### **CURRICULUM VITAE**

### **Personal Details**

Name: Dr. Azher Jameel

Date of Birth: 12<sup>th</sup> April 1989

Place of Birth: India
Nationality: India

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Dr. Azher Jameel is currently working as Assistant Professor in the Department of Mechanical Engineering, Islamic University of Science and Technology Awantipora India. Prior to that he worked at School of Mechanical Engineering, Shri Mata Vaishno Devi University Katra as Assistant Professor for more than 3 years. He has obtained Bachelor of Technology in Mechanical Engineering from National Institute of Technology Srinagar India and Master of Technology in CAD, CAM and Robotics from Indian Institute of Technology Roorkee India. Dr. Jameel topped his batch at IIT Roorkee during his Masters Program. He carried his Ph.D. in the areas of advanced computational mechanics at National Institute of Technology Srinagar India.

Dr. Jameel has been actively involved in teaching and research for the past 7 years in the areas of advanced computational mechanics, fracture and fatigue in structures, large elastoplastic deformations and experimental solid mechanics. His research interests include enriched numerical techniques, meshfree methods, iso-geometric analysis and coupled computational techniques. He has published more than 55 research papers in reputed journals and conferences. He has attended numerous conferences and workshops both in India and abroad and has been an active reviewer of various international journals. Dr. Jameel is currently supervising 4 Ph.D. research scholars who are working in the areas of experimental and computational mechanics. He has supervised several postgraduate and undergraduate dissertations and projects. He has also delivered expert lectures in computational mechanics at various universities of India.

### **Academic Qualifications**

#### (a) Academic Qualifications

Degree: Doctor of Philosophy

Year of Passing: March 2017

University: National Institute of Technology Srinagar, India

Dissertation Title: Applications of Enriched Methods in Solving Problems

**Containing Discontinuities** 

Degree: Master of Technology

Year of Passing: July 2013

University: Indian Institute of Technology Roorkee, India

Dissertation Title: Numerical Simulation of Contact Problems Using

XFEM/EFGM

**GPA:** 9.00

Degree: Bachelor of Technology

Year of Passing: August 2010

University: National Institute of Technology Srinagar, India

Project Title: Design of a Safety System for Blind Curved Roads

**GPA:** 7.194

### (b) Area of Research

- Computational Solid Mechanics
- Fracture and Fatigue in Structures
- > FEM, XFEM and Meshfree Methods
- Large Deformation Analysis
- Elasto-Plastic Analysis

#### (c) Academic Honors and Awards:

- Qualified Graduate Aptitude Test in Engineering (GATE) conducted by Indian Institute of Technology Madras in 2011 with 99.17 percentile.
- ➤ Awarded MHRD scholarship by the Government of India for pursuing M.Tech (PG) program in Mechanical Engineering at Indian Institute of Technology Roorkee India from 2011 to 2013.

#### (d) Membership of Professional Bodies

Life Member, Indian Society of Theoretical and Applied Mechanics (ISTAM). Membership No: L/1092

# **Career Details**

# (a) Academic Positions Held

S.No	Rank	Department	University	Country	From	То
1.	Assistant Professor	Mechanical Engineering	Islamic University of Science and Technology Awantipora	India	05-05-2018	Till Date
2.	Assistant Professor	Mechanical Engineering	Shri Mata Vaishno Devi University Katra	India	01-01-2015	04-05-2018

### (b) Administrative Positions Held

S. No.	Position Held	Department	University	Country	From	То
1.	I/c Head	Mechanical	IUST	India	November	December
		Engineering	Awantipora		2018	2021
2.	Member, Board of	Mechanical	IUST	India	November	December
	Research Studies	Engineering	Awantipora		2018	2021
3.	Research Coordinator	Mechanical	IUST	India	September	Till Date
	SoET, IUST	Engineering	Awantipora		2020	
4.	Coordinator, National	Mechanical	IUST	India	November	December
	<b>Board of Accreditation</b>	Engineering	Awantipora		2019	2021
5.	Coordinator	Mechanical	IUST	India	July 2018	November
	B. Tech (First Year)	Engineering	Awantipora			2019
6.	Incharge, Academic	Mechanical	IUST	India	July 2018	November
	Counselling & Mentoring	Engineering	Awantipora			2019
7.	Member, Departmental	Mechanical	IUST	India	June 2018	Till Date
	research Committee	Engineering	Awantipora			
8.	Member, Finance	Mechanical	IUST	India	July 2018	September
	Committee, TEQIP-III	Engineering	Awantipora			2021
9.	Incharge, Materials	Mechanical	IUST	India	July 2018	Till Date
	Testing Lab.	Engineering	Awantipora			

**IUST: Islamic University of Science and Technology** 

# **Teaching Details**

# (a) Courses Taught

S.No	Course Code	Course Name	No. of Times Taught	Evaluation / Feedback (Out of 5)
1.	MEC 351C / EMEL308B	Machine Design	7	4.19

2.	MEL2014 MEC251C	Strength of Materials	2	3.88
3.	EMEL302B / MEC302C	Design of Machine Elements	6	4.5
4.	MEL7036	Mechatronics	1	3.88
5.	EMEL403B	Mechanical Vibrations	2	4.5
6.	MEL4023	Robotics and Mechatronics	1	4.53
7.	MEC401G	Finite Element Methods	1	Not Available
8.	MEC450G	Fracture Mechanics	1	Not Available
9.	MEL6122	Computer Integrated Manufacturing	1	Not Available

Note: Average feedback obtained from the students is reported here.

### (b) Research Students Supervised

<u>Level</u>	Number of Students
PhD Students	04 (On-going)
Master Students	02
Undergraduate Students	19

### **Details of PhD Students**

S. No.	Name of Candidate	Research Area	Co-guide (if any)	Year of Registration
1.	Showkat Ahmed	Advanced Computational Mechanics	Prof. G. A. Harmain (NIT Srinagar)	2017
2.	Aazim Shafi Lone	Advanced Computational Mechanics	Prof. G. A. Harmain (NIT Srinagar	2017
3.	Ummer Amin Sheikh	Experimental Solid Mechanics	-	2019
4.	Vibushit Gupta	Advanced Computational Mechanics	Dr. Yatheshth Anand (SMVDU Katra)	2020

### (c) Faculty Development Programs Attended

- ➤ Attended one week faculty development program on "Sustainable Product Design and Manufacturing" organized by School of Mechanical Engineering, Shri Mata Vaishno Devi University Katra, India from 10-01-2022 to 14-01-2022.
- ➤ Attended four weeks "General Orientation Course" at the Human Resource Development Center, University of Kashmir, Srinagar, India, from 25-02-2019 to 26-03-2019.



- Attended one day workshop on "NPTEL Awareness", organized by IIT Kanpur at Islamic University of Science & Technology Awantipora, India on 30th November, 2018.
- ➤ 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, India in association with IIT Roorkee, India from 16-08-2018 to 18-08-2018.
- ➤ Attended one week faculty development program on "Sustainable Design and Manufacturing", organized by Department of Mechanical Engineering, Shri Mata Vaishno Devi University Katra, India from 12-02-2018 to 16-02-2018.
- Attended one day workshop on "Patent Drafting and Filing", organized by Department of Biotechnology, Shri Mata Vaishno Devi University, Katra, India in collaboration with Technology Information, Forecasting and Assessment Council (TIFAC), Department of Science & Technology (DST), Govt. of India on 20th October. 2016.
- ➤ Attended a short term course on "Optimization Using MATLAB", organized by Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India in collaboration with NITTTR, Chandigarh, India from 24-10-2016 to 28-10-2016.
- ➤ Attended a short term course on "Recent Trends in Automobile Engineering", organized by the Department of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, India in collaboration with NITTTR, Chandigarh, India from 29-02-2016 to 04-03-2016.

### **Research Details**

#### (a) Research Papers Published

	Published	Under-Review	Total
Journals	24	6	30
Conferences	29	0	29
Total	53	6	59

Number of Citations: 164 Citation Source: Google Scholar

### (b) Research Grants

Туре	Role	Title	Awarding Body	Duration	Grant Amount
Research Grant	Co-Investigator	Fatigue Crack Growth Analysis of High Entropy Alloys	NPIU, Govt of India	24 months	17,16,667 (INR)

### (c) Participation in Regional & International Conferences (Last 05 Years Only)

- 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 62nd 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.
- D. Ali, A. Kumar, Azher Jameel, G. A. Harmain, "Three Dimensional Analysis of Cracks in Presence of Holes by FEM", Proceedings of the 62nd 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.
- ➤ S. A. Kanth, G. A. Harmain, Azher Jameel, "Level Set Methodology for Representing Different Discontinuities in Engineering Materials", Proceedings of the 62nd 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.
- ➤ 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 62nd 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.
- ➤ 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 7th 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.
- ➤ 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.
- 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 (EFGM)", Proceedings of the 19th International Conference on Theoretical and Computational Mechanics (ICTCM-2017), held at London, United Kingdom, Vol. 19 (3), pp. 1267–1272, March 14-15, 2017.
- ➤ 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.
- ➤ Azher Jameel, G. A. Harmain, "Fatigue Crack Growth Analysis of Cracked Specimens by XFEM and EFGM", Proceedings of the 61st 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.
- ➤ Azher Jameel, G. A. Harmain, "Estimation of Crack Tip Plastic Zones by XFEM, EFGM and Coupled FE-EFG Techniques", Proceedings of the 61st 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.

### (d) Conferences / Workshops Organized

- ➤ Member, International Scientific Committee, "4th International Conference on Applied Materials and Manufacturing Technology (ICAMMT 2018)" held at the Kunming, China, September 21-23, 2018.
- ➤ Member, Organizing Committee, "6th World Conference on Applied Science, Engineering and Technology-2018 (WCASET-2018)" held at the Goa, India, January 2-3, 2018.
- 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.
- 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.
- ➤ 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.



### (e) Reviewer of Journals

S.N	Name of Journal	ISSN No.	Publisher	Since
1.	Mechanics of Advanced Materials and Structures	1537-6494	Taylor and Francis	2016
2.	Fatigue and Fracture of Engineering Materials and Structures	1460-2695	John-Wiley	2018
3.	Ocean Engineering	0029-8018	Elsevier	2020

### (f) Guest Lectures at Universities

- ▶ Delivered an expert lecture on "Fundamentals and Applications of Enriched Numerical Techniques" at the Faculty Development and Executive Program on "Emerging Trends in Mechanical Engineering (ETME)", organized by the Department of Mechanical Engineering, Aligarh Muslim University from 7<sup>th</sup>-11<sup>th</sup>, 2022.
- ➤ Delivered eight expert lectures on "Fundamentals and Applications of Finite Element Methods" in the Department of Mechanical Engineering, National Institute of Technology Srinagar, India from 16<sup>th</sup> 20<sup>th</sup> October, 2017.

### (g) Main Contributions in Research

- 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 (Taylor and Franics)" in 2018. The proposed technique was found to have a strong potential in modelling crack growth in engineering materials [1]. The technique was later employed to model large elastic-plastic deformations in bi-material components [2].
- > [1] 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. 26, pp. 1764–1775, 2019.
- > [2] 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. 1–23, 2020.

### **List of Publications**

#### (a) International Journals

1. A. S. Lone, Azher Jameel, G. A. Harmain, "Modelling of Contact Interfaces by Penalty Based Enriched Finite Element Method", Mechanics of Advanced Materials and Structures (Taylor and Francis), Vol. 0, pp. 1–13, 2022.

- 2. 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. 29, pp. 850–872, 2022.
- 3. A. Lone, Azher Jameel, S. H. Deen, "Numerical investigation of crack Growth in metals and composites", Proceedings of Engineering Science, Vol. 3, pp. 473–490, 2021.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. 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.
- 10. 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. 26, pp. 1764–1775, 2019.
- 11. Azher Jameel, G. A. Harmain, "Extended Iso-Geometric Analysis for modeling Three Dimensional Cracks", Mechanics of Advanced Materials and Structures (Taylor and Francis), Vol. 26, pp. 915–923, 2019.
- 12. 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. 26, pp. 1343–1356, 2019.
- 13. 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.
- 14. 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.

- 15. 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.
- 16. 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.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. 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.
- 21. 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.
- 22. Azher Jameel, Tarlochan Singh, "Modeling and Simulation of Large Deformation Bimaterial Problems Using EFGM", INROADS (An International Journal), Vol. 3, No. 1, pp. 48–53, 2014.
- 23. 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.
- 24. 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.

#### Papers under review

- 1. S. A. Kanth, G. A. Harmain, Azher Jameel, "Estimation of crack tip plastic zones in presence of material irregularities by extended finite element method", Theoretical and Applied Fracture Mechanics (under-review).
- 2. A. S. Lone, G. A. Harmain, Azher Jameel, "Modelling of Large Sliding Between Contacting Bodies by Element Free Galerkin Method", Computational Mechanics, (under-review).

- S. A. Kanth, Azher Jameel, G. A. Harmain, "Assessment of Fatigue Life in Presence of Different Types of Holes", Mechanics of Advanced Materials and Structures (underreview).
- 4. A. S. Lone, Azher Jameel, G. A. Harmain, "Enriched Element Free Galerkin Method for Solving Frictional Contact between Solid Bodies", Mechanics of Advanced Materials and Structures, (under-review).
- 5. V. Gupta, Azher Jameel, S. K. Verma, S. Anand, Y. Anand, "An insight on NURBS based Isogeometric Analysis, its current status and involvement in Mechanical Applications", Archives of Computational Methods in Engineering (Springer), (under-review).
- 6. V. Gupta, Azher Jameel, S. K. Verma, S. Anand, Y. Anand, "Transient Isogeometric Heat Conduction Analysis of Stationary Fluid in a container", Part E: Journal of Process Mechanical Engineering, (under-review).

### (b) Conference Papers

- Kumar, D. Ali, Azher Jameel, G. A. Harmain, "Effect of Inclusions on the Behavior of Cracks in Three Dimensional Engineering Components", Proceedings of the 62nd 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.
- 2. D. Ali, A. Kumar, Azher Jameel, G. A. Harmain, "Three Dimensional Analysis of Cracks in Presence of Holes by FEM", Proceedings of the 62nd 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.
- 3. S. A. Kanth, G. A. Harmain, Azher Jameel, "Level Set Methodology for Representing Different Discontinuities in Engineering Materials", Proceedings of the 62nd 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.
- 4. 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 62nd 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.
- 5. 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 7th 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.
- 6. 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.
- 7. 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 (EFGM)", Proceedings of the 19th International Conference on Theoretical and Computational Mechanics (ICTCM-2017), held at London, United Kingdom, Vol. 19 (3), pp. 1267–1272, March 14-15, 2017.
- 8. 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.
- Azher Jameel, G. A. Harmain, "Fatigue Crack Growth Analysis of Cracked Specimens by XFEM and EFGM", Proceedings of the 61st 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.
- 10. Azher Jameel, G. A. Harmain, "Estimation of Crack Tip Plastic Zones by XFEM, EFGM and Coupled FE-EFG Techniques", Proceedings of the 61st 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.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. 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.
- 15. Azher Jameel, Tarlochan Singh, "Modeling and Simulation of Large Deformation Bimaterial Problems Using EFGM", 1st International Conference on Innovative Advancements in Engineering and Technology, held at Jaipur National University, Jaipur, India, March 7-8, 2014.

- 16. 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.
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