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JOURNAL PUBLICATIONS / BOOK CHAPTER

- 1. B Anush Raj, J T Winowlin Jappes, M Adam Khan[#], V Dillibabu and N C Brintha (2020) Studies on heat treatment and electrochemical behaviour of 3D printed DMLS processed nickel based superalloy, Applied Physics A Materials Science & Processing. (Accepted)
- **2. M. Adam Khan** and Kapil Gupta (**2020**) Experimental Evaluation of Surface Quality Characteristics in Laser Machining of Nickel-based Superalloy, Optik International Journal for Light and Electron Optics. [In Press] (https://doi.org/10.1016/j.ijleo.2019.163199)
- **3. M. Adam Khan** and Kapil Gupta (2020) Machining Ni-Cr-Fe based superalloy using abrasive water jet cutting process and its surface studies, Materials Today: Proceedings [In Press] (https://doi.org/10.1016/j.matpr.2019.07.227)
- **4. Adam Khan M.***, Chellaganesh D., Uthayakumar M., Winowlin Jappes J.T., Duraiselvam M. (**2020**) Electrochemical Behaviour and Surface Studies on Austenitic Stainless Steel and Nickel-Based Superalloy Dissimilar Weld Joints. In: Gupta K. (eds) Materials Forming, Machining and Post Processing. Materials Forming, Machining and Tribology. Springer, Cham. pp. 251 266. (Book Chapter)
- **5.** D Chellaganesh, **M. Adam Khan**[#] and Winowlin Jappes JT (**2019**) High temperature oxidation behavior of thermally sprayed alumina titania coatings on nickel based superalloys, Materials Research Express. (In Press)
- **6.** S. Sivakumar, **M. Adam Khan**[#] and B. Muralidharan (**2018**) Processing of titanium based human implant material using Wire EDM, Materials and Manufacturing Processes 34(6), 695 700
- **7. M. Adam Khan**; A. Senthil Kumar; S. Thirumalai Kumaran; M. Uthayakumar and Tae Jo Ko (2019) Effect of tool wear on machining GFRP and AISI D2 steel using alumina based ceramic cutting tools, Silicon, 11(1), 153 158.
- **8.** Adam Khan M[#], S. Manikandan, G. Ebenezer, M. Uthayakumar and S. Thirumalai Kumaran, (2019) Solid particle erosion studies on fibre composite with egg shell as filler materials, International Journal of Surface Science and Engineering, 13(1), 1-13.
- **9.** M. Uthayakumar, S. Thirumalai Kumaran, **M. Adam Khan**, S. Skoczypiec, and W. Bizon (**2018**) Microdrilling of AA (6351)-SiC-B4C Composite Using Hybrid Micro-ECDM Process, Journal of Testing and Evaluation 48 (4).

- **10.** Kuruvila, Roshan; Sundaresan, Thirumalai Kumaran; **Khan, M. Adam**; M, Uthayakumar (**2018**) A brief review on the erosion–corrosion behavior of engineering materials, Corrosion Reviews, 36(5), 435 447.
- **11.** Chellaganesh D, **Adam Khan M**[#], JT Winowlin Jappes (**2018**) Hot corrosion behaviour of nickel iron based superalloy in gas turbine application, International Journal of Ambient Energy. (In Press)
- 12. D Chellaganesh, M Adam Khan, A Mohamed Ashif, T Ragul Selvan, S Nachiappan and J T Winowlin Jappes, (2018) Hybrid Composite Material and Solid Particle Erosion Studies, IMMT2017, IOP Conf. Series: Materials Science and Engineering 346 012014 doi:10.1088/1757-899X/346/1/012014
- **13. M Adam Khan**, A K Gokul, M.P Bharani Dharan, R.V.S Jeevakarthikeyan, M Uthayakumar, S Thirumalai Kumaran and M Duraiselvam, **(2018)** Machinability of nickel based alloys using electrical discharge machining process, IMMT2017, IOP Conf. Series: Materials Science and Engineering 346 012044 doi:10.1088/1757-899X/346/1/012044.
- **14.** Chellaganesh D, **Adam Khan M**[#], JT Winowlin Jappes and Sathiyanarayanan S (**2017**) Cyclic oxidation and hot corrosion behavior of nickel iron based superalloy, High Temperature Material and Processes, 37(2) 173 180.
- **15. Adam Khan M**[#], N. Ram Prasad, S. Navaneetha Krishnan, S. Karthic Raja, J.T.Winowlin Jappes, Muthukannan Duraiselvam (**2017**) Laser treated austenitic steel and nickel alloy for human implants, Materials and Manufacturing Processes, 32 (14) 1635 1641.
- **16.** S.Thirumalai Kumaran, Tae Jo Ko, M.Uthayakumar, **M.Adam Khan**, **(2017)** Imran Muhammad, Some experimental investigations on drilling AA (6351)-SiC-B4C composite Materials and Manufacturing Processess 32 (13) 1557 1564.
- **17. Adam Khan M**[#], Sundarrajan S and Natarajan S (**2017**) Hot corrosion behaviour of Super 304H for marine applications at elevated temperatures, Anti-Corrosion Methods and Materials, 64 (5) 508 514.
- **18. Adam Khan M**[#], Sundarrajan S and Natarajan S (**2017**) Studies on thermally grown oxide as interface between plasma sprayed coatings and nickel based superalloy substrate, International Journal of Minerals, Metallurgy and Materials, 24(6), 681 690.
- **19. Adam Khan M,** Sundarrajan S and Natarajan S (**2016**) Design and Statistical analysis of plasma coatings on superalloy for gas turbine applications, Materials at High Temperatures. 34(1) 12-21.
- **20.** S. Thirumalai Kumaran, Tae Jo Ko, M. Uthayakumar, **M. Adam Khan** and Magdalena Niemczewska-Wójcik (**2017**) Surface texturing by dimple formation in TiAlSiZr alloy using μ-EDM, Journal of the Australian Ceramic Society 53 (2), 821 828

- **21.** Thanikachalam J, Nagaraj P, Gopala Krishnan T, **Adam Khan. M** (**2017**) Investigation of Structural integrity and corrosion Behaviour of Thermal Barrier Coating, International Journal of Materials and Product Technology 15(1-3) 17 30.
- **22.** M.Uthayakumar, **M. Adam Khan**, S.Thirumalai Kumaran, Adam slota and Jerzy Zajac, (2016) Machinability of nickel based superalloy by abrasive water jet machining, Materials and Manufacturing Processes, 31(13) 1733 1739.
- **23.** S.P. Jani, A. Senthil Kumar, **M. Adam Khan**[#] and M. Uthaya Kumar (**2016**) Machinablity of hybrid natural fibre composite with and without filler as reinforcement, Materials and Manufacturing Processes 31(10) 1393 1399.
- **24.** A Rajalingam, SP Jani, A Senthil Kumar, **M Adam Khan (2016)** Production methods of biodiesel, Journal of Chemical and Pharmaceutical Research 8 (3), 170-173
- **25. Khan M Adam**[#] (**2015**) Electrochemical polarisation studies on plasma-sprayed nickelbased superalloy, *Applied Physics A Materials Science and Processing*, 2015, 120 (2), 801-808
- **26. Khan MA**[#], Sundarrajan S, Duraiselvam M, Natarajan S and Senthil Kumar A (**2015**) "Sliding wear behaviour of nickel based superalloy on plasma sprayed coatings", *Surface Engineering*, 33(1) 35 41.
- 27. Adam Khan M, Sundarrajan S and Natarajan S (2015) "Cyclic hot corrosion behaviour of Inconel 617 with $N_{a2}S_{O4}$ / NaCl / V_{2O5} molten salt environment at 900° and 1000°C", *High* Temperature *Materials and Processes 34 (3)*, 221–225.
- **28.** Adam Khan M, Sundarrajan S and Natarajan S (2014) "Influence of Plasma coatings on Inconel617 for gas turbine applications", Surface Engineering, 30(9), 656 661.
- 29. Adam Khan M, Sundarrajan S, Natarajan S, Parameswaran P and Mohandas E (2014) "Oxidation & hot corrosion behavior of Nickel based superalloy for Gas Turbine Applications" *Materials and Manufacturing Processes*, 29, 1-8.
- **30. Adam Khan M***, Senthil Kumar A and Poomari A **(2012)** "A hybrid algorithm to optimize cutting parameter for machining GFRP composite using alumina cutting tools" The International Journal of Advanced Manufacturing Technology, Volume 59, Numbers 9-12, 1047-1056.
- **31. Adam Khan M*** and Senthil Kumar A (**2011**) "Machinability of Glass Fibre Reinforced Plastic (GFRP) Composite Using Alumina Based Ceramic Cutting Tools" Journal of Manufacturing Process Volume 13 (1), Page 67-73.
- **32.** A.Poomari, B. Mohan, A. Rajadurai, A. Senthil Kumar, **M. Adam Khan** (2009) "Machinability of Ti-Al-N coated cermet tool with Ti[C,N] mixed alumina cutting

- and the uncoated cermet cutting tool while machining AISI D2 steel" International Journal of Manufacturing Science and Technology, Vol 3(1), page 101 109.
- **33.** A. Senthil Kumar, **M. Adam Khan**, R. Thiraviam and T. Sornakumar (**2006**) "Machining Parameters Optimization For Alumina Based Ceramic Cutting Tools Using Genetic Algorithm" International Journal of Machining Science and Technology, Vol. 10 page 471-489.

Internationl & National Conference – Conferences:

- 1. Adam Khan M, Gokul A K, Bharani Dharan M.P, Jeevakarthikeyan R.V.S, Uthayakumar M, Thirumalai Kumaran S and Duraiselvam M "MACHINABILITY OF NICKEL BASED ALLOYS USING ELECTRICAL DISCHARGE MACHINING PROCESS" International Conferences on Recent Advances in Materials & Manufacturing Technologies (IMMT2017) during November 28 & 29, 2017 at BITS Pilani Dubai, UAE.
- 2. D Chellaganesh, M Adam Khan, A Mohamed Ashif, T Ragul Selvan, S Nachiappan and J T Winowlin Jappes, "Hybrid Composite Material and Solid Particle Erosion Studies" International Conferences on Recent Advances in Materials & Manufacturing Technologies (IMMT2017) during November 28 & 29, 2017 at BITS Pilani Dubai, UAE.
- 3. D. Chellaganesh, Adam Khan M* and JT Winowlin Jappes "NICKEL BASED SUPERALLOYS AND THERMAL BARRIER COATINGS FOR TURBINE BLADES" International Conference on Electrochemical Science and Technology (ICONEST2017), 10th 12th August, 2017 at Indian Institute of Science, Bengaluru.
- **4.** R. Prakash, A. Mohamed Ashif, S. Manikandan, B. Ponrajesh, Adam Khan. M "Electrochemical behaviour of stainless steel and nickel based superalloy dissimilar weld" International Conference on Electrochemical Science and Technology (ICONEST2017), 10th 12th August, 2017 at Indian Institute of Science, Bengaluru.
- 5. S. Deepak Raja, S. Yogesh Naren, B. Vignesh, Adam Khan M* "THERMALLY SPRAYED ALUMINA TITANIA COATINGS ON STAINLESS STEEL AND ITS ELECTROCHEMISTRY" International Conference on Electrochemical Science and Technology (ICONEST2017), 10th 12th August, 2017 at Indian Institute of Science, Bengaluru.
- **6.** Pratik Panjikar, Vignesh Iyer, Vamsi Krishna M, Ram Prasad N and Adam Khan M "ENGINEERING MATERIAL FOR HUMAN IMPLANTS ELECTROCHEMISTRY WITH SIMULATING BODY FLUID A REVIEW" International Conference on Electrochemical Science and Technology (ICONEST2017), 10th 12th August, 2017 at Indian Institute of Science, Bengaluru.

- 7. M.P. Bharani Dharan, R.V.S.Jeevakarthikeyan, V. Kowshik, Adam Khan.M, N.Rajini, J.T. Winowlin Jappes, L. Muthulakshmi and B. Anandkumar "Influence of Escherichia coli and Bacillus sp. on Steel Simulating Marine Corrosion" International Conference on Electrochemical Science and Technology (ICONEST2017), 10th 12th August, 2017 at Indian Institute of Science, Bengaluru.
- **8.** S.Sivakumar, B.Muralidharan, M.Adam Khan "Biocompatibility studies and In vitro test on Electro Discharge Textured Titanium Bone Implant" International Conference on Electrochemical Science and Technology (ICONEST2017), 10th 12th August, 2017 at Indian Institute of Science, Bengaluru.
- R. Prakash, A. Mohamed Ashif, S. Manikandan, B. Ponrajesh, Adam Khan. M
 "Electrochemical behaviour of stainless steel and nickel based superalloy dissimilar weld"
 International Conference on Electrochemical Science and Technology (ICONEST2017), 10th
 12th August, 2017 at Indian Institute of Science, Bengaluru.
- **10.** Adam Khan M, Uthayakumar M and Thirumalaikumaran, Surface quality of nickel based superalloy on abrasive water jet machining, National Symposium on Electrochemical Science and Technology (NSEST 2015) during July 24 25, 2015, organized by ECS India at IISc Bangalore.
- **11.** Adam Khan M, Gopalakrishnan M, Kamala Kannan S and Karthick K, Electrochemical studies on thermally sprayed superalloys with 3.5% NaCl and 1.0M H2SO4 solutions, 17th Asian Pacific Corrosion Control Conference (APCCC17) during January 27 30, 2016 at IITB Mumbai.
- **12.** Chellaganesh D and Adam Khan M, High temperature oxidation and hot corrosion behavior of nickel based superalloys, 17th Asian Pacific Corrosion Control Conference (APCCC17) during January 27 30, 2016 at IITB Mumbai.
- **13.** Sirajdeen, A. Senthil Kumar and Adam Khan M, Electrochemical behavior on modern surface modification techniques a review, 17th Asian Pacific Corrosion Control Conference (APCCC17) during January 27 30, 2016 at IITB Mumbai.
- **14.** Adam Khan M, Karthick K, Gopalakrishnan M, Kamala Kannan S and Chellaganesh D, Electrochemical behaviour of austenitic stainless steel with and without thermal spray coatings, Eighteenth National Congress on Corrosion Control (18th NCCC) during February 24 26, 2016 organised by NCCI & CSIR CECRI, Karaikudi at Hotel Green Park, Chennai.
- **15.** B. Elayaperumal, M. Gobalakrishnan, N. Hariharan, J.T. Winowlin Jappes, Adam Khan M and I. Siva, Hard nickel composite coatings on mild steel for engineering applications, Eighteenth National Congress on Corrosion Control (18th NCCC) during February 24 26, 2016 organised by NCCI & CSIR CECRI, Karaikudi at Hotel Green Park, Chennai.

- **16.** N Ramprasad, S Navaneetha Krishnan, S Karthickraja, Adam Khan M, JT Winowlin Jappes and M Uthayakumar, Alternate materials for human implants and electrochemical behavior, National Symposium on Electrochemical Science and Technology (NSEST 2016) during July 15 16, 2016, organized by ECS India at IISc Bangalore.
- **17.** Javid Ahamed, T Ragul Selvan, N Mohammed Illiyas, Adam Khan M, Duraiselvam M, Effect and surface quality of laser treated austenitic stainless teel, National Symposium on Electrochemical Science and Technology (NSEST 2016) during July 15 16, 2016, organized by ECS India at IISc Bangalore.
- **18.** Chellaganesh D, Adam Khan M and Winolin Jappes JT, Hot corrosion studies on Ni Fe based superalloy for gas turbine applications, National Symposium on Electrochemical Science and Technology (NSEST 2016) during July 15 16, 2016, organized by ECS India at IISc Bangalore.
- **19.** Assessment on plasma coatings towards hot corrosion behaviour of Inconel 617 through factorial design for gas turbine applications The International Conference on Electrochemical Science and Technology, ICONEST 2014, August 07 09, 2014, at Indian Institute of Science (IISc), Bangalore.
- **20.** An Adam Gene Algorithm to optimize cutting parameter for machining GFRP composite using alumina cutting tools, 2nd International Conference on Advanced Manufacturing and Automation (INCAMA-2013), 28th 30th March 2013, at Kalasalingam University, Krishnankoil-626126, Tamil Nadu, India
- **21.** Machinability of Glass Fiber Reinforced Plastic (Gfrp) Composite Using Zirconia Based Alumina Cutting Tool, 2nd International Conference on Advanced Manufacturing and Automation (INCAMA-2013), 28th 30th March 2013, at Kalasalingam University, Krishnankoil-626126, Tamil Nadu, India
- **22.** Comparison Of The Performance Of Ti-Al-N Coated Cermet Tool With The Ti[C,N] Mixed Alumina Cutting Tool And The Uncoated Cermet Cutting Tool, an International conference on Advances in Mechanical Engineering (ICAME 2009), 3rd 5th August 2009, at SV NIT Surat, India.
- 23. "Optimization of machining process parameters using evolutionary algorithm", 2nd International Conference on Recent Advances in Material Possessing Technology RAMPT'09, held on 25th 27th February 2009 at National Engineering College, Kovilpatti, India.
- **24.** "Comparison Of Tool Wear Of Alumina Based Ceramic Cutting Tool On Machining Glass Fibre Reinforced Plastic (GFRP) And Die Steel (AISI D2)", an International conference on Advances in Mechanical Engineering (AME 2008), 15th 17th December 2008 at SV NIT Surat, India.

- **25.** "Degradation of Glass Fiber Reinforced Composite A Review", an International conference TeamTech 2007, 4th and 6th October 2007 at Indian Institute of Science (IISc). Bangalore, India.
- **26.** "Performance Characteristics Of Ceramic Cutting Tools On Machining Nodular Cast Iron" First International & 22nd All India Manufacturing Technology Design and Research Conference (22nd AIMTDR) 21st 23rd December 2006, IIT Roorkee.
- **27.** "An Artificial Immune algorithm for Multiobjective flow shop scheduling" International Conference on productivity and quality research (ICPQR-2005) held on 12-15 December 2005 at IIT Delhi.
- **28.** "A PSO algorithm for optimization of machining parameters in turning" International Conference on productivity and quality research (ICPQR- 2005) held on 12-15 December 2005 at IIT Delhi
- **29.** "Optimisation of machining parameters using Genetic Algorithm for tuning bar stock", held on January 2005, at Kumaraguru College of Technology, Coimbatore.
- **30.** "Surface roughness analysis using Fuzzy Logic on machining steel by advance Ceramic cutting tools", held on January 2005, at Kumaraguru College of Technology, Coimbatore.
- **31.** "Analysis of Hammer Crusher through probability distribution", International Conference on Responsive supply chain and organizational competitiveness (RSC-2004), held on January 2004 at Coimbatore Institute of Technology, Coimbatore.
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- **33.** "Kanban based production control A Survey". International Conference on Responsive supply chain and organizational competitiveness (RSC-2004) held on January 2004 at Coimbatore Institute of Technology, Coimbatore.
- **34.** "A simulated annealing approach to solve single machine Scheduling problem". International Conference on CAD/CAM and Robotics for Future factories (INCARF-2003) held on 11-13 Aug 2003 at IIT Delhi.
- **35.** Evaluation of thermal barrier coatings on Inconel 617 for gas turbine applications Seventeenth National Congress on Corrosion Control to be held at CSIR-Central Electrochemical Research Institute, Karaikudi during 21-23, August 2014, at CSIR CECRI, Karaikudi.
- **36.** Oxidation and hot corrosion behaviour of Inconel 617 at 900° and 1000°C, National Symposium on Electrochemical Science and Technology (NSEST 2013), August 23 24, 2013, at Indian Institute of Science (IISc), Bangalore.

- **37.** Evaluation of mechanical properties of basalt fiber reinforced metal laminates, National Conference on Corrosion, Surface Engineering & Tribology (CST2013), 22nd 23rd April 2013, at National Institute of Technology, Tiruchirapalli, Tamil Nadu.
- **38.** Hot Corrosion behaviour of Super 304H under marine environment with Na2SO4 / NaCl / V2O5 salt mixture, National Conference on Corrosion, Surface Engineering & Tribology (CST2013), 22nd 23rd April 2013, at National Institute of Technology, Tiruchirapalli, Tamil Nadu.
- **39.** Tool life of alumina based ceramic cutting tool and cermet cutting tool on machining Glass fibre reinforced plastic (GFRP), National Conference on Recent Advances in Mechanical Engineering (RAME 2011), held on 01 02 April 2011 at Noorul Islam Centre for Higher Education, Kumaracoil,629180.
- **40.** Design And Analysis Of Impact Onto Head Through Ballistic Helmet, National Conference on Recent Advances in Mechanical Engineering (RAME 2011), held on 01 02 April 2011 at Noorul Islam Centre for Higher Education, Kumaracoil,629180
- **41.** Machinability of Glass Fibre Reinforced plastic (GFRP) Composite using ceramic and cermet cutting tool, National Conference on Universal Innovations in Mechanical Engineering (UIME -11)", at KSR College of Engineering, Tirchegode, on 11th February 2011.
- **42.** Development of Hybrid Algorithm for Autonomous Parameter Selection In Turning Process, AICTE Sponsored National Conference on "Optimization Techniques and its Application in Engineering", at Rajalakshmi Engineering College, Chennai, on 6th and 7th August, 2009.
- **43.** Optimization of turning parameters for machining AISI D2 steel with multi layer coated carbide tool using PSO technique, AICTE Sponsored National Conference on "Optimization Techniques and its Application in Engineering", at Rajalakshmi Engineering College, Chennai, on 6th and 7th August, 2009.
- **44.** Analysis of machining parameter for Ti-Al-N coated cermet cutting tool while machining AISI 4340 steel using grey relational analysis in the Taguchi method, AICTE Sponsored National Conference on "Optimization Techniques and its Application in Engineering", at Rajalakshmi Engineering College, Chennai, on 6th and 7th August, 2009.
- **45.** "Evaluation of ceramic cutting tool during machining of Glass Fibre Reinforced Plastic composite" National conference (FEM-08) held on 24th and 25th March 2008, at Oxford college of Engineering, Bangalore, India.
- **46.** "Machinability analysis of hardened die steel using ceramic and carbide cutting tools", National Conference on Advances in Robotics, Precision Engineering & Manufacturing Techniques (AIRPAM2008), held on 14th and 15th March 2008 at Madras Institute of Technology, Anna University, Chennai.

- **47.** "Optimization of Machining Process Parameters Using Grey Relation Analysis", NCCIPDMM 2008, at Kalasalingam University, Krishnankoil.
- **48.** "Comparison of performance characteristics between ceramic and carbide cutting tools on machining die steel", National conference on Recent Advances in manufacturing & Management (RAMM 2008) held on 8th and 9th February 2008 at Annamalai University, Annamalai nagar, Tamil Nadu.
- **49.** "Machining of Glass fiber reinforced Plastic with ceramic cutting tool", National conference on Recent Advances in manufacturing & Management (RAMM 2008) held on 8th and 9th February 2008 at Annamalai University, Annamalai nagar, Tamil Nadu.
- **50.** "Evaluation of Mechanical Properties and Corrosion studies on FRP Composites" National Conference on Trends and innovations in mechanical engineering TIME 2007, held on 5th and 6th May 2007 at Deccan College of Engineering, Hyderabad.
- **51.** "Design of cutting parameters for cutting process" National Conference on recent trends in Mechatronics, Nano technology and robotics held on 15-16 April 2006 at National Institute of Technology Rourkela.
- **52.** "Optimisation of cutting process parameters using Non-Traditional Optimisation Algorithm", held on April 2005, at Bannari Amman Institute of Tech., Sathyamangalam.
- **53.** "Finite Element Analysis on Ceramic Cutting tool", held on April 2005, at Bannari Amman Institute of Tech., Sathyamangalam.