliance University, Bangalore, India, 59-istam-sm-fp-163, pp. 1–8, December 17–20, **2014**.
19. **Azher Jameel**, Tarlochan Singh, “Modeling and Simulation of Large Deformation Bi-material Problems Using EFGM”, *1<sup>st</sup> International Conference on Innovative Advancements in Engineering and Technology*, held at Jaipur National University, Jaipur, India, March 7-8, **2014**
20. **Azher Jameel**, “Applications of XFEM and EFGM in Modeling Frictional Contact Problems”, *Proceedings of the 58th Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2013)*, organized by IIT Kharagpur at Bengal Engineering And Science University, Shibpur, India, 58-istam-sm-fp-11, pp. 1–8, December 18–21, **2013**.
21. **Azher Jameel**, I. V. Singh, B. K. Mishra, “A Node-To-Segment Technique for Solving Large Sliding Frictional Contact Problems”, *Proceedings of the 58th Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2013)*, organized by IIT Kharagpur at Bengal Engineering And Science University, Shibpur, India, 58-istam-sm-fp-5, pp. 1–7, December 18–21, **2013**.

22. **Azher Jameel**, I. V. Singh, B. K. Mishra, “Numerical Simulation of Frictional Contact Problems Using EFGM”, *Proceedings of the 57th Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM-2012)*, organized by IIT Kharagpur at Defense Institute of Advanced Technology, Pune, India, pp. 53-59, December 17–20, **2012**.

### National Conferences:

1. Jamwal G., **Azher Jameel**, “A review on Generalized and Extended Finite Element Methods (GFEM and XFEM) and their applications”, *Proceedings of the 2<sup>nd</sup> National Conference on Innovative Trends in Mechanical Engineering (NCITME-2018)*, held at Shri Mata Vaishno Devi University Katra, India, March 23-24, **2018**.
2. Sheikh U. A., **Azher Jameel**, “Three Dimensional Large Deformation Elasto-Plastic Analysis By FEM Using Updated Lagrangian Approach”, *Proceedings of the 2<sup>nd</sup> National Conference on Innovative Trends in Mechanical Engineering (NCITME-2018)*, held at Shri Mata Vaishno Devi University Katra, India, March 23-24, **2018**.
3. Ali D., Kumar A., **Azher Jameel**, “Behaviour of Cracks in the Presence of Holes and Inclusions”, *Proceedings of the 2<sup>nd</sup> National Conference on Innovative Trends in Mechanical Engineering (NCITME-2018)*, held at Shri Mata Vaishno Devi University Katra, India, March 23-24, **2018**.
4. A. Chadha, R. R. Singh, **Azher Jameel**, “Phase change materials and their applications: A review”, *Proceedings of the 1<sup>st</sup> national Conference on Innovative Trends in Mechanical Engineering (NCITME-2017)*, held at Shri Mata Vaishno Devi University Katra, India, March 3-4, **2017**.
5. D. Ali, A. Kumar, **Azher Jameel**, Y. Anand, “Mechanics of internal bone fixation: A review”, *Proceedings of the 1<sup>st</sup> national Conference on Innovative Trends in Mechanical Engineering (NCITME-2017)*, held at Shri Mata Vaishno Devi University Katra, India, March 3-4, **2017**.
6. U. A. Sheikh, **Azher Jameel**, Y. Anand, “Applications of finite element analysis in bone bio-mechanics: a review”, *Proceedings of the 1<sup>st</sup> national Conference on Innovative Trends in Mechanical Engineering (NCITME-2017)*, held at Shri Mata Vaishno Devi University Katra, India, March 3-4, **2017**.
7. C. S. Jolly, M. Khajuria, R. Bali, V. Kumar, N. Sharma, A. Sharma, **Azher Jameel**, Y. Anand, “Applications of FEM in modeling crack growth problems”, *Proceedings of the 1<sup>st</sup> national Conference on Innovative Trends in Mechanical Engineering (NCITME-2017)*, held at Shri Mata Vaishno Devi University Katra, India, March 3-4, **2017**.