




**DEPARTMENT OF METALLURGICAL AND MATERIALS
ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI – 620 015, INDIA.**



RESEARCH SCHOLAR PROFILE

	NAME	KONDAIAH GUDIMETLA
	ROLL NO	412112007
	RESEARCH GUIDE	Dr. B. Ravisankar
	BATCH	SEP- 2012
	RESEARCH AREA	Equal Channel Angular Pressing (ecap)

PUBLICATIONS IN THE SCHOLARLY JOURNALS


1. Kondaiah Gudimetla, Batsala Naveen, S. Ramesh Kumar, B. Ravisankar, S. Kumaran, “Consolidation of Al-5083 Alloy Powders by Equal Channel Angular Pressing” International Journal of Materials and Product Technology, Under Review (ISSN print: 0268-1900, Impact factor: 0.488, SCIE Journal)
2. S. Ramesh Kumar, Kondaiah Gudimetla, B. Tejaswi, B. Ravisankar, “Effect of Microstructure and Mechanical properties of Al-Mg Alloy processed by ECAP at Room Temperature and Cryo Temperature” Transactions of Indian Institute of Metals, vol. 70 (3) (2017) pp 639-648. (ISSN print: 0972-2815, Impact factor: 0.91, SCIE Journal)
3. Chandra Sekhar Kondaveeti, Sai Prakash Sunkavalli, Durgarao Undi, L. V. Hanuma Kumar, Kondaiah Gudimetla, Balasubramanian Ravisankar, “Metallurgical and Mechanical Properties of Mild Steel Processed by Equal Channel Angular Pressing (ECAP)” Transactions of Indian Institute of Metals, (2016) pp 1-5. (ISSN print: 0972-2815, Impact factor: 0.91, SCIE Journal)
4. Kondaiah Gudimetla, S. Ramesh Kumar, B. Ravisankar, S. Kumaran, “Densification of Al 5083 Mechanically Alloyed Powder by Equal Channel Angular Pressing” Transactions of Indian Institute of Metals, vol. 68 (2015) pp 171-176. (ISSN print: 0972-2815, Impact factor: 0.91, SCIE Journal)
5. S. Ramesh Kumar, Kondaiah Gudimetla, P. Venkatachalam, B. Ravisankar, K. Jayasankar, “Microstructure and mechanical properties of Al 7075 alloy processed by Equal Channel Angular Pressing” Materials Science and Engineering A, vol. 533 (2012) pp 50-54. (ISSN: 0921-5093, Impact factor: 3.4, SCI Journal)
6. S. Ramesh Kumar, Kondaiah Gudimetla, P. Venkatachalam, B. Ravisankar, “Stress corrosion cracking of Al7075 alloy processed by equal channel angular pressing” International Journal of Engineering, Science and Technology, vol. 2, No. 12, 2010, pp. 53-61. (ISSN: 2141-2839, Non Scopus Journal)



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RESEARCH SCHOLAR PROFILE

	NAME	K. Tejonadha Babu
	ROLL NO	412112002
	RESEARCH GUIDE	Dr. S. Muthukumar
	BATCH	2012
	RESEARCH AREA	Friction Stir Welding of similar and dissimilar aluminum alloys.

PUBLICATIONS IN THE SCHOLARLY JOURNALS


1. A Study on Grain Size, Mechanical Properties and First Mode of Metal Transfer in Underwater Friction Stir Welded AA5052-O, K. Tejonadha Babu, S. Muthukumar and C.H. Bharat Kumar, Key Engineering Materials, Vol. 775, pp 466-472.
2. Mechanical, metallurgical characteristics and corrosion properties of friction stir welded AA6061-T6 using commercial pure aluminium as a filler plate, KT Babu, PK Kumar, S Muthukumar,,Procedia Materials Science 6, 648-655.
3. Effect of R-DSFSW on Mechanical and Metallurgical Properties of Commercial Pure Aluminum, KT Babu, P Athul, PK Kumar, S Muthukumar, Procedia Materials Science 5, 795-801.
4. Microstructure and mechanical properties of double shoulder friction stir welded commercial pure aluminum, K Tejonadha Babu, P Kranthi Kumar, S Muthukumar, OPJIT international journal of innovation and research Vol.-3, No.-1 Special issue on metallurgical and materials processes, products and applications.



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RESEARCH SCHOLAR PROFILE

	NAME	M.P.Shankar
	ROLL NO	412113005
	RESEARCH GUIDE	Dr.K.Sivaprasad
	BATCH	2013
	RESEARCH AREA	Welding and corrosion studies of Aluminium 2014 Alloys

PUBLICATIONS IN THE SCHOLARLY JOURNALS


- [1] R.Sokkalingam, MP Shankar, Anoop K Unni, K Sivaprasad and Veerappan Muthupandi, “Direct Active Soldering of PEO Coated and Uncoated AA6061 Aluminium Alloy” Advanced Materials Research (2018), Vol. 1148, pp 152-158.
- [2] MP Shankar, R.Sokkalingam, K Sivaprasad and Veerappan Muthupandi, “Effect of Electrolyte on Micro Arc Oxidation Coating of Al-2014 Alloy” Advanced Materials Research (2018), Vol. 1148, pp 159-164.



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RESEARCH SCHOLAR PROFILE

	NAME	P MUTHUKUMAR
	ROLL NO	412113009
	RESEARCH GUIDE	Dr.S.JEROME
	BATCH	2013
	RESEARCH AREA	Friction Stir Processing

PUBLICATIONS IN THE SCHOLARLY JOURNALS

International journal

1. P. Muthukumar, and S. Jerome, Surface coating (Al/Cu & Al/SiC) fabricated by direct particle injection tool for friction stir processing: Evolution of phases, microstructure and mechanical properties, *Surface and Coating Technology* (2019) (Accepted)
2. P. Muthukumar, S. Jerome, John Felix Kumar, S. Prakash, Fabrication of Surface Composite by Friction Stir Processing using a Novel Direct Particle Injection Tool, *Surface Review and Letters* (2018) 1850182. DOI: 10.1142/S0218625X18501822.
3. P. Muthukumar and S. Jerome, Effect of Eccentricity Pin Geometry on The Fabrication of Surface Composite (6061Al-T6 /SiC) by Friction Stir Processing, *International Journal of Mechanical and Production Engineering Research and Development (IJMPERD)*. DOI: 10.24247/ijmperdddec201829. .

Patent (Submitted)

Inventor: P. Muthukumar, S. Jerome

TITLE OF THE INVENTION: “DIRECT PARTICLE INJECTION FRICTION STIR PROCESSING (DPI-FSP) TOOL.”

Provisional Patent No.: 201741039063

International conference


1. P. Muthukumar, Mebin T Kuruvilla, R. John Felix Kumar and S. Jerome “Improved Surface Properties of Al 2024 Based Surface Hybrid Composites by Friction Stir Processing” *International Conference on Materials, Design and Manufacturing Process (ICMDM 2016)* Department of Mechanical Engineering College of Engineering Guindy Anna University, Chennai-25
2. P. Muthukumar, E. Chandrasekar, R. John Felix Kumar and S. Jerome “Effect of offset Tools on the Particle Distribution During Fabrication of Surface Composite by Friction Stir Processing” in *international conference on Light weighting for Defense and Transportation: Trends, New Paradigms and Strategy (NMD 2017, BITS-KK Birla, Goa.*



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RESEARCH SCHOLAR PROFILE

	NAME	P BHAGAT SINGH
	ROLL NO	412113006
	RESEARCH GUIDE	Prof.S.Kumaran
	BATCH	2013
	RESEARCH AREA	Liquid Metallurgy processing, Plastic/Metal Forming Process, Severe Plastic Deformation, High Temperature processing of Metals, Mechanical Behaviour of Materials, Material Characterization (Optical, SEM and Micro and Macro Texture)

PUBLICATIONS IN THE SCHOLARLY JOURNALS


- 1.) **Bhagat Singh.P**, Rama Krushna Sabat, S.Kumaran, Satyam Suwas., Effect of aluminium addition on the evolution of microstructure, crystallographic texture and mechanical properties of single phase hexagonal close packed Mg-Li alloys. (DOI: 10.1007/s11665-018-3164-6, *Journal of Materials Engineering and Performance-ASM*).
- 2.) **Bhagat Singh.P**, Amlan Kar, S.Kumaran, Satyam Suwas., Effect of aluminum on microstructure, mechanical property and texture evolution of dual phase Mg-8Li alloy in different processing conditions (DOI:10.1016/j.acme.2018.04.001, *Archives of Civil and Mechanical Engineering Journal*).
- 3.) **Bhagat Singh.P**, Kumaran.S., “Microstructural Evolution and Mechanical Properties of α -Magnesium-Lithium Alloy” *International Journal of Innovation and Research*, vol.-03, no.-01, Jan2014. Page no.49-51, ISSN 2319-4340.
- 4.) Sriraman.N, **Bhagat Singh.P**, Kumaran S, “Microstructure, Mechanical and Bio-corrosion Behaviour of Thermomechanically Processed Mg-4Li-1Ca Alloy”, (DOI:10.1007/s12666-019-01599-y, *Transactions of Indian Institute of Metals*).



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RESEARCH SCHOLAR PROFILE

	NAME	CHANDRA SEKHAR KONDAVEETI
	ROLL NO	412113003
	RESEARCH GUIDE	Dr. B. RAVISANKAR and Dr. S. KUMARAN
	BATCH	2013
	RESEARCH AREA	POWDER SEVERE PLASTIC DEFORMATION

PUBLICATIONS IN THE SCHOLARLY JOURNALS


- 1) **K.Chandra Sekhar**, Pravir Polly, S.Kumaran, B.Ravisankar, “Consolidation Of Mechanically Alloyed Al5083 -5wt% Y₂O₃ Nano-Composite By Equal Channel Angular Pressing (ECAP)”, 2014, Transactions of Powder Metallurgy Association of India, Vol.40 (2), 32-36.
- 2) **K.Chandra Sekhar**, Kondaiah.G, B.Ravisankar, “Metallurgical and Mechanical properties of Mild Steel processed by Equal Channel Angular Pressing ECAP, 2015, Transactions of Indian Institute of Metals (Accepted: DOI 10.1007/s12666-016-0862-3.)
- 3) Krishna K.S.V.B.R.; Vigneshwaran S; **Chandra Sekhar K**; Sarma S.R. Akella; Narayanasamy R; K.Sivaprasad:Venkateswarlu K., “Mechanical Behavior and Void Coalescence Analysis of Cryorolled AA8090 Alloy”, International Journal of Advanced Manufacturing technology (Accepted: DOI 10.1007/s00170-016-8863-2)
- 4) Pravir Polly, **K.Chandra Sekhar**, B.Ravisankar, S.Kumaran, “Densification Of Mechanically Alloyed Al5083 -5wt% Y₂O₃ Nano-Composite By Equal Channel Angular Pressing”, Applied Mechanics and Materials Vols. 592-594 (2014) pp 963-967.
- 5) Kondaiah Gudimetla, B Chaithanyakrushna, **K Chandra Sekhar**, B Ravisankar and S Kumaran, “Densification and Consolidation of Al 5083 Alloy Powder by Equal Channel Angular Pressing, Applied Mechanics and Materials, Vols. 592-594 (2014) pp.112-116
- 6) G.Kondaiah, **K.Chandra Sekhar**, B.Chaitanyakrushna, B.Ravisankar and S.Kumaran, “Characterization of Mechanically Alloyed Al5083 Alloy and Composite and Consolidation by Equal Channel Angular Pressing”, Applied Mechanics and Materials Vols 764-765 (2015) pp.23-27.



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RESEARCH SCHOLAR PROFILE

	NAME	MAXWELL REJIL C
	ROLL NO	412113002
	RESEARCH GUIDE	Dr. S. MUTHUKUMARAN
	BATCH	2013
	RESEARCH AREA	SOLID STATE WELDING

PATENTS FILED

1. A patent on "Self-Sealing type Friction Brazing/Soldering of tube to tube plate using an External Tool" was filed bearing Provisional No.: 201741038449.

PUBLICATIONS IN THE SCHOLARLY JOURNALS


2. **C. Maxwell Rejil**, C. Sharan, S. Muthukumar, M. Vasudevan, *Influence of Flash Trap Profiles on Joint Properties of Friction Welded CP-Ti Tube to 304L Stainless Steel Tube Plate using an External Tool Process*, Elsevier, Transactions of Nonferrous Metals Society of China 26(2016) 2067–2078. ([https://doi.org/10.1016/S1003-6326\(16\)64297-8](https://doi.org/10.1016/S1003-6326(16)64297-8))
3. **C. Maxwell Rejil**, S. Muthukumar, C. Sharan, S. P. Gill, H. B. Dong, *Interlayer Engineering on Friction Welded Titanium Tube to Stainless Steel Tube Plate by External Tool Process*, Springer, Transactions of the Indian Institute of Metals, Vol.70, (2017) Issue. 3, 691–701. (<https://doi.org/10.1007/s12666-017-1059-0>)



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RESEARCH SCHOLAR PROFILE

	NAME	K.ANANTHAKUMAR
	ROLL NO	412113051
	RESEARCH GUIDE	Dr.S.KUMARAN
	BATCH	2014-2019
	RESEARCH AREA	SOLID STATE WELDING (DIFFUSION BONDING)

PUBLICATIONS IN THE SCHOLARLY JOURNALS


- **K.Ananthakumar, S.Kumaran** “Experimental investigation and prediction of optimum process parameter for plasma assisted diffusion bonding of commercial pure titanium and austenitic stainless steel” **Arabian Journal for Science and Engineering –Springer**, Published in June 2018.(**SCI-Impact factor-1.092**)
- **K.Ananthakumar, S.Kumaran**, “Fuzzy logic model system for prediction of process parameters by plasma assisted diffusion bonding of dissimilar alloys” **Experimental Techniques-Springer**, Published in July 2018. (**SCI-Impact factor-0.806**)



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RESEARCH SCHOLAR PROFILE

	NAME	Mr. VIVEKANANDHAN P
	ROLL NO	412114003
	RESEARCH GUIDE	Dr. S. KUMARAN
	BATCH	AUG 2014
	RESEARCH AREA	THERMOELECTRIC MATERIALS

PUBLICATIONS IN THE SCHOLARLY JOURNALS


1. **Vivekanandhan.P**, Murugasami.R, Kumaran.S” Tuning the thermoelectric properties of Al doped Mg₂Si with multiscale structural features by spark plasma assisted combustion synthesis, *Mater. Chem. Phys.* (2019). (*Under Review*)
2. **Vivekanandhan.P**, Murugasami.R, Kumaran.S” Structural characterization and thermoelectric properties of spark plasma assisted combustion synthesized Bismuth doped nanocrystalline Magnesium Silicide, *J. Alloys Comps.* (2019). (*Under Review*)
3. Arun Raphel, Appu Kumar Singh **Vivekanandhan.P**, Kumaran.S” Ultralow thermal conductivity in nanocrystalline PbSnSeTe thermoelectric alloy by high entropy engineering and nanostructuring phenomena, *Scripta Mater.* (2019) (*Under Review*).
4. Murugasami.R, **Vivekanandhan.P**, Kumaran.S, Suresh Kumar, John Tharagan, Synergitic enhancement in thermoelectric and mechanical properties of n-type SiGe alloys prepared by mechanical alloying and spark plasma sintering, *Mater. Res. Bulletin* (2019). (*Under Review*)
5. **Vivekanandhan.P**, Murugasami.R, Kumaran.S” Microstructure and mechanical properties of nanocrystalline magnesium silicide thermoelectric compound prepared via Spark plasma assisted combustion synthesis, *Mater. Lett.* 231 (2018), 109–113.
6. Murugasami.R, **Vivekanandhan.P**, Kumaran.S, Suresh Kumar, John Tharagan, Thermopower performance and mechanical properties of Si₈₀Ge₂₀ doped with Boron by mechanical alloying and spark plasma sintering, *J. Alloys Comps.* 773 (2019), 752-761.
7. **Vivekanandhan.P**, Murugasami.R, Kumaran.S” Spark plasma assisted *in-situ* phase evolution and densification of nanocrystalline Mg₂Si-SiGe thermoelectric composite: Pulse current effects and densification mechanisms, *Scripta Mater.* 146 (2018) 344-348.
8. Murugasami.R, **Vivekanandhan.P**, Kumaran.S, Suresh Kumar, John Tharagan Thermoelectric power factor performance of Si₈₀Ge₂₀ doped with Phosphorous by spark plasma assisted transient liquid Phase sintering, *Scripta Mater.* 143 (2018) 35-39.
9. **Vivekanandhan.P**, Murugasami.R, Sairam.KVRS, Kumaran.S” Densification and Mechanical properties of nanostructured Mg₂Si Thermoelectric material by Spark Plasma Sintering, *Powder Technol.* 319 (2017) 129-138.
10. **Vivekanandhan.P**, Murugasami.R, Kumaran.S” Rapid *in-situ* synthesis of nanocrystalline magnesium silicide thermoelectric compound by spark plasma sintering, *Mater. Lett.* 197 (2017), 106-110.
11. Murugasami.R, **Vivekanandhan.P**, Kumaran.S” Densification and alloying of ball milled Silicon-Germanium powder mixture during Spark Plasma Sintering, *Adv. Powder Technol.* 28 (2017), 506-513.
12. Murugasami.R, **Vivekanandhan.P**, Kumaran.S” Rapid Alloying and Nanostructuring of Silicon-Germanium Powder Mixture by Spark Plasma Sintering, *Trans. Ind. Inst. Met.* 70 (3) (2017), 855-860.



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RESEARCH SCHOLAR PROFILE

	NAME	Mr. ARUN S
	ROLL NO	412114004
	RESEARCH GUIDE	Dr. N. Ramesh Babu
	BATCH	2014 JULY
	RESEARCH AREA	SURFACE MODIFICATION OF ZIRCONIUM BY PLASMA ELECTROLYTIC OXIDATION FOR NUCLEAR APPLICATIONS

PUBLICATIONS IN THE SCHOLARLY JOURNALS


- [1] S. Arun, T. Arunnellaiappan, N. Rameshbabu, Fabrication of the nanoparticle incorporated PEO coating on commercially pure zirconium and its corrosion resistance, Surf. Coat. Technol. 305 (2016) 264–273.
- [2] S. Arun, S. Hariprasad, A. Saikiran, B. Ravisankar, E. V. Parfenov, V. R. Mukaeva, N. Rameshbabu, The effect of graphite particle size on the corrosion and wear behaviour of the PEO-EPD coating fabricated on commercially pure zirconium, Surf. Coat. Technol. 363 (2019) 301–313.
- [3] S. Arun, S. Hariprasad, B. Ravishankar, Evgeny V. Parfenov, Veta R. Mukaeva, N. Rameshbabu, Formation of ZrO_2 -SiC composite coating on zirconium by plasma electrolytic oxidation in different electrolyte systems comprising of SiC nanoparticles Trans Indian Inst Met 71 (2018) pp 1699–1713.
- [4] S. Hariprasad, S. Gowtham, S. Arun, M. Ashok, N. Rameshbabu, Fabrication of duplex coatings on biodegradable AZ31 magnesium alloy by integrating cerium conversion (CC) and plasma electrolytic oxidation (PEO) processes, J. Alloys. Compd. 722 (2017) 698-715.
- [5] T. Arunnellaiappan, S. Arun, S. Hariprasad, S. Gowtham, B. Ravisankar, L. Rama Krishna, N. Rameshbabu, Fabrication of corrosion resistant hydrophobic ceramic nanocomposite coatings on PEO treated AA7075, Cerm. Int. 4 (2018) 874–884.
- [6] N. Rameshbabu, T. Arunnellaiappan, Arun Mohan Nair, S. Arun, T Anjilivelil, Comparison of the black PEO coatings formed on AA7075 using different combinations of salt in the electrolytes, Trans Indian Inst Met 72 (1) (2019) 47-53.



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RESEARCH SCHOLAR PROFILE

	NAME	Mr. NAGARAJ M
	ROLL NO	412114005
	RESEARCH GUIDE	DR. B. Ravisankar
	BATCH	2014
	RESEARCH AREA	Metal forming and joining

PUBLICATIONS IN THE SCHOLARLY JOURNALS


1. **M. Nagaraj**, B. Ravisankar, Enhancing the strength of structural steel through severe plastic deformation based thermomechanical treatment, Material Science and Engineering: A. 738 (2018) 420–429. doi:10.1166/jamr.2018.1391.
2. **M. Nagaraj**, B. Ravisankar, Effect of severe plastic deformation on microstructural and mechanical properties of structural steel is2062, Trans. Indian Inst. Met. 71(9):2315–2323, 2018. doi:10.1007/s12666-018-1363-3.
3. **M. Nagaraj**, B. Ravisankar, Investigation on ECAPed structural steel IS2062 using X-ray diffraction line profile analysis and evaluation of strengthening mechanisms, Material research express (2018). doi: 10.1088/2053-1591/aaf2fb
4. **M. Nagaraj**, B. Ravisankar, Effect of severe plastic deformation on microstructure and mechanical behaviour of friction welded structural steel IS2062, Trans. Indian Inst. Met. (2018). doi:10.1007/s12666-018-1527-1
5. S.P. Divya, **M. Nagaraj**, M. Kesavamoorthy, S.A. Srinivasan, B. Ravisankar, Investigation on the Effect of ECAP Routes on the Wear Behavior of AA2014, Trans. Indian Inst. Met. 71 (2018) 67–77. doi:10.1007/s12666-017-1141-7.
6. S.P. Divya, G. Yoganandan, J.N. Balaraju, S.A. Srinivasan, **M. Nagaraj**, B. Ravisankar, Investigation on wear and corrosion behavior of equal channel angular pressed aluminum 2014 alloy, IOP Conf. Ser. Mater. Sci. Eng. 314 (2018) 012024. doi:10.1088/1757899X/314/1/012024.



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RESEARCH SCHOLAR PROFILE

	NAME	Mr. B. Thirumaran
	ROLL NO	412114006
	RESEARCH GUIDE	Dr. S.P.Kumaresh babu
	BATCH	July 2014
	RESEARCH AREA	Corrosion studies on aluminium 7xxx metal matrix composite through casting technique for aerospace and marine applications.


PUBLICATIONS IN THE SCHOLARLY JOURNALS



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RESEARCH SCHOLAR PROFILE

	NAME	NANDHINI R
	ROLL NO	412114051
	RESEARCH GUIDE	Dr. S. Muthukumar
	BATCH	January 2015
	RESEARCH AREA	Friction Stir Welding of Polyamide 6,6

PUBLICATIONS IN THE SCHOLARLY JOURNALS


1. Nandhini R, Kesavamoorthy M and Muthukumar S, “Effect of Welding Parameters on Microstructure and Tensile Strength of friction stir welded Polyamide 6,6 joints”, International Polymer Processing, 32, 416-424 (2017).
2. R. Nandhini, R. Dinesh Kumar, S. Muthukumar and S. Kumaran, “Analysis of Mechanical and Crystalline Characteristics of Polyamide 66 Joints Welded by a Novel Friction Stir Welding”, Arabian Journal of Science and Engineering – Article Number: s13369-019-03770-5 – Published online.
3. R. Nandhini, M. Kesavamoorthy, S. Muthukumar and S. Kumaran, “Influence of process variables on the characteristics of friction-stir-welded polyamide 6,6 joints”, Materialwissenschaft und Werkstofftechnik (Material Science and Engineering Technology) - Manuscript ID: mawe.201800119.R1- Accepted.



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RESEARCH SCHOLAR PROFILE

	NAME	Mr. S.A.Srinivasan
	ROLL NO	412114052
	RESEARCH GUIDE	Dr. S.P.Kumaresh babu
	BATCH	Jan 2015
	RESEARCH AREA	Development of quaternary aluminium alloy composite for tribological application in aerospace and automobile engineering field.

PUBLICATIONS IN THE SCHOLARLY JOURNALS


- 01.** Elucidation on the microstructural and mechanical properties of tailored VAL12 hybrid composites with ZrO₂ dispersoids fabricated by squeeze casting technique, Materials science forum (In press), 2019



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RESEARCH SCHOLAR PROFILE

	NAME	HARI PRASAD SAMPATI RAO
	ROLL NO	412114053
	RESEARCH GUIDE	Dr. N. Ramesh Babu
	BATCH	February 2015
	RESEARCH AREA	Biomaterials

PUBLICATIONS IN THE SCHOLARLY JOURNALS:


1. The effect of graphite particle size on the corrosion and wear behaviour of the PEO-EPD coating fabricated on commercially pure zirconium, S Arun, **S Hariprasad**, A Saikiran, B Ravisankar, E V Parfenov, V R Mukaeva, N Rameshbabu, **Surface and Coatings Technology** 363 (2019) 301-313.
2. Formation of ZrO₂-SiC Composite Coating on Zirconium by Plasma Electrolytic Oxidation in Different Electrolyte Systems Comprising of SiC Nanoparticles, Arun Sukumaran, **Hariprasad Sampatirao**, Ravisankar Balasubramanian, Evgeny Parfenov, Veta Mukaeva, Rameshbabu Nagumothu, **Transactions of the Indian Institute of Metals** 71 (2018) 1699-1713.
3. Fabrication of corrosion resistant hydrophobic ceramic nanocomposite coatings on PEO treated AA7075, T Arunnellaiappan, S Arun, **S Hariprasad**, S Gowtham, B Ravisankar, N Rameshbabu, **Ceramics International** 44 (2018) 874-884.
4. Fabrication of duplex coatings on biodegradable AZ31 magnesium alloy by integrating cerium conversion (CC) and plasma electrolytic oxidation (PEO) processes, **S Hariprasad**, S Gowtham, S Arun, M Ashok, N Rameshbabu, **Journal of Alloys and Compounds** 722 (2017) 698-715.
5. An investigation on ZrO₂ nano-particle incorporation, surface properties and electrochemical corrosion behaviour of PEO coating formed on Cp-Ti, S Gowtham, **S Hariprasad**, T Arunnellaiappan, N Rameshbabu, **Surface and Coatings Technology** 313 (2017) 263-273.
6. Role of electrolyte additives on in-vitro corrosion behavior of DC plasma electrolytic oxidization coatings formed on CP-Ti, **S Hariprasad**, M Ashfaq, T Arunnellaiappan, Manu Harilal, N Rameshbabu **Surface and Coatings Technology** 292 (2016) 20-29.



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RESEARCH SCHOLAR PROFILE

	NAME	Mr. T.Aravind Nagaraj
	ROLL NO	412914052
	RESEARCH GUIDE	Dr. S.P.Kumaresh babu
	BATCH	Jan 2015
	RESEARCH AREA	Development of a nickel base alloy with tin and bismuth addition.

PUBLICATIONS IN THE SCHOLARLY JOURNALS


- 01. Solid Particle Erosion Behavior of Cast CY5SnBiM at Room Temperature, Journal of The Institution of Engineers (India): Series D, DOI: 10.1007/s40033-019-00175-4, Year : 2019**



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RESEARCH SCHOLAR PROFILE

	NAME	Mr. M.Rajkumar
	ROLL NO	412914054
	RESEARCH GUIDE	Dr. S.P.Kumaresh babu
	BATCH	Jan 2015
	RESEARCH AREA	Developed cast hyper duplex stainless steel with niobium and zirconium to improve the corrosion and erosion property.

PUBLICATIONS IN THE SCHOLARLY JOURNALS


01. Room-Temperature Erosion Behaviour of Nb-Stabilized 27Cr–7Ni–Mo–W–N Cast Hyper-Duplex Stainless Steel (Nb + CD3MWN - 7A), Journal of The Institution of Engineers (India): Series D, DoI:10.1007/s40033-018-0171-6, Year : 2018



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RESEARCH SCHOLAR PROFILE

	NAME	Mr. S. NAGARAJ
	ROLL NO	418914053
	RESEARCH GUIDE	Dr. S.P.Kumaresh babu
	BATCH	Jan 2015
	RESEARCH AREA	An approach to corrosion prevention in longitudinal beam of railway coaches


PUBLICATIONS IN THE SCHOLARLY JOURNALS



DEPARTMENT OF METALLURGICAL AND MATERIALS
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NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI – 620 015, INDIA.



RESEARCH SCHOLAR PROFILE

	NAME	ANBARASAN.N
	ROLL NO	412115001
	RESEARCH GUIDE	Dr. JEROME.S
	BATCH	2015
	RESEARCH AREA	WELDABILITY STUDIES ON INCONEL 718

PUBLICATIONS IN THE SCHOLARLY JOURNALS

Journal Publications

- **Anbarasan, N., Jerome, S., Arivazhagan, N., 2018.** Argon and argon-hydrogen Shielding gas effects on the laves phase formation and corrosion behavior of Inconel 718 Gas Tungsten Arc Welds. J. Mater. Process. Technol. <https://doi.org/10.1016/j.jmatprotec.2018.07.038>.
- **Anbarasan N., Jerome,S., Suresh Gandamalla., Oyyaravelu, R., 2019.** Effect of Pulse Frequency on Microstructural and Corrosion properties of Inconel 718 Gas Tungsten Arc Weldments, Transactions of the Indian Institute of Metals <https://doi.org/10.1007/s12666-019-01626-y> (Accepted-In press)
- **Anbarasan, N., Narein, N., Jerome, S., 2019.** Influence of Mechanical Arc Oscillation on the Microstructural and Mechanical Properties of Aerospace Superalloy 718 Welds. Transactions of the Indian Institute of Metals (Under Review).

Conference Publications


- **Anbarasan, N., Gupta, B. K., Prakash, S., Muthukumar, P., Oyyaravelu, R., Kumar, R.J.F., Jerome, S., 2018.** Effect of Heat Treatment on the Microstructure and Mechanical Properties of Inconel 718. Mater. Today Proc. 5, 7716–7724. <https://doi.org/10.1016/j.matpr.2017.11.448>.
- **Anbarasan, N., Jerome, S., 2018.** Effect of flow rate and argon-hydrogen shielding gas mixture on weld bead morphology of Inconel 718. Mater. Today Proc. <https://doi.org/10.1016/j.matpr.2018.09.002>.
- **Anbarasan N and Jerome S, “Aging response by Pulsed GTAW weldments of Superalloy 718 with Mo fillers”, Indian Institute of Metals, 71st Annual Technical Meeting, NMD-ATM-2017.**



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TIRUCHIRAPPALLI – 620 015, INDIA.**



RESEARCH SCHOLAR PROFILE

	NAME	Mr. P.Dinesh
	ROLL NO	412115002
	RESEARCH GUIDE	Dr. S.P.Kumaresh babu
	BATCH	July 2015
	RESEARCH AREA	Studies on effect of neodymium and lanthanum rare earths addition on microstructure, mechanical and corrosion properties of Hot-Extruded Mg-9Li-3Al magnesium alloy for light-weight structural applications.

PUBLICATIONS IN THE SCHOLARLY JOURNALS


01. Influence of Neodymium on microstructure and mechanical properties of Mg-9Li-3Al alloy, Materials science forum (In press), 2019



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RESEARCH SCHOLAR PROFILE

	NAME	RAM KUMAR V
	ROLL NO	412115003
	RESEARCH GUIDE	Dr. V. MUTHUPANDI
	BATCH	2015
	RESEARCH AREA	Microarc oxidation of magnesium alloys

PUBLICATIONS IN THE SCHOLARLY JOURNALS


1. Ram Kumar V, Muthupandi V, Sivaprasad K, Bala Srinivasan P “Effect of Frequency and Duty Cycle on Growth, Structure and Corrosion Resistance of Micro Arc Oxidation” Key Engineering Materials, Vol. 775, pp 291-297, doi:10.4028/www.scientific.net/KEM.775.291
2. Ram Kumar V, Muthupandi V, Sivaprasad K “Effect of Type and Concentration of Aqueous Solutions on Corrosion Behaviour of Plasma Electrolytic Oxide films on ZM21 Mg Alloy” – Accepted in Materials science forum



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RESEARCH SCHOLAR PROFILE

	NAME	M PREMNATH
	ROLL NO	412115005
	RESEARCH GUIDE	Dr. S. KUMARAN
	BATCH	2015-2020
	RESEARCH AREA	HYDROGEN STORAGE

PUBLICATIONS IN THE SCHOLARLY JOURNALS


1. Premnath Muthu, **Kumaran Sinnaeruvadi**, Facilitation of Quasi-Reversible Effect with Rapid Diffusion Kinetics on $Mg_{0.9-x}Ti_{0.1}Ni_x$ High Energy Ball Milled Powders for Ni-MH Batteries, *Journal of Alloys and Compounds*, (2019). (Accepted)
2. Premnath Muthu, **Kumaran Sinnaeruvadi**, Structural and Optical Properties Correlation of Nickel Doped Magnesium–Titanium Alloys with Sorption Kinetics Reaction for Hydrogen Storage Application, *Transaction of Indian Institute of Metals*, 70, (2017), 581 - 587.



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RESEARCH SCHOLAR PROFILE

	NAME	N.SRIRAMAN
	ROLL NO	412115007
	RESEARCH GUIDE	Dr.S.KUMARAN
	BATCH	2015
	RESEARCH AREA	DEVELOPMENT OF MAGNESIUM-BASED BIO-DEGRADABLE ALLOYS

PUBLICATIONS IN THE SCHOLARLY JOURNALS


1. **N.Sriraman**, S.Kumaran, *Studies on bio-acceptability of thermo-mechanically processed Mg-4Li-0.5Ca alloy and its microstructural correlation*, *Journal of Material Engineering and Performance*-DOI(10.1007/s11665-018-3709-8).
2. **N.Sriraman**, P.Bhagat Singh, S.Kumaran, *Microstructure, Mechanical and Bio-corrosion behaviours of Thermomechanically processed Mg-4Li-1Ca Alloy*, *Transactions of Indian Institute of Metals*, DOI(10.1007/s12666-019-01599-y).
3. **N.Sriraman**, S.Kumaran, *Improved bio-acceptability of thermomechanically processed ZM21 magnesium alloy*, *Material Research Express* – DOI (10.1088/2053-1591/ab0323).



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RESEARCH SCHOLAR PROFILE

	NAME	Vikram Kumar S.Jain
	ROLL NO	412115006
	RESEARCH GUIDE	Dr. S.Muthukumaran
	BATCH	2015-2020
	RESEARCH AREA	Friction Stir Welding/Processing, Tribology

PUBLICATIONS IN THE SCHOLARLY JOURNALS


1. Vikram Kumar S. Jain, P. M. Muhammed, S. Muthukumaran, S. P. Kumaresh Babu
“Microstructure, Mechanical and Sliding Wear Behavior of AA5083–B4C/SiC/TiC Surface Composites Fabricated Using Friction Stir Processing” Trans Indian Inst Met (2018) 71(6):1519–1529.
2. Vikram Kumar S. Jain, James Varghese, S. Muthukumaran “Effect of First and Second Passes on Microstructure and Wear Properties of Titanium Dioxide-Reinforced Aluminum Surface Composite via Friction Stir Processing” Arab J Sci Eng (2019) 44 (2): 949-957.
3. Vikram Kumar S. Jain, S. Muthukumaran “Effect of Friction Stir Processing on Microstructure and Dry Sliding Wear Behaviour of Al/TiO₂ Composite” International Conference On Recent Innovations In Production Engineering - RIPE 2017, March 24-25,2017, Anna University
4. Vikram Kumar S Jain, Venkata Rao, Mohandas K N, S. Muthukumaran “Sliding Wear Behavior of Plasma-Sprayed NiCrAlY-WC Based Composite Coatings on AA5083 Alloy” International Journal of composite Materials and Matrices (2018) 4(2) 21-26.



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RESEARCH SCHOLAR PROFILE

	NAME	R. SOKKALINGAM
	ROLL NO	412115008
	RESEARCH GUIDE	Dr.K.Sivaprasad
	BATCH	2015
	RESEARCH AREA	Welding of high-entropy alloys

PUBLICATIONS IN THE SCHOLARLY JOURNALS

[1] **R. Sokkalingam**, K. Sivaprasad, V. Muthupandi and Muthukannan Duraiselvam, “Characterization of Laser Beam Welded Al_{0.5}CoCrFeNi High-Entropy Alloy”, Key Engineering Materials (2018), Vol. 775, pp 448-453.

[2] **R.Sokkalingam**, MP Shankar, Anoop K Unni, K Sivaprasad and Veerappan Muthupandi, “Direct Active Soldering of PEO Coated and Uncoated AA6061 Aluminium Alloy” Advanced Materials Research (2018), Vol. 1148, pp 152-158.

[3] MP Shankar, **R.Sokkalingam**, K Sivaprasad and Veerappan Muthupandi, “Effect of Electrolyte on Micro Arc Oxidation Coating of Al-2014 Alloy” Advanced Materials Research (2018), Vol. 1148, pp 159-164.

[4] **R. Sokkalingam**, Sourav Mishra, Srinivasa Rakesh Cheethirala, V. Muthupandi, and K. Sivaprasad, “Enhanced Relative Slip Distance in Gas-Tungsten-Arc-Welded Al_{0.5}CoCrFeNi High-Entropy Alloy”, Metall and Mat Trans A (2017) 48: 3630. <https://doi.org/10.1007/s11661-017-4140-8>.

[5] P.V.Satyanarayana, **R. Sokkalingam**, K.Sivaprasad and A.K.Mukherjee, “Effect of Composition on Tensile and Impact Properties of Tungsten Based Heavy Alloy”, Materials Science Forum ISSN: 1662-9752, Vol. 863, pp 40-44, Doi:10.4028/www.scientific.net/MSF.863.40.


[6] **R. Sokkalingam**, Venkatesan K, Sabari SS, Malarvizhi S, Balasubramanian V (2014), “Effect of post-weld aging treatment on tensile properties of GTAW welded armor grade AA2519-T87 aluminum alloy joints. Int J Res Sci Eng (2014), Vol. 3(11), pp 316–320.



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RESEARCH SCHOLAR PROFILE

	NAME	Dinesh Kumar R
	ROLL NO	412115051
	RESEARCH GUIDE	Dr.S.Muthukumaran
	BATCH	January 2016
	RESEARCH AREA	Friction Stir Welding

PUBLICATIONS IN THE SCHOLARLY JOURNALS

1. **Dinesh Kumar Rajendran**, Ganesa Balamurugan.K, S.Muthukumaran- “Investigation on the mechanical and wear properties of Al/Mg bimetallic composite fabricated by friction stir processing technique” - Transactions of the Indian Institute of Metals (2018) 71(5):1247–1255 (**SCI**)
2. **Dinesh Kumar R**, S.Muthukumaran, Vincent Xavier, T.Venkateswaran, D.Sivakumar- “Investigation of weld parameters on ductility, fracture behavior and metal flow of friction stir welded AA2219-T87 alloy”- Journal of Central South University (**SCIE**) Accepted
3. **Dinesh Kumar R**, Ilhar Ul Hasan, S.Muthukumaran, T.Venkateswaran, D.Sivakumar- “Single and Multi-response Optimization and validation of mechanical properties in dissimilar friction stir welded AA2219-T87 and AA7075-T73 alloys using T-GRA”- Experimental Techniques (**SCIE**) Accepted
4. R. Nandhini, **R. Dinesh Kumar**, S. Muthukumaran, S. Kumaran- “Analysis of Mechanical and Crystalline Characteristics of Polyamide 66 Joints Welded by Novel Friction Stir Welding” -Arabian journal for science and engineering (**SCIE**) Accepted
5. **Dinesh Kumar R**, Srija D, Suresh S, S.Muthukumaran, Optimization of Process Parameters for Improved Corrosion Resistance and Microstructural Exploration in Friction Stir Welding of AA2024 - AA6061- Materials Science Forum (**Scopus**) Accepted



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TIRUCHIRAPPALLI – 620 015, INDIA.**



6. R. Nandhini, **R. Dinesh Kumar**, S. Muthukumaran, S. Kumaran Optimization of Welding Process Parameters in Additive Friction Stir Welding of Polyamide 6,6 Joints”- Materials Science Forum (**Scopus**) Accepted
7. Ganesa Balamurugan Kannan and **Dinesh Kumar Rajendran**, “A Review on Status of Research in Metal Additive Manufacturing” Advances in 3D Printing & Additive Manufacturing Technologie Wimpenny, D.I., Pandey, P.M., Kumar, L.J., Eds. Springer: Singapore, 2017; pp. 95–100 (**Springer Book Chapter**)
8. **Dinesh Kumar.R**, Elangovan.S, Siva Shanmugam.N “ Parametric Optimisation of Pulsed – TIG Welding Process in Butt Joining of 304L Austenitic Stainless Steel Sheets” International Journal of Research in Engineering and Technology, Vol-03 Special Issue-11 :NCAMESHE – 2014 pp.213-219

International Conference:


1. **Dinesh Kumar R**, S.Muthukumaran, T.Venkateswaran, Vincent Xavier, D.Sivakumar “Effect of tool shoulder profile on mechanical and metallurgical properties of dissimilar friction stir welded AA6061-AA7075” – ICAMPS -IIM
2. **Dinesh Kumar R**, Ganesa Balamurugan K, S.Muthukumaran- “ A Study on the Effect of Process Parameters on Mechanical Property of Friction Stir Additive Manufactured Al 1000 plates” – International Conference on Contemporary Design and Analysis of Manufacturing and Industrial Engineering Systems-NIT Trichy
3. Nandhini R, **Dinesh Kumar R**, S.Muthukumaran, S.Kumaran- “Tribological Behaviour of Friction Stir Processed Glass Fiber Reinforced (GFR) Polyamide 66 Composite”- International Conference on Contemporary Design and Analysis of Manufacturing and Industrial Engineering Systems-NIT Trichy
4. **Dinesh Kumar R**, S.Muthukumaran, T.Venkateswaran, D.Sivakumar- “Multi-Response Optimization of Friction Stir Welded AA2219-T87 by Taguchi -Grey Relation Analysis and Metallurgical Inferences”- International Conference RIPE -17 at Madras Institute of Technology- Chennai.



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RESEARCH SCHOLAR PROFILE

	NAME	L.GOPINATH
	ROLL NO	412915008
	RESEARCH GUIDE	Dr.S.JEROME
	BATCH	2015
	RESEARCH AREA	THIN WALL MANUFACTURABILITY IN ALUMINUM ALLOYS

PUBLICATIONS IN THE SCHOLARLY JOURNALS

COMMUNICATED - 2 PAPERS


STATUS - UNDER REVIEW



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RESEARCH SCHOLAR PROFILE

	NAME	V ARUNKUMAR
	ROLL NO	412915003
	RESEARCH GUIDE	Dr. S JEROME
	BATCH	2015
	RESEARCH AREA	DEVELOPMENT OF PRECIPITATION HARDENABLE STAINLESS STEEL FOR SPACE / MISSILE APPLICATIONS

PUBLICATIONS IN THE SCHOLARLY JOURNALS


NOT YET



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RESEARCH SCHOLAR PROFILE

	NAME	ROSHAN JACOB
	ROLL NO	412116001
	RESEARCH GUIDE	Prof. S. Raman Sankaranarayanan
	BATCH	August 2017
	RESEARCH AREA	MANGANESE STEEL


PUBLICATIONS IN THE SCHOLARLY JOURNALS : NA



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RESEARCH SCHOLAR PROFILE

	NAME	SUNILKUMAR D
	ROLL NO	412116002
	RESEARCH GUIDE	Dr. S. Muthukumaran
	BATCH	2016-2021
	RESEARCH AREA	Friction stir welding of high temperature materials

PUBLICATIONS IN THE SCHOLARLY JOURNALS


1. Sunilkumar D, Muthukumaran S, Vasudevan M, Selvi SP, Reddy MG. Effect of Tool Rotation Speed on Microstructure and Hardness of Friction-Stir-Welded 9Cr-1Mo Steel. Transactions of the Indian Institute of Metals.:1-4. <https://doi.org/10.1007/s12666-019-01621-3>. (SCI Journal)



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RESEARCH SCHOLAR PROFILE

	NAME	AMRUTHALURU SAI KIRAN
	ROLL NO	412116003
	RESEARCH GUIDE	Dr. N. RAMESHBABU
	BATCH	2016 JUNE
	RESEARCH AREA	PLASMA ELECTROLYTIC OXIDATION COATINGS

PUBLICATIONS IN THE SCHOLARLY JOURNALS:


1. The effect of graphite particle size on the corrosion and wear behaviour of the PEO-EPD coating fabricated on commercially pure zirconium, S.Arun, S.Hariprasad, **A.Saikiran**, B.Ravisankar, E.V.Parfenov, V.R.Mukaeva, N.Rameshbabu, Surf. Coat. Technol. 363 (2019) 301-313.
2. Experimental Investigation on Synthesis of Nanocrystalline Hydroxyapatite by the Mechanochemical Method, Manu Harilal, **A. Saikiran**, N. Rameshbabu, Key Eng. Mater. 775 (2018) 149-155.



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RESEARCH SCHOLAR PROFILE

	NAME	B.V. Ponraj
	ROLL NO	412116004
	RESEARCH GUIDE	Dr. S.Kumaran
	BATCH	July 2016
	RESEARCH AREA	Oxide Dispersion Strengthened alloys

PUBLICATIONS IN THE SCHOLARLY JOURNALS


NA



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RESEARCH SCHOLAR PROFILE

	NAME	Mr. A. Vallimanalan
	ROLL NO	412116005
	RESEARCH GUIDE	Dr. S.P.Kumaresh babu
	BATCH	Jan 2015
	RESEARCH AREA	Development of thermal barrier coatings for aerospace application.


PUBLICATIONS IN THE SCHOLARLY JOURNALS



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RESEARCH SCHOLAR PROFILE

	NAME	Mr. P. Mayilsamy
	ROLL NO	412116006
	RESEARCH GUIDE	Dr. S.P.Kumaresh babu
	BATCH	July 2016
	RESEARCH AREA	Studies on the mechanical behavior of copper matrix composites prepared by pressure die casting technique


PUBLICATIONS IN THE SCHOLARLY JOURNALS



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RESEARCH SCHOLAR PROFILE

	NAME	SADHASIVAM M
	ROLL NO	412116007
	RESEARCH GUIDE	Prof. S. Raman Sankaranarayanan
	BATCH	2016 - 22
	RESEARCH AREA	Stainless Steel composite development for wear resistance application

PUBLICATIONS IN THE SCHOLARLY JOURNALS


Nil



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RESEARCH SCHOLAR PROFILE

	NAME	T.SATHISH SUDHANDRA BHARATHI
	ROLL NO	412116051
	RESEARCH GUIDE	Dr.S.KUMARAN
	BATCH	2017 JANUARY
	RESEARCH AREA	THERMOELECTRICS

PUBLICATIONS IN THE SCHOLARLY JOURNALS


1. Paper presented at two day symposium on Thermoelectric Materials, Devices and Systems on 10th and 11th Dec 2018 at PSG , Coimbatore on topic of **“Combustion Assisted Synthesis of Magnesium Silicide Thermoelectric Compound with nano-oxide Inclusion by Spark Plasma Sintering”**



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RESEARCH SCHOLAR PROFILE

	NAME	Praveen Kumar D
	ROLL NO	412116052
	RESEARCH GUIDE	Dr S Kumaran
	BATCH	2017-2022
	RESEARCH AREA	SPS-Diffusion Bonding

PUBLICATIONS IN THE SCHOLARLY JOURNALS


(Not Applicable)



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RESEARCH SCHOLAR PROFILE

	NAME	P.Vignesh
	ROLL NO	412117001
	RESEARCH GUIDE	Dr.S.Kumaran
	BATCH	2017-2022
	RESEARCH AREA	Magnesium Alloy


PUBLICATIONS IN THE SCHOLARLY JOURNALS - NIL



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RESEARCH SCHOLAR PROFILE

	NAME	VIVEK GAURAV
	ROLL NO	412117002
	RESEARCH GUIDE	Prof. S. Raman Sankaranarayanan
	BATCH	2017-22
	RESEARCH AREA	Process Metallurgy

PUBLICATIONS IN THE SCHOLARLY JOURNALS


Yet to publish.



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RESEARCH SCHOLAR PROFILE

	NAME	B.BLESSTO
	ROLL NO	412117003
	RESEARCH GUIDE	Dr.K.Sivaprasad
	BATCH	2017
	RESEARCH AREA	Cryorolling of AA2219 for tankage applications

PUBLICATIONS IN THE SCHOLARLY JOURNALS

G Venkatesh, B Blessto, C Santhosh Kumar Rao, R Subramanian and L John Berchmans, Novel perovskite coating of strontium zirconate in Inconel substrate, IOP Conference Series: Materials Science and Engineering, Volume 314, 2018. doi:10.1088/1757-899X/314/1/012010.


<https://iopscience.iop.org/article/10.1088/1757-899X/314/1/012010/pdf>



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RESEARCH SCHOLAR PROFILE

	NAME	K V V NAGARAJU
	ROLL NO	412917052
	RESEARCH GUIDE	Dr. T. SRINIVASA RAO / S KUMARAN
	BATCH	2017-2022
	RESEARCH AREA	MICROWAVE PROCESSING OF METALS

PUBLICATIONS IN THE SCHOLARLY JOURNALS


Nil



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TIRUCHIRAPPALLI – 620 015, INDIA.**



RESEARCH SCHOLAR PROFILE

	NAME	J.MAYA
	ROLL NO	412117053
	RESEARCH GUIDE	Dr.K.Sivaprasad
	BATCH	2017
	RESEARCH AREA	High Entropy Alloys, ECAP, SPS, Hot Pressing, Mechanical and Metallurgical Characteristics

PUBLICATIONS IN THE SCHOLARLY JOURNALS


Mechanical Properties of P/M Hot forged Low alloy Molybdenum steels - PMAI Journal 1993.



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RESEARCH SCHOLAR PROFILE

	NAME	V.CHAKKRAVARTHY
	ROLL NO	412117055
	RESEARCH GUIDE	Dr. S Jerome
	BATCH	2017 December
	RESEARCH AREA	Welding based additive manufacturing


PUBLICATIONS IN THE SCHOLARLY JOURNALS



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TIRUCHIRAPPALLI – 620 015, INDIA.**



RESEARCH SCHOLAR PROFILE

	NAME	P. MANOJ KUMAR
	ROLL NO	412117051
	RESEARCH GUIDE	Dr. N. RAMESH BABU
	BATCH	JANUARY 2018
	RESEARCH AREA	PLASMA ELECTROLYTIC OXIDATION


PUBLICATIONS IN THE SCHOLARLY JOURNALS



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RESEARCH SCHOLAR PROFILE

	NAME	E. LOKESH KUMAR
	ROLL NO	412117052
	RESEARCH GUIDE	Dr. N. RAMESH BABU
	BATCH	JANUARY 2018
	RESEARCH AREA	PLASMA ELECTROLYTIC OXIDATION


PUBLICATIONS IN THE SCHOLARLY JOURNALS



**DEPARTMENT OF METALLURGICAL AND MATERIALS
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RESEARCH SCHOLAR PROFILE

	NAME	HARISH TM
	ROLL NO	412917051
	RESEARCH GUIDE	Dr. JEROME.S
	BATCH	2017
	RESEARCH AREA	WELDABILITY STUDIES ON BOILER GRADE STEELS

PUBLICATIONS IN THE SCHOLARLY JOURNALS


NOT YET



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RESEARCH SCHOLAR PROFILE

	NAME	ARUN RAPHEL
	ROLL NO	412917052
	RESEARCH GUIDE	Dr. S KUMARAN
	BATCH	2017-2022
	RESEARCH AREA	THERMOELECTRIC HIGH ENTROPY ALLOYS

PUBLICATIONS IN THE SCHOLARLY JOURNALS


1. Arun Raphel ¹, K Vinodh Kumar ², S Kumaran ³, Oxidation and Corrosion Resistance of AlCoCrFeTi High Entropy Alloy, Materials Today Proceedings 4, ISSN: 2214-7853 pp: 195-202, April 2017.
2. Arun Raphel, Appu Kumar Singh Vivekanandhan.P, Kumaran.S” Ultralow thermal conductivity in nanocrystalline PbSnSeTe thermoelectric alloy by high entropy engineering and nanostructuring phenomena, *Scripta Materilia* (2019) (***Under Review***).



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RESEARCH SCHOLAR PROFILE

	NAME	Mr. S.Muralidhara
	ROLL NO	412117004
	RESEARCH GUIDE	Dr. S.P.Kumaresh babu
	BATCH	July 2017
	RESEARCH AREA	Working on mechanical and tribological behaviour of Carbon fiber reinforced composites for aerospace and automobile applications.


PUBLICATIONS IN THE SCHOLARLY JOURNALS



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RESEARCH SCHOLAR PROFILE

	NAME	ANIL BABU SANKURU
	ROLL NO	412118001
	RESEARCH GUIDE	Dr. B. Ravisankar
	BATCH	JULY-2018
	RESEARCH AREA	Equal Channel Angular Pressing (ECAP) of Magnesium alloys


PUBLICATIONS IN THE SCHOLARLY JOURNALS



**DEPARTMENT OF METALLURGICAL AND MATERIALS
ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI – 620 015, INDIA.**



RESEARCH SCHOLAR PROFILE

	NAME	C PREMCHAND
	ROLL NO	412118002
	RESEARCH GUIDE	Dr N. RAMESH BABU
	BATCH	JUNE 2018
	RESEARCH AREA	PLASMA ELECTROLYTIC OXIDATION COATINGS


PUBLICATIONS IN THE SCHOLARLY JOURNALS



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RESEARCH SCHOLAR PROFILE

	NAME	KARTHIKEYAN G
	ROLL NO	412118003
	RESEARCH GUIDE	Dr.D.NAGARAJAN
	BATCH	2018-2023
	RESEARCH AREA	METAL FORMING

PUBLICATIONS IN THE SCHOLARLY JOURNALS


NIL



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RESEARCH SCHOLAR PROFILE

	NAME	KAVITHA G
	ROLL NO	412118004
	RESEARCH GUIDE	Prof. S. Raman Sankaranarayanan
	BATCH	2018-23
	RESEARCH AREA	Process Metallurgy

PUBLICATIONS IN THE SCHOLARLY JOURNALS


- Kavitha Gunabalapandian, Santigopal Samanta, Ravi Ranjan, Shiv Brat Singh, Investigation of Austenitization in Low Carbon Microalloyed Steel During Continuous Heating, May 2017, Volume 48, [Issue 5](#), pp 2099–2104



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RESEARCH SCHOLAR PROFILE

	NAME	M.VISHNUKUMAR
	ROLL NO	412118005
	RESEARCH GUIDE	Dr.V.MUTHUPANDI
	BATCH	2018
	RESEARCH AREA	ADDITIVE MANUFACTURING


PUBLICATIONS IN THE SCHOLARLY JOURNALS



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RESEARCH SCHOLAR PROFILE

	NAME	KRISHNA VENI.U
	ROLL NO	412118006
	RESEARCH GUIDE	Dr.S.Kumaran
	BATCH	2018-2023
	RESEARCH AREA	Bio-materials

PUBLICATIONS IN THE SCHOLARLY JOURNALS


Nil



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RESEARCH SCHOLAR PROFILE

	NAME	<u>Chandrakala</u>
	ROLL NO	412918001
	RESEARCH GUIDE	Dr. S. Kumaran (and Dr. B. P. Saha)
	BATCH	2018-2019
	RESEARCH AREA	Non-Oxide Ceramics

PUBLICATIONS IN THE SCHOLARLY JOURNALS


Has completed the course work recently (July 2018 –December 2018), hence no publications so far.



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RESEARCH SCHOLAR PROFILE

	NAME	THANGAVEL N
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	RESEARCH GUIDE	<u>Dr.S.Kumaran</u>
	BATCH	
	RESEARCH AREA	<u>Thermoelectric Materials</u>

PUBLICATIONS IN THE SCHOLARLY JOURNALS


NIL



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RESEARCH SCHOLAR PROFILE

	NAME	Pradeep S
	ROLL NO	312118001
	RESEARCH GUIDE	Dr.S. Muthukumaran
	BATCH	July 2018
	RESEARCH AREA	Gas Tungsten Arc Welding (GTAW)