

**Dr. CM Manjunatha, Chief Scientist and Head, SID, CSIR-NAL**

**List of Conference/Seminar papers presented (In reverse Chronological Order)**

1.	Sharanagouda G Malipatil, Ramesh Bojja, Anuradha N Majila, Chandru Fernando D and CM Manjunatha. Correlating stress ratio effects on the fatigue crack growth rate behavior of a nickel based super alloy GTM718, <i>4<sup>th</sup> Structural Integrity Conference and Exhibition, SICE22, 14-16, Dec 2022, IIT Hyderabad, India</i>
2	Sharanagouda G Malipatil, N Nagarajappa, N Jagannathan, Anuradha N Majila, Chandru Fernando D, M Manjuprasad and CM Manjunatha, Fatigue crack propagation behavior of a nickel based super alloy under a turbine standard spectrum load, <i>4<sup>th</sup> Structural Integrity Conference and Exhibition, SICE22, 14-16, Dec. 2022, IIT Hyderabad, India</i>
3	Nagarajappa N, Sharanagouda G Malipatil, Nandana Ms, Udaya Bhat K, Shylaja Srihari, Manjuprasad M, Manjunatha CM, Prediction of fatigue crack growth behavior of 7010 aluminum alloy under mini-FALSTAFF spectrum loads using FRANC3D, <i>4<sup>th</sup> Structural Integrity Conference and Exhibition, SICE22, 14-16, Dec. 2022, IIT Hyderabad, India</i>
4	L Lokesh kumar, BS Raviteja, A Aarun, SV Ashish, AR Anilchandra, CM Manjunatha, Simulation studies of low velocity impact damage in FRPs, <i>16<sup>th</sup> International Conference on Vibration Engineering and Technology of Machinery, VETOMAC- XVI, 16-18 Dec. 2021, BMS College of Engineering, Bangalore, India</i>
5	Sharanagouda, Sandeep Kumar, Anuradha N Majila, D Chandru Fernando, M Manjuprasad, CM Manjunatha, Prediction of fatigue crack growth behavior under cold-turbistan spectrum loads using variable crack closure approach in GTM 720 nickel base super alloy, <i>16<sup>th</sup> International Conference on Vibration Engineering and Technology of Machinery, VETOMAC- XVI, 16-18 Dec. 2021, BMS College of Engineering, Bangalore, India</i>
6	Shri Prakash Badi, NT Manikandanath, JN Balaraju, Ganesh Murugesan, Sai Pramod Pemmasani, Meenu Srivastava, KV Nagacharan, CM Manjunatha. Eco-friendly anodization process for the corrosion protection of aircraft Al alloys: Pilot plant establishment and demonstration of process technology, <i>International Conference on Product Life cycle Modeling Simulation &amp; Synthesis, PLMSS2021, 17-18, Dec 2021, VSSC, Trivandrum, India</i>
7	Sharanagouda, Anuradha N Majila, D Chandru Fernando, CM Manjunatha. Experimental and analytical evaluation of spectrum fatigue crack growth behaviour in nickel base super alloys, <i>66<sup>th</sup> Congress of Indian Society of Theoretical and Applied Mechanics, ISTAM-2021, 3-5 Dec. 2021, VIT-AP University, Amaravati, Andhra Pradesh, India</i>
8	N Nagarajappa, Sharanagouda G Malipatil, M Manjuprasad, CM Manjunatha. Fatigue crack growth prediction in an aluminium alloy under variable amplitude loads, <i>66<sup>th</sup> Congress of Indian Society of Theoretical and Applied Mechanics, ISTAM-2021, 3-5, Dec. 2021, VIT-AP University, Amaravati, Andhra Pradesh, India</i>
9	N Nagarajappa, Sharanagouda, Anuradha N Majila, D Chandru Fernando, M Manjuprasad, CM Manjunatha. Prediction of fatigue crack growth in nickel base super alloys under cold-TURBISTAN spectrum loads, <i>8<sup>th</sup> International Web Conference on Creep, Fatigue and Creep-Fatigue Interaction, CF-8, 24-27 Aug. 2021, IGCAR, Kalpakkam, India</i>
10	Alok Behera, MM Thawre, AR Ballal, CM Manjunatha. Constant amplitude fatigue life prediction of CFRP multi-directional laminate using constant life diagrams, <i>8<sup>th</sup></i>

	<i>International Web Conference on Creep, Fatigue and Creep-Fatigue Interaction, CF-8, 24-27 Aug. 2021, IGCAR, Kalpakkam, India</i>
11	Sharanagouda G Malipatil, Anuradha N Majila, D Chandru Fernando, M Manjuprasad, CM Manjunatha. Constant amplitude fatigue crack propagation behavior of nickel base super alloys, <i>4<sup>th</sup> International Conference on Innovations in Mechanical Engineering, ICIME-2021, 26-27 Feb. 2021, Gurunanak Institute of Technology, Hyderabad, India</i>
12	Kishora Shetty, Shylaja Srihari, CM Manjunatha. Suhasini Gururaja, Hot-wet environmental effects on in-plane shear strength of IMA/M21E aircraft grade CFRP composites, <i>3<sup>rd</sup> International Structural Integrity Conference and Exhibition, SICE2020, 18-20 Dec. 2020, IITB, Mumbai, India</i>
13	Sharanagouda G Malipatil, Anuradha N Majila, D Chandru Fernando, M Manjuprasad, CM Manjunatha. Variation of crack closure with crack driving force during fatigue crack propagation in a nickel base super alloy, <i>3<sup>rd</sup> National Aerospace Propulsion Conference, NAPC2020, 17-19 Dec. 2020, BMS College of Engineering, Bengaluru, India</i>
14	MS Nandana, K Udaya Bhat, CM Manjunatha. Shashi Bhushan Arya, Electrochemical and exfoliation corrosion behavior of reversion treated high strength aluminium alloy, <i>2<sup>nd</sup> International Conference on Recent Trends in Metallurgy, Materials Science and Manufacturing, IMME19, 27-28 Dec. 2019, NIT, Tiruchirappalli, India</i>
15	Vishweshwara Pandith, Chandrakantha Bekal, Ramesh Bojja, C M Manjunatha. Shylaja Srihari, Effect of moisture on the compression behaviour of sandwich foams, <i>ISAMPE National Conference on Composites, INCCOM-16, 20-21 Sept. 2019, Thiruvananthapuram, India</i>
16	Sharanagouda G Malipatil, Anuradha N Majila, D Chandru Fernando, CM Manjunatha. Near threshold fatigue crack growth behaviour of IN720 nickel base super alloy, <i>International Conference on Advances Materials and Processes for Defence Applications, ADMAT-2019, 23-25 Sept. 2019, Hyderabad, India</i>
17	Sharanagouda G Malipatil, Anuradha N Majila, Chandru Fernando, CM Manjunatha, Correlating stress ratio effects on the fatigue crack growth rate of a nickel base super alloy IN 718, <i>3<sup>rd</sup> International Conference &amp; Exhibition on Fatigue, Durability and Fracture Mechanics, 29-31 Aug. 2019, VTU, Belagavi, India</i>
18	NT Manikandanath, N Bhargava, JN Balaraju, N Jagannathan, CM Manjunatha, Effect of chromic acid-free anodization on the fatigue life of an aluminium alloy, <i>National Symposium on Electrochemical Science and Technology, NSEST2019, 18-19 Jul. 2019, IISc, Bangalore, India</i>
19	Sharanagouda G Malipatil, Anuradha N Majila, D Chandru Fernando, CM Manjunatha, Influence of crack driving force on correlating stress ratio effects in fatigue crack growth rate of a nickel base super alloy in720, <i>4<sup>th</sup> Indian Conference on Applied Mechanics, INCAM 2019, 3-5 Jul. 2019, IISc, Bangalore, India</i>
20	S Charan Kumar, L Ravi Kumar, V Mukesh, CH Viswarupachari, SC Jangir, P Vinayak, Gaddikeri Kotresh, N Jagannathan, CM Manjunatha, Effect of impact damage on the fatigue life of a carbon fiber composite T-joint, <i>4<sup>th</sup> Indian Conference on Applied Mechanics, INCAM 2019, 3-5 Jul. 2019, IISc Bangalore, India</i>
21	D Chandru Fernando, Anuradha Nayak Majila, BR Thammaiah, AR Anil Chandra, CM Manjunatha, Effect of temperature on the high strain rate tensile behavior of a titanium alloy, <i>4<sup>th</sup> Indian Conference on Applied Mechanics, INCAM 2019, 3-5 Jul. 2019, IISc Bangalore, India</i>
22	MS Nandana, K Udaya Bhat, CM Manjunatha, Influence of heat treatment on near-threshold fatigue crack growth behavior of high strength aluminum alloy 7010, <i>30<sup>th</sup></i>

	<i>Symposium of the International Committee on Aeronautical Fatigue, ICAF 2019-Structural Integrity in the Age of Additive Manufacturing, 2-7 Jun. 2019, Krakow, Poland</i>
23	Sharanagouda G Malipatil, Anuradha N Majila, Chandru Fernando, CM Manjunatha, Fatigue crack growth behavior of a nickel base super alloy Inconel 718 under spectrum loads, <i>International Conference on Design, Materials, Cryogenics and Constructions, ICDMC-2019, 28-29, Mar. 2019, VelTech R&amp;D Institute of Science &amp; Technology, Chennai, India</i>
24	JN Balaraju, V Ezhilselvi, Meenu Srivastava, NT Manikandanath, M Ganesh, KVR Shanmugavel, Shirish S Kale, Nagacharan, CM Manjunatha Development and certification of chromic acid-free anodizing process for aircraft grade aluminium alloys, <i>3<sup>rd</sup> International conference on Recent Advances in Material Chemistry, ICRAMC-2019, 13-15 Feb. 2019, SRM Institute of Science and Technology, Chennai</i>
25	MS Nandana, K Udaya Bhat, CM Manjunatha, Effect of microstructure on the fatigue crack growth behavior in Al-Zn-Mg-Cu alloy, <i>2<sup>nd</sup> International Conference on Structural Integrity, ICONS2018, 14-18 Dec. 2018, IITM, Chennai, India</i>
26	MS Nandana, K Uday Bhat, CM Manjunatha, Influence of retrogression and re-ageing heat treatment on the fatigue crack growth behavior of 7010 aluminum alloy <i>2<sup>nd</sup> International Conference on Structural Integrity and Exhibition, SICE2018, 27-28, Jul. 2018, Hyderabad, India</i>
27	N Jagannathan, S Gururaja, CM Manjunatha, Matrix cracking in polymer matrix composite under bi-axial loading, <i>2<sup>nd</sup> International Conference on Structural Integrity and Exhibition, SICE2018, 27-28, Jul. 2018, Hyderabad, India</i>
28	Kishora Shetty, Shylaja Srihari, CM Manjunatha, Effect of hygrothermal aging on the interlaminar shear strength of a carbon fiber composite <i>2<sup>nd</sup> International Conference on Structural Integrity and Exhibition, SICE2018, 27-28, Jul. 2018, Hyderabad, India</i>
29	MS Nandana, K Uday Bhat, CM Manjunatha, Effect of retrogression duration on the grain boundary microstructure and microchemistry of AA7010, <i>First International Conference on Design, Materials and Manufacture, ICDEM-2018, NITK, Surathkal, AIP Conference Proceedings, Vol. 1943, Apr. 2018, pp 020085-1 to 4</i> <a href="https://doi.org/10.1063/1.5029661">https://doi.org/10.1063/1.5029661</a>
30	MS Nandana, K Udaya Bhat, CM Manjunatha, Effect of Retrogression Duration on the Grain Boundary Microstructure and Microchemistry of AA7010, <i>International Conference on Design, Materials &amp; Manufacture, IcDeM-18, 29-31, Jan. 2018, NITK, Surathkal, India</i>
31	MS Nandana, K Udaya Bhat, CM Manjunatha, Effect of retrogression and re-ageing heat treatment on microstructure and microhardness of aluminium 7010 alloy, <i>International Conference on Research in Mechanical Engineering Sciences, RiMES 2017, 21-23, Dec. 2017, MIT, Manipal, India. MATECWeb conf. Vol 144, 2018</i> <a href="https://doi.org/10.1051/matecconf/201814402003">https://doi.org/10.1051/matecconf/201814402003</a>
32	MS Nandana, K Udaya Bhat, CM Manjunatha, Influence of Retrogression and Re-ageing Heat Treatment on Microstructure and Microchemistry of AA7010 Alloy, <i>National Metallurgist Day- Annual Technical Meeting, NMD- ATM 2017, BITS Pilani, 11-14, Nov. 2017, Goa, India</i>
33	MS Nandana, K Udaya Bhat, CM Manjunatha, Effect of retrogression and re-ageing heat treatment on the microstructure of AA7010 aluminum alloy, <i>International Conference On Electrochemical society &amp; Technology, ICONEST-2017, 10-12, Aug. 2017, IISc, Bangalore</i>
34	PK Sahoo, B Dattaguru, CM Manjunatha, CRL Murthy, Strength prediction of adhesively bonded joints using plastic zone correction, <i>11th International Symposium</i>

	<i>on Plasticity and Impact Mechanics, IMPLAST 2016, 11-14 Dec. 2016, IIT, Delhi, India</i> <a href="https://doi.org/10.1016/j.proeng.2016.12.259">https://doi.org/10.1016/j.proeng.2016.12.259</a>
35	N Jagannathan, K Sakthivel, Ramesh Bojja, CM Manjunatha, Effect of silica nanoparticles on the fatigue life of a glass fiber reinforced epoxy composite under an aircraft spectrum load sequence, <i>First Structural Integrity Conference and Exhibition, SICE-2016, 4-6 Jul. 2016, Bangalore, India</i>
36	T Sivaranjani, DVTG Pavan Kumar, CM Manjunatha, M Manjuprasad, Fatigue life estimation of typical fighter aircraft main landing gear using finite element analysis, <i>First Structural Integrity Conference and Exhibition, SICE-2016, 4-6 Jul. 2016, Bangalore, India</i>
37	G Yoganandan, JN Balaraju, NT Manikandanath, V Ezhilselvi, AR Anilchandra, CM Manjunatha, Mechanical and corrosion behavior of eco-friendly anodizing process for airframe grade aluminum alloy, <i>First Structural Integrity Conference and Exhibition, SICE-2016, 4-6 Jul. 2016, Bangalore, India</i>
38	B Shylesh Kamath, AR Anilchandra, T Sivaranjani, K Badari Narayana, CM Manjunatha, Fatigue crack growth prediction under spectrum load in an aluminum alloy by K*-closure approach, <i>First Structural Integrity Conference and Exhibition, SICE-2016, 4-6 Jul. 2016, Bangalore, India</i>
39	M Mohan Kumar, N Srinivasan, C. Surendra, P Sankaradoss, CM Manjunatha, Development of a novel fish-bone loading arrangement for drag load simulation on structural test component, <i>First Structural Integrity Conference and Exhibition, SICE-2016, 4-6 Jul. 2016, Bangalore, India</i>
40	AR Anilchandra, M Seshagirachari, Ramesh Bojja, N Jagannathan, CM Manjunatha, Prediction of mode II delamination onset life under spectrum fatigue loads using equivalent strain energy release rate concept, <i>First Structural Integrity Conference and Exhibition, SICE-2016, 4-6 Jul. 2016, Bangalore, India</i>
41	Ramesh Bojja, N Jagannathan, AS Selvamani Babu, AR Anilchandra, CM Manjunatha, Mode I delamination growth behavior of a carbon fiber composite under a spectrum load sequence, <i>First Structural Integrity Conference and Exhibition, SICE-2016, 4-6 Jul. 2016, Bangalore, India</i>
42	AR Anilchandra, Ramesh Bojja, N Jagannathan, CM Manjunatha, Variable amplitude fatigue testing to characterize mode II delamination in a polymer composite, <i>7<sup>th</sup> International Conference on Creep, Fatigue and Creep – Fatigue Interaction, CF-7, 19-22 Jan. 2016, IGCAR, Kalpakkam, India</i>
43	Ramesh Bojja, AR Anilchandra, N Jagannathan, CM Manjunatha, Micromechanics modeling and prediction of stiffness degradation behavior of a fiber reinforced polymer nanocomposite under block amplitude fatigue loads, <i>7<sup>th</sup> International Conference on Creep, Fatigue and Creep-Fatigue Interaction, CF-7, 19-22 Jan. 2016, IGCAR, Kalpakkam, India</i>
44	MM Thawre_, A Dubey, KK Verma, DR Peshwe, N Jagannathan, CM Manjunatha, A study on the fatigue life of a composite t-joint subjected to transport aircraft spectrum loads, <i>7<sup>th</sup> International Conference on Creep, Fatigue and Creep-Fatigue Interaction, CF-7, 19-22 Jan. 2016, IGCAR, Kalpakkam, India</i>
45	AR Anil Chandra, Ramesh Bojja, N Jagannathan, CM Manjunatha, Constant onset fatigue life diagram for mode ii delamination of a carbon fiber composite <i>ISAMPE National Conference on Composites, INCCOM-14, 22-23, Jan. 2016, Hyderabad, India</i>
46	Kishor Shetty, Shylaja Srihari, CM Manjunatha, Environmental effects on aerospace fibre reinforced plastic composites, <i>ISAMPE National Conference on Composites, INCCOM-14, 22-23, Jan. 2016, Hyderabad, India</i>

47	AR Anil Chandra, Ramesh Bojja, N Jagannathan, CM Manjunatha, Constant onset fatigue life diagram for mode ii delamination of a carbon fiber composite <i>ISAMPE National Conference on Composites, INCCOM-14, 22-23, Jan. 2016, Hyderabad, India</i>
48	Kishora Shetty, Shylaja Srihari, CM Manjunatha, Environmental effects on aerospace fibre reinforced plastic composites, <i>ISAMPE National Conference on Composites, INCCOM-14, 22-23, Jan. 2016, Hyderabad, India</i>
49	AR Anilchandra, Ramesh Bojja, N Jagannathan, CM Manjunatha, Variable amplitude fatigue testing to characterize mode II delamination in a polymer composite, <i>7<sup>th</sup> International Conference on Creep, Fatigue and Creep-Fatigue Interaction, CF-7, 19-22 Jan. 2016, IGCAR, Kalpakkam, India</i>
50	Ramesh Bojja, AR Anilchandra, N Jagannathan, CM Manjunatha, Micromechanics modeling and prediction of stiffness degradation behavior of a fiber reinforced polymer nanocomposite under block amplitude fatigue loads, <i>7th International Conference on Creep, Fatigue and Creep-Fatigue Interaction, CF-7, 19-22 Jan. 2016, IGCAR, Kalpakkam, India</i>
51	MM Thawre_, A Dubey, KK Verma, DR Peshwe, N Jagannathan, CM Manjunatha, A study on the fatigue life of a composite t-joint subjected to transport aircraft spectrum loads, <i>7th International Conference on Creep, Fatigue and Creep-Fatigue Interaction, CF-7, 19-22 Jan 2016, IGCAR, Kalpakkam, India</i>
52	BS Mithuna, HK Rangavittal, AR Anil Chandra, R Bojja, N Jagannathan, CM Manjunatha, Stiffness degradation behaviour of a polymer nanocomposite under constant amplitude fatigue loads, <i>National seminar on Research aspirants of nanomaterials and its applications, NSRANA-2015, 20-21 Jul. 2015, SCJIT, Chikkaballapur, India</i>
53	D Saji , P Pitchai, N Jagannathan, CM Manjunatha, TC Subbareddy, Cure-in-place repair for aircraft composite structures, <i>XVIII National seminar on aerospace structures NASAS, 15-17 Dec. 2014, VNIT, Nagpur, India</i>
54	AR Anil Chandra, N Jagannathan, CM Manjunatha, An experimental investigation on the onset of growth behavior of a mode II delamination under spectrum fatigue load, <i>XVIII National seminar on aerospace structures, NASAS, 15-17 Dec. 2014, VNIT, Nagpur, India</i>
55	MM Thawre, KN Pandey, AN Dubey, DR Peshwe, RK Paretkar, N Jagannathan, CM Manjunatha, Prediction of fatigue life of a carbon fiber composite T-joint under a fighter aircraft random load sequence, <i>XVIII National seminar on aerospace structures NASAS, 15-17 Dec. 2014, VNIT, Nagpur, India</i>
56	N Jagannathan, AR Anil Chandra, CM Manjunatha, Influence of micro and nanoparticulate fillers on the fatigue crack growth rate of an epoxy polymer, <i>XVIII National seminar on aerospace structures, NASAS, 15-17 Dec. 2014, VNIT, Nagpur, India</i>
57	N Jagannathan, K Sakthivel, AR Anil Chandra, Shylaja Srihari, CM Manjunatha, Prediction of tensile behaviour of a hybrid nanocomposite using micromechanics models, <i>ISAMPE national conference on composites INCCOM-13, 14-15 Nov. 2014, VSSC, Trivandrum, India</i>
58	AR Anil Chandra, AS Selvamani Babu, N Jagannathan, CM Manjunatha, Onset of mode II delamination growth under constant amplitude fatigue loads, <i>ISAMPE national conference on composites INCCOM-13, 14-15 Nov. 2014, VSSC, Trivandrum, India</i>
59	MS Hussain, M Seshagirachari, N Jagannathan, CM Manjunatha, Off-axis fatigue behavior and 3D constant life diagram of a unidirectional carbon fiber composite,

	<i>ISAMPE national conference on composites INCCOM-13</i> , 14-15 Nov. 2014, VSSC, Trivandrum, India
60	Chan Bakshi, M. Mohan Kumar, M.V. Shivaprasad, Atul Bakare, SS Rao, SA Sarin, C.M. Manjunatha, In-flight strain data acquisition and fatigue life assessment of main landing gear of a fighter aircraft, <i>National seminar on self-reliance in aerospace structures SRIAS-2014</i> , 10-11, Nov. 2014, Ojhar, Nasik, India
61	M Mohan Kumar, C Surendra, P Sankardoss, N Srinivasan, N Jagannathan, CM Manjunatha, Mechanical testing and evaluation of aircraft materials and components, <i>National seminar on self-reliance in aerospace structures SRIAS-2014</i> , 10-11, Nov. 2014, Ojhar, Nasik, India
62	MS Duragkar, KK Verma, N Jagannathan, RK Paretkar, CM Manjunatha, Effect of ply-drop on the fatigue life of a carbon fiber composite under a combat aircraft spectrum load sequence, <i>First World conference on fracture and damage mechanics, FRACTURE 2014</i> , 9-11, Aug. 2014, Kottayam, India
63	A Revathi, M Sendil Murugan, Shylaja Srihari, N Jagannathan, CM Manjunatha, Effect of hot-wet conditioning on the mechanical and thermal properties of IM7/ 8552 carbon fiber composite, <i>6th National Conferences on Advances in Polymeric Materials (NCAPM), POLYCON-2014</i> , 25-26 Apr. 2014, Mysore, India
64	MS Hussain, M. Seshagirachari, MC Basavaraj, N Jagannathan, CM Manjunatha, Off-axis fatigue behaviour of IMA/M21 carbon fiber composite, <i>Innovative Trends in Mechanical and Aerospace Engineering, ITMAE-2014</i> , 28-29, Mar. 2014, SVIT, Vasad, Gujarat
65	MS Hussain, M Seshagirachari, N Jagannathan, KK Verma, CM Manjunatha, Fatigue life prediction of a cross-ply carbon fiber composite under off-axis loads, <i>ISAMPE National Conference on Composites, INCCOM12</i> , 12-13 Dec. 2013, Bangalore
66	J Raju, MS Duragkar, N Jagannathan, CM Manjunatha, Finite element analysis and prediction of onset of mode I delamination growth under a tensile spectrum load sequence, <i>ISAMPE National Conference on Composites, INCCOM12</i> , 12-13 Dec. 2013, Bangalore,
67	N Jagannathan, J Raju, G Radhakrishnan, MS Duragkar, CM Manjunatha, Onset of mode I delamination growth in a carbon fiber composite under constant amplitude fatigue loads, <i>ISAMPE National Conference on Composites, INCCOM12</i> , 12-13 Dec. 2013, Bangalore, pp 299-304.
68	KN Pande, MM Thawre, JG Bhatt, DR Peshwe, RK Paretkar, KK Verma, GM Kotresh, CM Manjunatha, Constant amplitude fatigue behavior of a co-cured and co-bonded carbon fiber composite T-joint, <i>ISAMPE National Conference on Composites, INCCOM12</i> , 12-13 Dec. 2013, Bangalore, pp 305-309.
69	AT Kavyashree, K Sakthivel, AS Selvamani Babu, N Jagannathan, CM Manjunatha, Effect of low-high and high-low block load sequence on the fatigue performance of a nanocomposite, <i>ISAMPE National Conference on Composites, INCCOM12</i> , 12-13 Dec. 2013, Bangalore, pp 338-343.
70	CM Manjunatha, A Revathi, S Navaneetha, Shylaja Srihari, N Jagannathan, Mechanical and thermal properties of an epoxy polymer modified with micron-rubber and nano-silica particles, <i>ISAMPE National Conference on Composites, INCCOM12</i> , 12-13 Dec. 2013, Bangalore, pp 360-365.
71	MC Basavaraj, HC Yogeasha, Ramesh Bojja, N Jagannathan, CM Manjunatha, Fatigue behavior of a carbon fiber composite under tensile block load sequence, <i>International Conference on Convergence of Science, Engineering and Management in Education and Research, ICCSEM</i> , 26-27, Sep. 2013, Dayanad Sagar college of Engineering,

	Bangalore
72	N Jagannathan, Ramesh Bojja, CM Manjunatha, Shreya kaduskar, "Fatigue behavior of a nanocomposite under completely reversed cyclic loads", Proc. <i>1<sup>st</sup> Indo-Canadian symposium on nano science and technology, ICSNST-2013</i> , 20-21, Feb. 2013, NIE, Mysore, India.
73	Ramesh Bojja, N. Jagannathan, Shreya Kaduskar, CM Manjunatha, Effect of stress ratio on the improved fatigue behavior of a glass fiber reinforced polymer nanocomposite, <i>International Conference on Recent Advances in Composite Materials, ICRACM</i> , 18-22 Feb. 2013, Goa, India
74	N Jagannathan, Ramesh Bojja, CM Manjunatha, An experimental investigation on the spectrum fatigue behavior of a GFRP nanocomposite. <i>Isampe National Conference on Composites, INCCOM-11</i> , 2-3, Nov. 2012, Amrita Vishwa Vidyapeetham, Coimbatore, India
75	CM Manjunatha, Ramesh Bojja, N Jagannathan, Fatigue behavior of a nanocomposite under a fighter aircraft spectrum load sequence, <i>2<sup>nd</sup> International Conference on Nanotechnology, NANOCON-2012</i> , 18-19 Oct. 2012, BVUCOE, Pune, India
76	K Padmalatha, N Jagannathan, Ramesh Bojja, CM Manjunatha, An experimental investigation on the fatigue behaviour of a nanocomposite under a spectrum load sequence, <i>ISAMPE national conference on composites, INCCOM-10</i> , 18-19 Nov. 2011, Pune
77	N Jagannathan, CM Manjunatha, K Padmalatha, Fatigue life prediction under spectrum loads in composites: Evaluation of interpolation techniques, <i>XVII National seminar on aerospace structures, NASAS</i> , 22-24 Sep. 2011, IIT Kanpur.
78	Sagar Elgi, N Jagannathan, HV Lakshminarayana, CM Manjunatha, Fatigue life prediction under spectrum loads in composites using constant life diagram, <i>International Conference on Advanced Materials, ICAM 2011</i> , 19-20 Aug. 2011, BTLIT, Bangalore,
79	CM Manjunatha, N Jagannathan, K Padmalatha, AC Taylor, AJ Kinloch, A study on the fatigue and fracture behavior of a rubber particle modified epoxy polymer, <i>International Conference on World Class Materials and Manufacturing Technologies, M&amp;MT-2011</i> , ASM, 8-10 Mar. 2011, Mumbai, India
80	Ramesh Bojja, N Jagannathan, Baskar Rao M, C M Manjunatha, Life prediction of a fiberglass reinforced epoxy composite under wind turbine blade spectrum load sequence, <i>2<sup>nd</sup> International Conference on Materials for the Future, ICMF-2011</i> , 23-25 Feb. 2011, Thrissur, India
81	PK Sahoo, CM Manjunatha, B Dattaguru, CRL Murthy, Fatigue debond growth in adhesively bonded single lap joints, <i>International conference on Composites for 21<sup>st</sup> century; Current and Future trends, ICC-CFT-2011</i> , 4-7 Jan. 2011, IISc Bangalore, India
82	CM Manjunatha, K Padmalatha, N Jagannathan, Prediction of variable amplitude fatigue life of fiberglass reinforced epoxy composites using constant life diagram, <i>International conference on Composites for 21<sup>st</sup> century; Current and Future trends, ICC-CFT-2011</i> , 4-7 Jan. 2011, IISc., Bangalore, India
83	Ramesh Bojja, N Jagannathan, BR Mattapally, K Padmalatha, CM Manjunatha, Fatigue life prediction under helicopter rotor blade spectrum load sequence in a of fiberglass reinforced epoxy composite, <i>National Conference on Advances In Mechanical Engineering, AIM-2011</i> , 3-5 Jan. 2011, Manipal, India
84	M Baskar Rao, B Ramesh, N Jagannathan, K Padmalatha, CM Manjunatha, Prediction of improved fatigue behavior of a GFRP nanocomposite under two-step block-load sequences, <i>3<sup>rd</sup> National Conference on Nanomaterials and Nanotechnology</i> , 21-23



	Dec. 2010, Amity University, Lucknow, India
85	CM Manjunatha, N Jagannathan, K Padmalatha, AC Taylor, AJ Kinloch, Fracture and fatigue behaviour of a micron-rubber and nano-silica particle modified epoxy polymer, <i>International Conference on Nanoscience, Nanotechnology and Advances in Materials-NANOS2010</i> , 17-19 Dec. 2010, Gitam University, Visakapatnam, India
86	CM Manjunatha, S Sprenger, AC Taylor, AJ Kinloch, Prediction of enhanced fatigue behavior of a glass-fiber reinforced epoxy nanocomposite under a tensile block load sequence, <i>International Conference on Nanoscience, Nanotechnology and Advances in Materials- NANOS2010</i> , 17-19 Dec. 2010, Gitam University, Visakapatnam, India
87	CM Manjunatha, K Padmalatha, N Jagannathan, An experimental investigation on the enhanced fatigue behaviour of a GFRP nanocomposite under a spectrum load sequence, <i>International Conference on Nanomaterials and Nanotechnology-NANO2010</i> , 13-16 Dec. 2010, Tiruchengode, TN, India
88	CM Manjunatha, N Jagannathan, K Padmalatha, Variable amplitude fatigue behavior of a fiberglass-epoxy nanocomposite, <i>3<sup>rd</sup> Bangalore Nano</i> , 8-9 Dec. 2010, Bangalore, India
89	MM Thawre, RK Paretkar, DR Peshwe, CM Manjunatha, Ramesh Sundaram, Development of a constant life diagram for a carbon fiber composite with a ply-drop construction, <i>National Metallurgist day- Annual Technical meeting, NMD-ATM</i> , 14-16 Nov. 2010, IISc, Bangalore, India
90	K Padmalatha, BR Matapally, Ramesh Bojja, CM Manjunatha, Fatigue life prediction under a transport aircraft spectrum load sequence in a fiberglass-epoxy composite, <i>National Metallurgist day- Annual Technical meeting, NMD-ATM</i> , 14-16 Nov. 2010, IISc, Bangalore, India
91	CM Manjunatha, K Padmalatha, N Jagannathan, A study on the enhanced fatigue behavior of a GFRP nanocomposite under a three-step decreasing block load sequence, <i>International Conference Nano Technology: Materials and Composites for Frontier Applications, NANOCON2010</i> , 14-16, Oct. 2010, BVUCOEP, Pune, India
92	CM Manjunatha, N Jagannathan, K Padmalatha, AC Taylor, AJ Kinloch, The effect of micron-rubber and nano- silica (hybrid) particles on the fatigue crack growth behavior of an epoxy polymer, <i>International Conference on Nano Science and Technology ICONSAT 2010</i> , Feb.17-20, 2010, IIT Bombay, Mumbai, India
93	CM Manjunatha, Shylaja Srihari, A Revathi, AC Taylor, AJ Kinloch, The ILSS and flexure behavior of a fiberglass laminate with silica nano particle modified epoxy matrix under hot-wet conditions, <i>International conference on Materials for the Millennium MATCON-2010</i> , 11-13 Jan. 2010, CUSAT, Kochi, India
94	CM Manjunatha, K Padmalatha, N Jagannathan, AC Taylor, AJ Kinloch, The enhanced fatigue behavior of a GFRP laminate based upon a nanocomposite matrix under a three-step increasing block load sequence, <i>International conference on Materials for the Millennium MATCON-2010</i> , 11-13 Jan. 2010, CUSAT, Kochi, India
95	CM Manjunatha, N Jagannathan, K Padmalatha, AC Taylor, AJ Kinloch, The effect of silica nano-particles on the fatigue crack growth behavior of an epoxy polymer, <i>International conference on Materials for the Millennium MATCON-2010</i> , 11-13 Jan. 2010, CUSAT, Kochi, India
96	MS Duragkar, RK Paretkar, DR Peshwe, Ramesh Sundaram, CM Manjunatha, Development of a constant fatigue life diagram for a carbon fiber composite, <i>ISAMPE National conference on Composites INCCOM-8</i> , 4-5 Dec. 2009, Thiruvananthapuram, India



97	CM Manjunatha, Shylaja Srihari, A Revathi, AC Taylor, AJ Kinloch, The effect of moisture on the mechanical properties of a GFRP nanocomposite, <i>ISAMPE National conference on Composites INCCOM-8</i> , 4-5 Dec. 2009, Thiruvananthapuram, India
98	CM Manjunatha, N Jagannathan, S Sprenger, AC Taylor, AJ Kinloch, The fatigue crack growth behavior of a rubber particle modified epoxy polymer, <i>ISAMPE National conference on Composites INCCOM-8</i> , 4-5 Dec. 2009, Thiruvananthapuram, India
99	B Dattaguru, PK Sahoo, CM Manjunatha, Strength prediction methods for adhesively bonded joints, <i>3rd International Congress on Computational Mechanics and Simulation, ICCMS-09</i> , 1-3 Dec. 2009, IIT, Bombay, India
100	CM Manjunatha, S Sprenger, AC Taylor, AJ Kinloch. The fatigue behaviour of a GFRP nanocomposite under a tensile block load sequence, <i>XVI<sup>th</sup> National Seminar on Aerospace Structures, NASAS</i> , 19-20 Nov. 2009, IIT, Bombay, India
101	CM Manjunatha, Shylaja Srihari, A Revathi, AC Taylor, AJ Kinloch. The effect of micron-rubber and nano-silica particle modified epoxy matrix on the mechanical properties of a GFRP composite, <i>XVI<sup>th</sup> National Seminar on Aerospace Structures, NASAS</i> , 19-20 Nov. 2009, IIT, Bombay, India
102	MS Duragkar, RK Paretkar, DR Peshwe, Ramesh Sundaram, CM Manjunatha, The effect of plydrop on the fatigue behaviour of a carbon fiber composite, <i>XVI<sup>th</sup> National Seminar on Aerospace Structures, NASAS</i> , 19-20 Nov. 2009, IIT, Bombay, India
103	S Sprenger, AJ Kinloch, AC Taylor, K Masania, CM Manjunatha, RD Mohammed, Tough and stiff: The synergy between rubber-toughening and SiO <sub>2</sub> -nanoparticles in GFRC and CFRC, <i>The SAMPE Europe 30th Jubilee International Conference</i> , 23-25, Mar. 2009, Paris, France
104	PK Sahoo, CM Manjunatha, B Dattaguru, Failure prediction of adhesively bonded lap joints between metal and composite adherends, <i>International conference on Aerospace Science and Technology, INCAST</i> , 26-28 Jun. 2008, IISc, Bangalore, India
105	PK Sahoo, B Dattaguru, CM Manjunatha, A parametric study of mixed-mode strain energy release rate components at debonds in adhesively bonded composite joints, <i>International and INCCOM-6 Conference on Future Trends in Composite Materials and Processing</i> , 12-14 Dec. 2007, IIT Kanpur, India
106	CM Manjunatha, VR Ranganath, TC Subba Reddy, Damage tolerance evaluation of an impact damage induced composite T-joint under fighter aircraft spectrum loads, <i>International and INCCOM-6 Conference on Future Trends in Composite Materials and Processing</i> , IIT Kanpur, 12-14 Dec. 2007, IIT Kanpur, India
107	CM Manjunatha, VR Ranganath, Damage tolerance evaluation of airframe materials, <i>International Symposium on Advanced Materials and Processing, ISAMP-2007</i> , 29-30 Oct. 2007, BEC, Bagalokot, India
108	CM Manjunatha, VR Ranganath, Influence of crack orientation on spectrum modification for accelerated fatigue test, <i>International Conference on Advanced Materials and Composites, ICAMC-2007</i> , 24-26 Oct. 2007, NIIST, Trivandrum, India
109	PK Sahoo, B Dattaguru, CM Manjunatha, Failure prediction of adhesively bonded lap joints, <i>XV National Seminar on Aerospace Structures, NASAS</i> , 15-16 Oct. 2007, Park College of Engineering, Coimbatore, India
110	CM Manjunatha, VR Ranganath, Prediction of optimum spectrum for full scale fatigue test, <i>XV National Seminar on Aerospace Structures, NASAS</i> , 15-16 Oct. 2007, Park College of Engineering, Coimbatore, India
111	CM Manjunatha, AR Anil Chandra, VR Ranganath, Damage tolerance evaluation: A new approach to crack growth prediction under service loads, <i>Symposium on Recent</i>

	<i>Advances in Materials Engineering</i> , 4-6, Jun. 2007, Indian Institute of Science, Bangalore,
112	Praveen Kumar Jain, C.M. Manunatha, Udupi Srinivasa, Measurement and simulation of elasto-plastic deformation, <i>Conference on Current Trends in Engineering Analysis and Design, DREAMS 2007</i> , 12 Mar. 2007, JFW Technology Centre, Bangalore, India
113	CM Manjunatha, VR Ranganath, TC Subba Reddy, An experimental investigation on the damage tolerance behavior of a composite T-joint, <i>International Conference on Recent Advances in Composite Materials, ICRACM 07</i> , 7 Feb. 2007, New Delhi, India
114	PK Sahoo, CM Manjunatha, B Dattaguru, Finite element analysis of adhesively bonded lap joints and estimation of shear strength, <i>International Conference on Recent Advances in Composite Materials, ICRACM 07</i> , 7 Feb. 2007, New Delhi, India
115	CM Manjunatha, VR Ranganath, S Sujatha, M Sureshkumar, M Venkataswamy, Estimation of service load sequence from fatigue fracture surface analysis, <i>National Conference on Failure Analysis, NCF A-2006</i> , 22-23 Dec. 2006, Hyderabad, India
116	KL Singh, CM Manjunatha, NM Venkata, Modeling and stress analysis of stiffened carbon fiber composite panels, <i>ISAMPE National Seminar on Composites INCCOM-5</i> , 24-25 Nov. 2006, Hyderabad, India
117	CM Manjunatha, AR Anil Chandra, VR Ranganath, A new procedure for crack growth prediction under spectrum loads, <i>National Metallurgist Day-Annual Technical Meeting, NMD-ATM-2006</i> , 15-16 Nov. 2006, Jamshedpur, India
118	CM Manjunatha, AR Anil Chandra, VR Ranganath, Fatigue crack growth prediction under FALSTAFF load sequence by K*-RMS Approach, <i>International Seminar on Fatigue, Fracture and Durability</i> , 26-28 Jun 2006, IISc., Bangalore, India
119	CM Manjunatha, AR Anil Chandra, VR Ranganath, Modification of FALSTAFF load sequence to accelerate fatigue tests, <i>National Conference on Mechanical Engineering, NATCON2006</i> , 26-27 May 2006, Siddaganga Institute of Technology, Tumkur, India,
120	CM Manjunatha, VR Ranganath, Damage tolerance evaluation: Recent trends in fatigue crack growth prediction under spectrum loads, <i>National Conference on Emerging Trends in Mechanical Engineering, ETIME-2006</i> , 10-11 Feb. 2006, BMSCE, Bangalore, India
121	CM Manjunatha, VR Ranganath, Spectrum modification for full scale fatigue testing of an ageing aircraft, <i>XI National Seminar on Aerospace Structures, XI NASAS</i> , 30-31 Jan. 2006, VNIT, Nagpur, India
122	MS Duragkar, DP Peshwe, RK Paretkar, VR Ranganath, CM Manjunatha, Fatigue Behavior of carbon fiber composite laminate under block-type spectrum loading, Proc. XIV National Seminar on Aerospace Structures, <i>XI National Seminar on Aerospace Structures, XI NASAS</i> , 30-31 Jan. 2006, VNIT, Nagpur, India
123	CM Manjunatha, VR Ranganath, Effect of materials on the spectrum modification for full scale fatigue testing of an ageing aircraft, <i>XI National Seminar on Aerospace Structures, XI NASAS</i> , 30-31 Jan. 2006, VNIT, Nagpur, India
124	CM Manjunatha, V.R. Ranganath Fatigue crack growth analysis to modify spectrum load sequence for full scale fatigue testing of an aircraft, <i>National Symposium on Fatigue, Fracture and Integrity Assessment, FFIA-2006</i> , 17-18, Jan. 2006, Jamshedpur, India
125	CM Manjunatha, VR Ranganath, Prediction of optimum test load spectrum based on materials for full scale fatigue testing of an aircraft, <i>International Conference on Computational and Experimental Engineering and Science, ICCES05</i> , 1-6 Dec.2005, IITM, Chennai, India

126	CM Manjunatha, VR Ranganath, Fatigue crack growth prediction under spectrum loading sequence, <i>Annual Technical Meeting: NMD-ATM 2005</i> , 14-16 Nov. 2005, IITM, Chennai, India
127	KL Singh, CM Manjunatha, Finite element analysis of CFC panel buffered T-stiffened carbon fiber composite panel with circular cut-out, <i>National Conference on Composite Component Construction</i> , 12-13 Sept. 2005, JNTU college of Engineering, Kakinada, India
128	MS Dasharathi, K Annamalai, M Adithan, VR Ranganath, CM Manjunatha and PSS Rao Patange, On-line measurement of fatigue crack growth rate in servo hydraulic testing machine using labview software, <i>21<sup>st</sup> International Conference on CAD/CAM Robotics, CARS &amp; FOF 2005</i> , 17-20 July 2005, Krakow, Poland
129	M Raghavendra, CM Manjunatha, CV Venugopal, M Jeeva Peter, Effect of moisture on the mechanical properties of GFRP woven fabric material, <i>International Seminar for Research Students, ISRS-2004</i> , 20-22 Dec. 2004, IIT Madras, India
130	CM Manjunatha, K Balakrishna, M Jeeva Peter and S Ravikumar, Effect of moisture on the tensile strength degradation of fibers in composite fabric materials, <i>International Conference on Theoretical and Applied Computational and Experimental Mechanics ICTACEM-2004</i> , 28-30 Dec.2004, IIT Kharagpur, India
131	TC Subba Reddy, R Srinivasamurthy, CM Manjunatha, Tensile testing of fuselage CFC cut-out panels, <i>International Conference on Recent Advances in Composite Materials ICRACM-2004</i> , 17-19 Dec. 2004, BHU, Varanasi, India
132	CM Manjunatha, TC Subba Reddy, R Srinivasamurthy, K Vijayaraju, PD Mangalgiri, Effect of off-axis loading and countersunk hole on the bearing strength of CFC bolted joint, <i>International Conference on Recent Advances in Composite Materials ICRACM-2004</i> , 17-19 Dec. 2004, BHU, Varanasi, India
133	CM Manjunatha, KS Narayana Rao, M Jeeva Peter, S Ravikumar, "A statistical approach to the determination of design allowable for a structural composite material of a helicopter", <i>Proceedings of the 3<sup>rd</sup> ISAMPE National Conference on Composites INCCOM-3</i> , 7-9 Oct. 2004, Pune, India
134	CM Manjunatha, TC Subba Reddy, R Srinivasa Murthy, K Vijayaraju, Influence of Moisture on the Bearing Strength of CFC Bolted Joints", <i>3<sup>rd</sup> ISAMPE conference on Composites INCCOM-3</i> , 7-9 Oct. 2004, Pune, India
135	R Srinivasa Murthy, TC Subba Reddy, CM Manjunatha, MD Praveenkumar, Tensile testing and evaluation of CFC panel with rectangular cut-out, <i>International Conference on Advances in Structural Integrity, ICASI-2004 and National Seminar on Aerospace Structures XIII-NASAS</i> , 14-17 July 2004 IISc, Bangalore, India
136	MD Praveenkumar, TC Subba Reddy, R Srinivasa Murthy, CM Manjunatha, K Vijayaraju, Testing and evaluation of composite T-beam under pressure loading, <i>International Conference on Advances in Structural Integrity, ICASI-2004 and National Seminar on Aerospace Structures XIII-NASAS</i> , 14-17 July 2004 IISc, Bangalore, India
137	CM Manjunatha, TC Subba Reddy, R Srinivasa Murthy, K Vijayaraju, Effect of environment on the T-shear strength of co-cured CFC T-Joint specimen, <i>International Conference on Advances in Structural Integrity, ICASI-2004 and National Seminar on Aerospace Structures XIII-NASAS</i> , 14-17 July 2004, IISc, Bangalore, India
138	TC Subba Reddy, R Srinivasa Murthy, CM Manjunatha, K Vijayaraju, PD Mangalgiri. Effect of impact damage on the static T-shear strength of co-cured carbon fiber composite specimen, <i>ISAMPE National Conference on Composites, INCCOM-2 and National Seminar on Aerospace Structures NASAS</i> , Sept. 2003, Bangalore, India

139	R Srinivasa Murthy, TC Subba Reddy, CM Manjunatha, K. Vijayaraju, Testing and evaluation of a carbon fiber composite L-joint, <i>ISAMPE National Conference on Composites-INCCOM-2 and National Seminar on Aerospace Structures-NASAS</i> , ISAMPE-Bangalore, Sept. 2003, Bangalore, India
140	CM Manjunatha, B.K. Parida, A new model for predicting the effects of tensile overload on fatigue crack growth behaviour, <i>44<sup>th</sup> AIAA Conference on Structures, Structural Dynamics, and Materials</i> , 7-10 Apr. 2003, Norfolk, Virginia, USA
141	CM Manjunatha, RK Puty, PK Dash, BK Parida. Derivation of test load spectrum for full scale fatigue testing of an aircraft. <i>International Conference on Life Extension of Aging Aircraft, ALEX 2000</i> , 9-10 Jun. 2000, Nasik, India
142	BK Parida, CM Manjunatha, PK Dash. Fatigue crack growth behavior of small cracks emanating from a corner notch. <i>ASTM conference on Small Fatigue Cracks: Mechanics, Mechanisms and Applications</i> , 6-11 Dec. 1998, Hawaii, USA
143	CM Manjunatha, BK Parida. The growth behavior of short fatigue cracks in an aluminum alloy, <i>International Conference on Recent Advances in Metallurgical Processes ICRAMP-97</i> , July 1997, IISc, Bangalore, India
144	CM Manjunatha, BK Parida. Automated crack length measurement with modified single cantilever COD gage. <i>6<sup>th</sup> National Seminar on Aircraft Structures NASAS</i> , 1996, NAL, Bangalore, India
145	CM Manjunatha, JE King. Temperature and environmental effects on fatigue crack growth rate behavior in Ni-Cr-Mo steel. <i>Fifth International Conference on Fatigue and Fatigue Thresholds, FATIGUE 93</i> , 3-7 May 1993, Montreal, Quebec, Canada