



**Dr.M.RAVICHANDRAN**

ASSOCIATE PROFESSOR

MECHANICAL ENGINEERING

**Educational Qualification :**

**Ph.D** - Mechanical Engineering –2014 –Anna University Chennai

**M.Tech:** Advanced Manufacturing - May 2007- SASTRA University, Tanjore.

**B.E:** Mechanical Engineering -April 2002- M.I.E.T Engineering College, Bharathidasan University, Tiruchirappalli.

**Academic Experience : Teaching 13.10 Years**

**I) INTERNATIONAL JOURNALS: 53**

**International Journals (Science Citation Indexed)**

1. T.K. Kandavel, R. Chandramouli and **M. Ravichandran** “Experimental study on the plastic deformation and densification characteristics of some sintered and heat treated low alloy powder metallurgy steels” Materials and Design, 31 (2010) 485–492. (Scopus)
2. **M. Ravichandran**, A.Naveen Sait and V.Anandkrishnan “Synthesis and forming behavior of aluminium-based hybrid powder metallurgic composites” International Journal of Mineral, Metallurgy and Materials –21 (2014) 181-189. (Scopus)
3. **M. Ravichandran**, A.Naveen Sait and V.Anandkrishnan “Effect of TiO<sub>2</sub> in aluminium matrix on workability behavior of powder metallurgy composites during cold upsetting” International Journal of Materials Research – 105:4 (2014) 358-364. (Scopus)
4. **M. Ravichandran**, A. Naveen Sait and V. Anandkrishnan “Al–TiO<sub>2</sub>–Gr powder metallurgy hybrid composites with cold upset forging” Rare Metals- 33:6 (2014) 686–696. (Scopus)
5. **M. Ravichandran**, A.Naveen Sait and V.Anandkrishnan “Densification and deformation studies on powder metallurgy Al–TiO<sub>2</sub>–Gr composite during cold upsetting” Journal of Materials Research – 29:13 (2014) 1480-1487. (Scopus)

6. **M. Ravichandran**, A. Naveen Sait and V. Anandakrishnan “Workability studies on Al-TiO<sub>2</sub>-Gr powder metallurgy composites under tri-axial stress state during cold upsetting” *Materials Research- American Journal of Materials* –17:6 (2014) 1489-1496. (Scopus)
7. **M. Ravichandran**, A. Naveen Sait and V. Anandakrishnan “Synthesis and forming characteristics of Al – TiO<sub>2</sub> powder metallurgy composites during cold upsetting under plane stress conditions” *Journal of Sandwich Structure and Materials* – 17:3 (2015) 278-294. (Scopus)
8. M.Pandi Krishnan, A.Naveen Sait and **M. Ravichandran** “Parametric optimization of resistance seam welding of stainless steel (SS 304) sheets using Taguchi’s approach” *Materials Testing* – 57: 5 (2015) 463-467. (Scopus)
9. **M. Ravichandran** and V. Anandakrishnan “Optimization of P/M parameters to attain maximum strength in Al-10wt. %MoO<sub>3</sub> composite” *Journal of Materials Research* – 30:15 (2015) 2380-2387. (Scopus)
10. **M. Ravichandran**, VS.Vidhya and V. Anandakrishnan “Study of the Characteristics of Al+5wt. %TiO<sub>2</sub>+6wt.%Gr hybrid P/M composite powders prepared by the process of ball milling” *Materials Science*, 51(4) (2016) 589-598. (Scopus)
11. **M. Ravichandran**, S. Dineshkumar “Experimental investigations on Al-TiO<sub>2</sub>-Gr hybrid composites fabricated through stir casting route”, *Materials Testing* – 58 (3) (2016) 211-217. (Scopus)
12. **M. Ravichandran**, M.Thirunavukkarasu, S.Sathish and V.Ananthakrishnan “Optimization of welding parameters to attain maximum strength in friction stir welded AA7075 joints” *Materials Testing* – 58 (3) (2016) 206-210. (Scopus)
13. S.Marichamy, M.Saravanan, **M. Ravichandran**, G.Veerappan “Parametric optimization of EDM process on Duplex Brass using Grey relational analysis, *Journal of Materials Research*, 31 (16) (2016) 2531-2537. (Scopus)
14. **M. Ravichandran** and V. Anandakrishnan “Hot upsetting studies on sintered (Al-TiO<sub>2</sub>-Gr) powder metallurgy hybrid composite” *Strength of Materials*, 3 (2016) 135-146. (Scopus)
15. S.Marichamy, M.Saravanan, **M. Ravichandran** “Parametric optimization of EDM process on  $\alpha$ - $\beta$  Brass using Taguchi approach”, *Russian Journal of Non-Ferrous Metals*, 57(6), (2016) 586–598. (Scopus)
16. V.Mohanavel, K.Rajan, **M.Ravichandran**, “Synthesis, characterization and properties of stir cast AA6351-Aluminium Nitride (AlN) composites” *Journal of Materials Research*, 31(24), (2016) 3824-3831. (Scopus)
17. S.Saravanan, P. Senthilkumar, **M.Ravichandran**, V.Anandakrishnan, “Mechanical, electrical and corrosion behavior of AA6063/TiC composites synthesized via stir casting route” *Journal of Materials Research*, 32 (3), (2017) 606-614. (Scopus)
18. S. Arivukkarasan, V. Dhanalakshmi, B.Stalin, M.Ravichandran, “Mechanical and Tribological Behaviour of Tungsten Carbide (WC) Reinforced Aluminium LM4 Matrix Composites” *Particulate Science and Technology* – (2017) 1-7. Doi. org/ 10.1080 / 02726351. 2017.1331285. (Scopus)
19. K.Ilayaraja, P.Ranjith Kumar, V. Anandakrishnan, S.Sathish, **M. Ravichandran**, R.Ravi Kumar “Synthesis, characterization and forming behavior of hybrid copper matrix composites produced using powder metallurgy” *International Journal of Materials Research- 108 : 7* (2017) 586-591. (Scopus)

20. **M.Ravichandran**, V. Anandakrishnan, M.Duraiselvam, Alokesh Pramanik, Recent Issues in Materials and Manufacturing, Advances in Mechanical Engineering – Editorial, 9(12) (2017),1–2. (Scopus)
21. B. Stalin · G. T. Sudha, **M. Ravichandran** “Investigations on Characterization and Properties of Al-MoO<sub>3</sub> composites synthesized through Powder Metallurgy Technique, Silicon – doi.org/10.1007/s12633-018-9803-6.
22. S.Dinesh Kumar and **M. Ravichandran**, “Synthesis, characterization and wire electric erosion behaviour of AA7178-10 wt. % ZrB<sub>2</sub> composite” Silicon- DOI 10.1007/s12633-018-9802-7.
23. B.Stalin, **M.Ravichandran**, Rameshkumar, Optimization of reinforcement and wear parameters to minimize the wear behavior of AA6063-Si<sub>3</sub>N<sub>4</sub> Composite, Materials Express Research, 5 (2018) 1-10.
24. S.Saravanan, P, Senthilkumar, **M, Ravichandran**, N, Shivasankaran, Wire electrical discharge machining of AA6063- TiC particle reinforced metal matrix composites using Taguchi method, Materials Research Express – 5(10) (2018).
25. S.Dinesh Kumar and **M. Ravichandran**, “Synthesis, microstructure, properties and EDM behavior of hard ZrB<sub>2</sub> reinforced AA7178 composite” Materials Testing, 60 (9) (2018) 877-884.
26. M.Meignanamoorthy, **M.Ravichandran**, Effect of hot extrusion and the amount of boron carbide on the properties and microstructure of AA8079- B<sub>4</sub>C composites produced via ball milling and powder metallurgy– Materials Research Express, 5 (2018) 116508.

### **International Journals (Scopus Indexed)**

1. S.Saravanan, P.Senthilkumar and **M. Ravichandran**, K.Kaviya “Microstructure and Stress-Strain Analysis of AA6063-5&7.5wt.%TiC Nano Composites, Journal of Chemical and Pharmaceutical Sciences -11 (2015) 39-42. (Conference Paper)
2. S.Saravanan, **M.Ravichandran**, V.Balasubramaniyan, “Comparison Studies on Effect of Thermal Spray Coating in Internal Combustion Engine” Mechanics and Mechanical Engineering, 20 (1) (2016) 23–32.
3. **M. Ravichandran**, A. Naveen Sait, “Evaluation of Seam Welding Parameters of Stainless steel (SS 316) sheets using Taguchi Technique” International Journal of Manufacturing Technology and Research, 7(3-4) (2015) 175-186.
4. **M.Ravichandran**, S.Saravanan, V.Balasubramanian “Investigations on Erosion and Corrosion behavior of high-velocity oxy-fuel sprayed WC-Cr<sub>3</sub>C<sub>2</sub>-Ni coatings in AISI 1018 Steels” HTM Journal of Heat Treatment and Materials, 71 (4), (2016) 163-169.
5. S.Marichamy, M.Saravanan, **M. Ravichandran**, B Stalin “Optimization of Surface Roughness for Duplex Brass Alloy in EDM Using Response Surface Methodology, Mechanics and Mechanical Engineering, 21(1), (2017) 57-66.
6. S.Sakthivelu, M.Meignanamoorthy, **M.Ravichandran** “Optimization of Machining Parameters in CNC Drilling of Aluminium 6351 Alloy, Pakistan Journal of Bio Technology, 14, (2017) 106-108.

7. S.Sakthivelu, T. Anandaraj, M. Meignanamoorthy, M. Ravichandran “Prediction of Optimized Machining Parameters in CNC End Milling, Pakistan Journal of Bio Technology, 14, (2017) 103-105. (Conference Paper)
8. K.Ilayaraja, P.Ranjith Kumar, V. Anandkrishnan, S.Sathish, **M. Ravichandran**, R.Ravi Kumar “Workability Behavior of Hybrid Copper Matrix Composites Synthesized by Powder Metallurgy Technique” Mechanics and Mechanical Engineering – 21(2) (2017) 207-216.
9. **M. Ravichandran** “Process parameters optimization for plasma transferred arc welding of Stainless Steel 316 using Taguchi technique” HTM Journal of Metals and Materials – 72 (5) (2017) 300-307.
10. **M.Ravichandran**, A.Naveen Sait, U.Vignesh “Investigation on TIG welding parameters of 2205 duplex stainless steel” International Journal of Automotive and Mechanical Engineering – 14(3) (2017) 4518-4530.
11. M.Meignanamoorthy and **M.Ravichandran**, Synthesis of Metal Matrix Composites via Powder Metallurgy Route: A Review, Mechanics and Mechanical Engineering – Vol. 22, No. 1 (2018) 65–75.
12. S. Sakthivelu, P. P. Sethusundaram, M. Meignanamoorthy, M. Ravichandran, Synthesis of Metal Matrix Composites through Stir Casting Process a Review, Mechanics and Mechanical Engineering – Vol. 22, No. 1 (2018) 357–369.
13. B.Stalin, **M.Ravichandran**, S. Arivukkarasan , V. Mohanavel, Weight Loss Corrosion Studies of Aluminium-LM4 Reinforced With Alumina Silicate ( $Al_2O_3SiO_2$ ) Particulates Composites In Sodium Chloride (NaCl) Solution, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), Special Issue, 2018, 329-336.
14. B.Stalin, **M.Ravichandran** & M.Meignanamoorthy, Synthesis of Metal Matrix Composites and Alloys by Mechanical Alloying: A Review, IOP conference series: Material science and Engineering, 402 (2018) 012097 (Conference Paper)
15. A. Praveen Kumar, M.Meignanamoorthy & **M.Ravichandran**, Influence Of Sintering Temperature And The Amount Of Reinforcement On The Microstructure And Properties Of Al–TiO<sub>2</sub> Composites, International Journal of Mechanical Engineering and Technology (IJMET), 9(9) 2018, 826-832.
16. G.Veerappan, **M. Ravichandran** and S.Marichamy, Mechanical properties and Machinability of Waspaloy for Aerospace Applications: A Review, IOP conference series: Material science and Engineering, 402 (2018) 012039. (Conference Paper)
17. **M.Ravichandran**, S.Dinesh Kumar, Aluminium Metal Matrix Composite with Zirconium diboride Reinforcement: A Review, ICMPC 2018, Hydrabad, Materials Today Proceeding. Materials Today: Proceedings 5 (2018) 19844–19847. (Conference Paper)
18. S. Saravanavel, K. Vijayakumar, D. Srinivasan and **M.Ravichandran**, Direct Steam Generation Using Solar Parabolic Dish Collector – A Cost Effective Approach, International Journal of Mechanical Engineering and Technology (IJMET), 9(10) 2018, 102-110.
19. S. Saravanavel, A. Mohanakrishnan, K. Vijayakumar, **M. Ravichandran**, Performance Analysis of Single Basin Solar Distillation System With Various Wick Materials, International Journal of Mechanical Engineering and Technology (IJMET), 9 (10), 2018, 446–453.

### **International Journals (Others with ISSN)**

1. **M. Ravichandran** and S. Dineshkumar “Synthesis of Al-TiO<sub>2</sub> composite through liquid powder metallurgy route” SSRG International Journal of Mechanical Engineering (SSRG-IJME) – 1:1 (2014) 12-17. ISSN: 2249-2593. (Conference Paper)
2. S.Sakthivelu, **M.Ravichandran**, M.Meignanamoorthy and M.Kumar “Effect of Machining Parameters on Surface Roughness and Material Removal Rate in CNC End Milling”, International Journal of Scientific Research and Engineering Studies – 2:4 (2015) 23-26. ISSN: 2349-8862.
3. M. Meignanamoorthy and **M.Ravichandran** “Experimental Investigations on Mechanical Properties of Hot Extruded Al -TiO<sub>2</sub> - Gr Hybrid Composites”, International Journal of Core Engineering & Management - 1:12 (2015) 128-134. ISSN: 2348-9510.
4. M. Meignanamoorthy, S.Sakthivelu and **M.Ravichandran** “A Survey on Aluminium Metal Matrix Composites using Powder Metallurgy Technique”, International Journal of Advanced Research Trends in Engineering and Technology – 2:3 (2015) ISSN: 2348 – 8360.
5. **M. Ravichandran**, A. Naveen Sait and V. Anandakrishnan “Hot upset forging studies on Al-2.5%TiO<sub>2</sub>-Gr hybrid powder metallurgy composite” Transactions of Powder Metallurgy Association of India, 40 (2) (2015) 43-49. (Conference Paper)
6. N.Sabarirajan, N.Rajakumar and **M. Ravichandran**, “Experimental Investigations on Mechanical Properties of AA 8050-TiC Metal Matrix Composite” International Journal of Applied Engineering Research -10:56 (2015) 383-387. (Conference Paper)
7. K. Kaviya, S. Saravanan, **M. Ravichandran**, P. Senthilkumar “Stress-Strain Analysis of AA6063-5 and 7.5 wt. % TiC Nano Composites” – International Journal of Techno Chem Research, 2(2) (2016) 127-132.
8. S.Kathiravan, A.Naveen sait, **M.Ravichandran**, “Experimental Investigations on Stretchability of an Austenitic Stainless Steel 316L” Iranian Journal of Material Forming, 3 (1) (2016) 55-64.
9. K. Ilayaraja, P.Ranjith Kumar, S. Sathish, **M.Ravichandran**, R. Ravikumar, V. Anandakrishnan, Multi-Objective Optimization of Electric Discharge Machining of Hybrid Copper Composite Using Taguchi Grey Relational Analysis, Journal of Advances in Chemistry, 13(1), (2016) 5923-5928.
10. **M.Ravichandran**, M. Meignanamoorthy, S.Sakthivelu “Optimization of Material Removal Rate in CNC Drilling of AA6063 using Taguchi Method”, International Journal of Research in Advanced Technology – IJORAT – 1:9 (2016) 1-3. ISSN: 2348 – 8360.
11. **M. Ravichandran**, M.Meignanamoorthy, S.Dinesh Kumar “Microstructure and Properties of Hot Extruded Al-TiO<sub>2</sub> powder metallurgic composites” Applied Mechanics and Materials, 852, (2016) 130-135. (Conference Paper)
12. **M.Ravichandran**, N.Sabarirajan,T.Sathish, S. Saravanan “Effect of Welding Parameters on Mechanical Properties of Plasma Transferred Arc Welded SS 202 Plates” Applied Mechanics and Materials, 852, (2016) 324-330. (Conference Paper)
13. **M.Ravichandran**, A.R. Manikandan, M.Omkumar “Investigations on properties of Al-B4C Composites Synthesized through powder metallurgy route” Applied Mechanics and Materials, 852, (2016) 93-97. (Conference Paper)

14. S. Saravanan, P.Senthil kumar, T. Palanisamy, **M. Ravichandran**, V. Anandkrishnan, S. Sankar, A.V. Balan, “Accelerated Short-Term Techniques to Evaluate Corrosion in TiC Reinforced AA6063 Composites” Journal of Advances in Chemistry, 13(10), (2017) 5905-5913.
15. S.V. Alagarsamy, **M. Ravichandran**, S.Vignesh, S. Arockia Vincent Sagayaraj, Multi-Performance Optimization of Wire Cut EDM Process Parameters on Surface Roughness of AA7075 / B<sub>4</sub>C<sub>p</sub> Metal Matrix Composites, International Journal on Future Revolution in Computer Science & Communication Engineering, ISSN: 2454-4248, 3(11) (2017) 74 – 79. (Conference Paper)
16. D.Pritima, P.Padmanabhan, **M.Ravichandran**, “Properties and bending behavior of Nickel coated Mild steel sheet” Journal of Advances in Chemistry, 13(11), (2017) 5991-5996.
17. S.Marichamy, M.Saravanan, **M. Ravichandran**, S. Nagarajan, and G. Veerappan “Artificial neural network model and Genetic algorithm based optimization during Electric discharge machining of  $\alpha$ - $\beta$  brass, Journal of Machining and Forming Technologies – 8 (3-4) (2017) 89-101.
18. B. Stalin, **M. Ravichandran**, K. Sathiya Moorthi, C. Ramesh Kannan, Experimental investigations of stringer on chassis frame in TATA 2516 TC Truck, International Journal of Advanced Technology and Engineering Exploration, 5 (43) (2018) 118-123.
19. S.V. Alagarsamy, **M. Ravichandran**, P.Raveendran, K.Karthikeyan, H.Saravanan, Selection of end Milling Parameters on AA7075-15 Wt. % B<sub>4</sub>C Metal Matrix Composites, International Journal of Techno Chem Research, 04 (2) (2018) 117-124.
20. B. Stalin, J. Varun Siddharth, G. Senthilkumar, **M. Ravichandran**, Topological enhancement of split AC condenser brackets through CAE, International Journal of Advanced Technology and Engineering Exploration, 5 (47) (2018) 362-368.
21. B. Stalin, J. Varun Siddharth, G. Senthilkumar, **M. Ravichandran**, Experimental investigation and Taguchi optimization of turning process parameters for glass fiber reinforced plastics (GFRP), International Journal of Advanced Technology and Engineering Exploration, 5 (47) (2018) 394-399.

## II) BOOK CHAPTER : 02

1. Dr. A. Naveen Sait and **M. Ravichandran**, Proceedings of Recent Advances in Manufacturing and Materials” - 2011, Excel Publishers, New Delhi, India (ISBN 93-80697-98-8).
2. **M.Ravichandran**, V. Anandkrishnan, M.Duraiselvam, Alokesh Pramanik, Recent Issues in Materials and Manufacturing, Special Issue in Advances in Mechanical Engineering, Sage Publications, Volume (8), 2016.

## TEXT BOOKS : 04

1. Dr. A. Naveen Sait and **Dr. M. Ravichandran**, (2015) Text Book of Manufacturing Technology-II, Sri Krishna Hi-Tech Publishing Company Pvt. Ltd- Chennai. (ISBN 978-93- 80659 –73-2)

2. Dr. A. Naveen Sait , **Dr. M. Ravichandran** and N.Sabarirajan, (2015) Text Book of Manufacturing Technology-I, Sri Krishna Hi-Tech Publishing Company Pvt. Ltd-Chennai. (ISBN 978-93-85364 -18-1)
3. Dr. A. Naveen Sait, **Dr. M. Ravichandran** and S. Dinesh Kumar, (2017) Text Book of Unconventional Machining Processes, Maruthi Publishers- Chennai. (ISBN 978-93-80757-01-8)
4. Dr. S. Saravanan, Dr.B.Stalin, **Dr. M. Ravichandran** and Dr.S.Sankar, (2018) Fundamentals of Nanoscience, Arunai Publications- Thiruvannamalai. (ISBN 978-81-938294-0-0)

### III) INTERNATIONAL CONFERENCE : 30

#### International Conferences

1. **M. Ravichandran**, A. Naveen Sait and V. Anandkrishnan “Hot upset forging studies on Al-2.5%TiO<sub>2</sub>-Gr hybrid powder metallurgy composite” International Conference on Powder Metallurgy and Particulate Materials, Powder Metallurgy Association of India - Mumbai, (23–25 Jan, 2014) Chennai – pp.55. Transactions of Powder Metallurgy Association of India, 40 (2) (2015) 43-49.
2. **M. Ravichandran** and S. Dineshkumar “Synthesis of Al-TiO<sub>2</sub> composite through liquid powder metallurgy route” Intercontinental Conference on Innovations in Science, Engineering, Technology and Management (ICISSETM-2014), Powai Engineering College, Namakkal. pp. 175-177. SSRG International Journal of Mechanical Engineering (SSRG-IJME) – 1:1 (2014) 12-17. ISSN: 2249-2593.
3. **M. Ravichandran** and G. Hariharasuthan “Evaluation of mechanical properties of chicken feather/ natural fiber reinforced polyester hybrid composite” Intercontinental Conference on Innovations in Science, Engineering, Technology and Management (ICISSETM-2014) Powai Engineering College, Namakkal. pp.17. Abstract
4. **M. Ravichandran** and M. Thirunavukkarasu “Experimental Investigations on friction stir welding of AA7075” Intercontinental Conference on Emerging and Recent Technology (ICERT 2015), Sri Raja Rajan College of Engineering and Technology, Karaikudi, 31<sup>st</sup> January 2015.
5. **M. Ravichandran** and A.Naveen Sait “Synthesis of aluminium matrix composites through powder metallurgy” Intercontinental Conference on Engineering and Applied Sciences (ICEAS 2015), Vetri Vinayaha College of Engineering and Technology, Thottiyam, 28<sup>th</sup> February 2015.
6. M.Meignanamoorthy, A.Naveen Sait and **M. Ravichandran**, “Assessment of Mechanical Properties and Microstructure of Hot Extruded Aluminium Composites (Al-TiO<sub>2</sub>-Gr)” Intercontinental conference on Technological Developments in Engineering “ICTDE-15”, Chendhuran College of Engineering & Technology, Pudukkottai, 9<sup>th</sup> & 10<sup>th</sup> April 2015. ISBN: 978-93-80624-99-0, pp 379-382.
7. M. Thirunavukkarasu, K.Ramasamy and **M. Ravichandran**, “Experimental Investigations on Friction Stir Welding of AA7075” Intercontinental conference on Technological Developments in Engineering “ICTDE-15”, Chendhuran College of

- Engineering & Technology, Pudukkottai, 9<sup>th</sup> & 10<sup>th</sup> April 2015. ISBN: 978-93-80624-99-0, pp 370-378.
8. N.Sabarirajan, N.Rajakumar and **M. Ravichandran**, “Experimental Investigations on Mechanical Properties of AA 8050-TiC Metal Matrix Composite” Intercontinental conference on Technological Developments in Engineering “ICTDE-15”, Chendhuran College of Engineering & Technology, Pudukkottai, 9<sup>th</sup> & 10<sup>th</sup> April 2015. ISBN: 978-93-80624-99-0, pp 341-345. International Journal of Applied Engineering Research - 10:56 (2015) 383-387.
  9. R.Ashokkumar, **M. Ravichandran**, A.Naveen Sait “Optimization of Quality Characteristics in CNC Turning Process of GFRP Rod by Using Taguchi’s Method” Intercontinental conference on Technological Developments in Engineering “ICTDE-15”, Chendhuran College of Engineering & Technology, Pudukkottai, 9<sup>th</sup> & 10<sup>th</sup> April 2015. ISBN: 978-93-80624-99-0, pp 427-429.
  10. S.Tamil Vendan, R.Narayanan and **M. Ravichandran**, “Properties and Microstructure Analysis of Al-TiC-Gr Composites” Intercontinental conference on Technological Developments in Engineering “ICTDE-15”, Chendhuran College of Engineering & Technology, Pudukkottai, 9<sup>th</sup> & 10<sup>th</sup> April 2015. ISBN: 978-93-80624-99-0, pp 390-392.
  11. S.Saravanan, P.Senthilkumar and **M. Ravichandran**, “Experimental Investigations on Microstructure and Mechanical Properties of AA6063 & AA6063-5%TiC Composites” Intercontinental conference on Advances in Mechanical Engineering “ICAME-2015”, University College of Engineering, Villupuram, 15<sup>th</sup> & 16<sup>th</sup> October 2015. ISBN 978-93-85477-29-4, pp 608-611.
  12. S.Saravanan, P.Senthilkumar and **M. Ravichandran**, K.Kaviya “Microstructure and Stress-Strain Analysis of AA6063-5&7.5wt.%TiC Nano Composites” – International Conference on Recent Advancements in Materials (ICRAM-15), Anna University BIT Campus-Tiruchirappalli, 16<sup>th</sup> & 17<sup>th</sup> October 2015. Journal of Chemical and Pharmaceutical Sciences -11 (2015) 39-42.
  13. **M. Ravichandran** and P.P.Shantharaman, “Synthesis of chicken feather/sisal reinforced polyester hybrid composite through compression molding technique” International conference on Emerging Trends in Engineering, Technology and Science “ICETETS 2016”, Kings College of Engineering, Thanjavur, 24-26 February 2016. 978-1-4673-6725-7/16/\$31.00 ©2016 IEEE, pp 833-837.
  14. R.Balaji and **M. Ravichandran**, “Numerical investigation of flow field in an convergent – divergent nozzle using computational fluid dynamic analysis” International conference on Emerging Trends in Engineering, Technology and Science “ICETETS 2016”, Kings College of Engineering, Thanjavur, 24-26 February 2016. 978-1-4673-6725-7/16/\$31.00 ©2016 IEEE, pp 838-844.
  15. S.Marichamy, M.Saravanan, **M. Ravichandran** “Optimization of machining parameters of EDM for Cu-Zn alloy using Response surface Methodology, International Conference on “Futuristic Innovations in Mechanical Engineering and Manufacturing Management” M.Kumarasamy College of Engineering, Karur, 30<sup>th</sup>-31<sup>st</sup> March 2016. ME226, pp 111. Publisher: Copyright © 2016 by ICFIMEMM 2016. (Proceedings Abstract)
  16. L.Rubaraj, M.Meignanamoorthy, S.Sakthivelu, **M.Ravichandran** “Optimization of material removal rate in CNC drilling of AA6063 using Taguchi method, International Conference on “Futuristic Innovations in Mechanical Engineering and Manufacturing Management” M.Kumarasamy College of Engineering, Karur, 30<sup>th</sup>-31<sup>st</sup> March 2016.



ME208, pp 205. Publisher: Copyright © 2016 by ICFIMEMM 2016. (Proceedings Abstract)

17. **M. Ravichandran**, M.Meignanamoorthy, S.Dinesh Kumar “Microstructure and Properties of Hot Extruded Al-TiO<sub>2</sub> powder metallurgic composites” International Conference on Mechanical Engineering Design (ICMED2016), SSN College of Engineering, Chennai, 25-26 April 2016. AB16547, pp 41. (Proceedings Abstract) - Applied Mechanics and Materials, 852, (2016) 130-135.
18. **M.Ravichandran**, N.Sabarirajan,T.Sathish, S. Saravanan “Effect of Welding Parameters on Mechanical Properties of Plasma Transferred Arc Welded SS 202 Plates” International Conference on Mechanical Engineering Design (ICMED2016), SSN College of Engineering, Chennai, 25-26 April 2016. AB16613, pp 69. (Proceedings Abstract) - Applied Mechanics and Materials, 852, (2016) 324-330.
19. **M.Ravichandran**, A.R. Manikandan, M.Omkumar “Investigations on properties of Al-B<sub>4</sub>C Composites Synthesized through powder metallurgy route” International Conference on Mechanical Engineering Design (ICMED2016), SSN College of Engineering, Chennai, 25-26 April 2016. AB16630, pp 51. (Proceedings Abstract) - Applied Mechanics and Materials, 852, (2016) 93-97.
20. S.V. Alagarsamy, **M. Ravichandran**, S.Vignesh, S. Arockia Vincent Sagayaraj, Multi-Performance Optimization of Wire Cut EDM Process Parameters on Surface Roughness of AA7075 / B<sub>4</sub>C<sub>p</sub> Metal Matrix Composites, International Conference on Renewable Energy and Materials for Sustainability (ICREMS – 2016), Noorul Islam University, Nagercoil. International Journal on Future Revolution in Computer Science & Communication Engineering, ISSN: 2454-4248, 3(11) (2017) 74 – 79.
21. D.Pritima, P.Padmanabhan, **M.Ravichandran**, “Influence of process parameters on springback behavior during air bending of Nickel coated Mild steel sheet” International Conference on Recent Advances in Mechanical Engineering - ICROMEK '17, Government College of Engineering, Salem-11, 2<sup>nd</sup> & 3<sup>rd</sup> March 2017.
22. V. Mohanavel, K. Rajan, **M. Ravichandran**, C. Jayasekar, S. Suresh Kumar, Physical, mechanical and tribological behaviour of dual particles reinforced metal matrix composites, Proceedings of International Conference on Recent Advances In Mechanical Engineering, Kingston Engineering College, Vellore. 1 & 2 September 2017, pp: 231-233. (Full paper Proceeding).
23. B.Stalin, **M.Ravichandran**, S. Arivukkarasan, V. Dhanalakshmi, V. Mohanavel, Weight loss corrosion studies of aluminium-LM4 reinforced with alumina silicate (Al<sub>2</sub>O<sub>3</sub>SiO<sub>2</sub>) particulates composites in Sodium Chloride (NaCl) solution, Proceedings of International Conference on Recent Advances In Mechanical Engineering, Kingston Engineering College, Vellore. 1 & 2 September 2017. Springer Note.
24. N. Dhakshinamurthy, V. Mohanavel, S. Suresh Kumar and M. Ravichandran, Failure Mode and Effects Analysis (FMEA) In Centrifugal Pump, Proceedings of International Conference on Recent Advances In Mechanical Engineering, Kingston Engineering College, Vellore. 1 & 2 September 2017, Pak. J. Biotechnol. Vol. 14 (2) 251- 256 (2017) – Submitted.
25. V. Mohanavel, M. Ravichandran, P. Ganeshan, S. Suresh Kumar and M. Balamurugan, Experimental Investigation on Mechanical and Tribological Properties of SiC Particles Reinforced Aluminum Matrix Composites, Proceedings of International Conference on

- Recent Advances In Mechanical Engineering, Kingston Engineering College, Vellore. 1 & 2 September 2017, Pak. J. Biotechnol. Vol. 14 (2) 251- 256 (2017) – Submitted.
26. G.Veerappan and **M.Ravichandran**, Mechanical properties and Machinability of Waspaloy for Aerospace Applications: A Review, ICAME2018, SRM University, Kattankulathur, Chennai, 22-24 March 2018. pp:76, Abstract Proceeding, IOP conference series: Material science and Engineering, Accepted for Publication.
  27. B.Stalin, **M.Ravichandran** & M.Meignanamoorthy, Synthesis of Metal Matrix Composites and Alloys by Mechanical Alloying: A Review, ICAME2018, SRM University, Kattankulathur, Chennai, 22-24 March 2018. pp:158, Abstract Proceeding, IOP conference series: Material science and Engineering, Accepted for Publication.
  28. S.Sukumar, G. Elatharasan, **M.Ravichandran**, Investigations on W – TiC Composites produced using Powder Metallurgy Route, International Conference on Newer Engineering Concepts and Technology (ICONNECT 2K18), K.Ramakrishnan College of Technology, Trichy, 23-24 March 2018. pp : 124, Abstract Proceeding.
  29. B.Stalin, J.Rajaparthiban, **M.Ravichandran**, P. Amuthakannan, Investigation on Effect of Cutting Parameters Using Taguchi Approach for AISI 316 steel, 3<sup>rd</sup> International Conference on “Advanced Manufacturing and Automation” (INCAMA-2018), Kalasalingam University, 5-6<sup>th</sup> April 2018, Full paper proceeding.
  30. M.Meignanamoorthy, **M.Ravichandran**, Influence of B<sub>4</sub>C Reinforcement on Properties of Metal Matrix Composites Synthesized by Powder Metallurgy Technique: A Review, International Conference on Emerging Trends in Engineering Research (ICETER'18), VELS University, Chennai, 18-19 May 2018, Abstract Proceeding.
  31. B. Stalin, **M. Ravichandran**, C. Ramesh Kannan and K. Sathiya Moorthi, Design and Analysis of Stringer on the Chassis Frame in Load Carrying Vehicle” International Conference on Advances in Manufacturing Technology (ICAMT 18), Chennai Institute of Technology, Chennai, 22-23 June 2018, Abstract Proceeding, pp:43
  32. S.Saravanan, **M. Ravichandran**, S.Sukumar, B. Stalin, Application of Taguchi method in optimization of process parameters of electrochemical machining of TiC reinforced AA6063 composites, International Conference on Advances in Manufacturing Technology (ICAMT 18), Chennai Institute of Technology, Chennai, 22-23 June 2018, Abstract Proceeding, pp:51
  33. M.Meignanamoorthy, **M. Ravichandran** , A.Elmariung, S.Dinesh Kumar, Effect of sintering temperature on the microstructure and forming behavior of AA8079 (Al-Cu-Fe-Si-Zn)” International Conference on Advances in Manufacturing Technology (ICAMT 18), Chennai Institute of Technology, Chennai, 22-23 June 2018, Abstract Proceeding, pp:52
  34. C. Ramesh Kannan, B. Stalin, **M. Ravichandran**, K. Sathiya Moorthi, Performance Analysis of SS304 Steel Hat-Stringer on the Chassis Frame, International Conference on Advances in Manufacturing Technology (ICAMT 18), Chennai Institute of Technology, Chennai, 22-23 June 2018, Abstract Proceeding, pp:53
  35. B.Stalin, C.Anandavel Murugan, **M.Ravichandran**, Milling Cutter Flank Wear Prediction Using ensemble of PSO Optimized SVM and GLM Regression Models, International Conference on Advances in Manufacturing Technology (ICAMT 18), Chennai Institute of Technology, Chennai, 22-23 June 2018, Abstract Proceeding, pp:55.

36. Rajaparthiban J, Saravanel S, **Ravichandran M**, Vijayakumar K and Stalin B, Investigation on effect of machining parameters using TGRA approach for AISI 316 steel, International Conferences on Advances in Materials and Manufacturing Applications- IConAMMA 2018. Presented & Abstract Proceeding.
37. Marichamy S, Stalin B, **Ravichandran M** and Sudha G.T “Optimization of machining parameters of EDM for  $\alpha$ - $\beta$  brass using Response surface Methodology, International Conferences on Advances in Materials and Manufacturing Applications- IConAMMA 2018. Presented & Abstract Proceeding.
38. Balasubramanian M, Sathish Kumar M.K, Stalin B and **Ravichandran M**, Theoretical predictions and experimental investigation on three stage hemispherical dome in superplastic forming process” International Conferences on Advances in Materials and Manufacturing Applications- IConAMMA 2018. Abstract Proceeding

### **NATIONAL CONFERENCES : 36**

1. T.K. Kandavel, R. Chandramouli and **M. Ravichandran** “Some Studies on the Structure and Properties of Molybdenum and Copper based Low Alloy Sintered P/M Steels” National Conference on Contemporary Approaches in Design and Manufacturing (CADAM’07), Alagappa Chettiar College of Engineering and Technology. Karaikudi, on 26<sup>th</sup> & 27<sup>th</sup> April 2007. pp: 2.1 - 2.6.
2. **M.Ravichandran**, T.K. Kandavel, R. Chandramouli and D.Shanmugasundaram “Cold and Hot Upsetting Characteristics Studies on Ti Based Low Alloy P/M Steels” National Conference on Emerging Trends in Mechanical Engineering (ETME-07), Shri Angalamman College of Engineering and Technology, Tiruchirappalli, 13<sup>th</sup> April 2007. pp: 44-49.
3. **M. Ravichandran**, S. Anbalagan, S. Sugumar and B. Narayan “Characteristics Studies on Ti and Cu Based Low Alloy P/M Steels” National Conference on Recent Advances in Design, Applications & Manufacturing Systems (RADAMS-09), Thanthai Periyar Government Institute of Technology, Vellore, on 17<sup>th</sup> April 2009.
4. **M. Ravichandran** and B. Narayanan “The alternate fuel for automobiles-Hydroxy or Brown Gas” in National Seminar on Renewable Energy (NSRE-09), PRIST University, Thanjavur, on 25<sup>th</sup> and 26<sup>th</sup> March 2009.
5. S. Saravanan and **M. Ravichandran** “Effect of Thermal Spray Coating ( $\text{Al}_2\text{O}_3 + \text{SiC}$ ) on fuel consumption and Emission control in IC Engines” National Conference on RIPE-2010, Anna University, Chennai during 16-17 April 2010.
6. **M. Ravichandran**, S. Saravanan and S. Sathish “Investigations on the powder characteristics of low alloy P/M steels containing Molybdenum” National Conference on New Trends in Mechanical Sciences (NTMS-2010), Dr. Navalar Nedunchezhiyan College of Engineering, Kadalur, during 12-13 April 2010.
7. S. Saravanan and **M. Ravichandran** “Effect of Thermal Spray Coating ( $\text{Al}_2\text{O}_3$ ) on fuel consumption and Emission control in IC Engines” National Conference on Recent Trends in Mechanical Engineering (RTME-2010), Dr. Sivanthi Aditanar College of Engineering, Tiruchendhur. 26<sup>th</sup> March 2010.
8. T. Prabakaran, **M. Ravichandran**, V. Anandakrishnan, G.M.Balamurugan and S. Sathish “Investigations on the Structure and Properties of sintered low alloy P/M steels

containing Copper and Molybdenum” National Conference on Recent Advances in Mechanical and Materials Processing (RAMMP’10), Mookambigai College of Engineering, Pudukkottai on 13<sup>th</sup> March 2010. pp. 102-105.

9. **M. Ravichandran** “Cold and Hot Upsetting Characteristics Studies on Chromium Based Low Alloy P/M Steels” National Conference on Recent Advancements in Mechanical Engineering (RAME’ 2010), K.S.Rangasamy College of Technology, Namakkal on 30<sup>th</sup> January 2010.
10. S. Saravanan and **M. Ravichandran**, “Effect of Thermal Spray Coating ( $Al_2O_3$ ) on fuel consumption and Emission control in IC Engines”, National Conference on Recent Advances in Manufacturing and Materials (RAMM’11), Chendhuran College of Engineering and Technology, Pudukkottai. pp 250-257. ISBN 93-80697-98-8
11. **M. Ravichandran.**, A. Naveen Sait, V. Ananthakrishnan, “Experimental Investigation on Characteristics of Ti and Cu based low alloy P/M steels ”, National Conference on Recent Advances in Manufacturing and Materials (RAMM’11), Chendhuran College of Engineering and Technology, Pudukkottai. pp 261-266. ISBN 93-80697-98-8
12. S. Saravanan, C.Thiruvikraman, **M. Ravichandran** and V. Balasubramaniyan, “Erosion and corrosion behavior of high velocity oxy fuel sprayed WC-Cr<sub>3</sub>C<sub>2</sub>-Ni coatings” National conference on Contemporary Approaches in Design and Manufacturing (CADAM-13), Alagappa Chettiar College of Engineering and Technology. Karaikudi, on 25<sup>th</sup> April 2013. pp: 14.
13. S. Sakthiprakash and **M. Ravichandran**, “Study on friction stir welding aluminium alloys” National conference (MahAyantra’13), Annai Velankanni College of Engineering, Kanyakumari, on 2<sup>nd</sup> March 2013.
14. M.Meignanamoorthy and **M. Ravichandran**, “Experimental Investigations on Mechanical Properties of Hot Extruded Aluminium Hybrid Composites (Al-TiO<sub>2</sub>-Gr)” National conference on Scenario in Mechanical Sciences (NCSMS-2K15), Star Lion College of Engineering and Technology, Thanjavur, 3<sup>rd</sup> & 4<sup>th</sup> March 2015.
15. Murugesan and **M. Ravichandran**, “Forming behavior studies on Al-Mo alloy produced by powder metallurgy method during cold upsetting” National conference on Scenario in Mechanical Sciences (NCSMS-2K15), Star Lion College of Engineering and Technology, Thanjavur, 3<sup>rd</sup> & 4<sup>th</sup> March 2015.
16. Ganesamoorthy and **M. Ravichandran**, “Optimization of Machining of Al 6065-TiC composites using Taguchi Technique” National conference on Scenario in Mechanical Sciences (NCSMS-2K15), Star Lion College of Engineering and Technology, Thanjavur, 3<sup>rd</sup> & 4<sup>th</sup> March 2015.
17. M.Meignanamoorthy and **M. Ravichandran**, “Experimental Investigations on Mechanical Properties of Hot Extruded Aluminium Composites (Al-TiO<sub>2</sub>)” National conference on Energy and Manufacturing Scenario-2015 “NCEMS-15”, Kings College of Engineering, Thanjavur, 14<sup>th</sup> March 2015. ISBN: 978-93-85057-01-4.
18. N.S.Manikandan, S.Saravanan, **M.Ravichandran**, “Role of Mechanical Engineers in Nation Building” ISTE 18<sup>th</sup> National Annual Students Convention, Kings College of Engineering, Thanjavur, 30<sup>th</sup> & 31<sup>st</sup> October 2015. ISBN: 978-93-85057-03-8
19. A.Arockia raj, S.Saravanan, **M.Ravichandran**, “Bio-Diesel Production from Sweet Lime Peels” ISTE 18<sup>th</sup> National Annual Students Convention, Kings College of Engineering, Thanjavur, 30<sup>th</sup> & 31<sup>st</sup> October 2015. ISBN: 978-93-85057-03-8

20. Hema Nandhni, S.Saravanan, **M.Ravichandran**, “Challenges of Women Empowerment” ISTE 18<sup>th</sup> National Annual Students Convention, Kings College of Engineering, Thanjavur, 30<sup>th</sup> & 31<sup>st</sup> October 2015. ISBN: 978-93-85057-03-8
21. K.Kaviya, S.Saravanan, **M.Ravichandran**, “Nano Particles for Pollution Controls” ISTE 18<sup>th</sup> National Annual Students Convention, Kings College of Engineering, Thanjavur, 30<sup>th</sup> & 31<sup>st</sup> October 2015. ISBN: 978-93-85057-03-8
22. **M. Ravichandran** “Optimization of TIG welding parameters of AA 6061 using Taguchi Technique” 32<sup>nd</sup> National Seminar on Indian Manufacturing Industries- Challenges and Opportunities, organized by The Institution of Engineers (India), Jharkhand State Centre supported by MECON Limited at Engineer Bhawan, Ranchi, 10<sup>th</sup> & 11<sup>th</sup> December 2016.pp. 88-96.
23. S.V.Alagarsamy, **M. Ravichandran**, A.L. Gobimanikandan, Mechanical Characterization of Aluminium Based Metal Matrix Composites- A Review, TEQIP II sponsored “National conference on Engineering Design and Analysis” (NCEDA’16), 2<sup>nd</sup> & 3<sup>rd</sup> September, 2016, Anna University, Tiruchirappalli. Transactions on Innovations in Science and Technology, 1(4), 2016, 141-145. 1) E-ISSN:2456-5075.<http://www.transistonline.com>.
24. M.Meignanamoorthy, A.Raja, **M.Ravichandran**, S.Sakthivelu, Synthesis and Mechanical Properties of Al-Gr Powder Metallurgic Composites, 3<sup>rd</sup> National Conference on Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.
25. S.Tamilvendan, M.Meignanamoorthy, **M.Ravichandran**, R.Sivakumar, Study of Mechanical Behavior of Aluminium Based Metal Matrix Composites, 3<sup>rd</sup> National Conference on Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.
26. M.Meignanamoorthy, C.Dhanabal, R.Pradeepraj, **M.Ravichandran**, Consequence of Process Parameters on Material Removal Rate of AA7011 in CNC Turning: A Taguchi Approach, 3<sup>rd</sup> National Conference on Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.
27. M.Meignanamoorthy, V.Karthik Raja, **M.Ravichandran**, S.V.Alagarsamy, Optimizing Material Removal Rate in CNC Turning of Aluminium Alloy via Taguchi Technique, 3<sup>rd</sup> National Conference on Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.
28. M.Meignanamoorthy, P.DineshKumar, **M.Ravichandran**, S.Sakthivelu, Effect of Speed, Feed and Depth of Cut on Surface Roughness in CNC Drilling of AA6351 Using Taguchi Method, 3<sup>rd</sup> National Conference on Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.
29. M.Meignanamoorthy, M.Logeswaran, **M.Ravichandran**, S.Sakthivelu Optimization of Surface Roughness in CNC Turning of AA7050-15%SiCComposites Using Taguchi Method, 3<sup>rd</sup> National Conference on Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.
30. M.Meignanamoorthy, R.Suthakar, **M.Ravichandran**, S.Sakthivelu, Investigations on Mechanical Behavior of AA6061-SiC-GrHybrid Composites, 3<sup>rd</sup> National Conference on

Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.

31. M.Meignanamoorthy, R.Sivakumar, **M.Ravichandran**, S.V.Alagarsamy, Wear Behavior of AA7050-TiC Composites Synthesized Via Stir Casting Route, 3<sup>rd</sup> National Conference on Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.
32. M.Meignanamoorthy, R.Azhagar Samy, R.Pradeepraj, **M.Ravichandran**, Consequence of Process Parameters on Surface Roughness of AA7011 in CNC Turning: A Taguchi Approach, 3<sup>rd</sup> National Conference on Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.
33. M.Meignanamoorthy, B.Kaviyarasan, **M.Ravichandran**, S.Sakthivelu, Experimental Investigations on Mechanical Properties of Cu-SiC Composites Fabricated By Powder Metallurgic Route, 3<sup>rd</sup> National Conference on Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.
34. M.Meignanamoorthy, A.Muniyaraj, **M.Ravichandran**, S.Sakthivelu, Study of Wear Behavior of Al-ZrO<sub>2</sub>-Gr Hybrid Composites Fabricated by Powder Metallurgy Route, 3<sup>rd</sup> National Conference on Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.
35. M.Meignanamoorthy, P.Pandiyarajan, **M.Ravichandran**, S.Sakthivelu, Development of Aluminium Based Metal Matrix Composites for Heavy Duty Applications, 3<sup>rd</sup> National Conference on Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.
36. M.Meignanamoorthy, A.Mansoor Ali, **M.Ravichandran**, S.V.Alagarsamy, Optimizing Surface Roughness in CNC Turning of Aluminium Alloy via Taguchi Technique, 3<sup>rd</sup> National Conference on Recent Advancements in Technologies (RAT-2017), Mother Terasa College of Engineering and Technology, Pudukkottai, 10<sup>th</sup> & 11<sup>th</sup> March 2017.