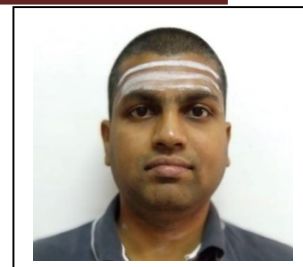


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Curriculum Vitae



Brief Profile:

I wish to quote the following from the great epic Mahabharata.

A student completes –

1/4 of his learning when he hears his teacher,

1/4 of the learning when he reflects himself on the knowledge he has gained.

1/4 of his learning when he questions his teacher to clear his doubts,

And finally, his learning is complete when he teaches what he has learnt himself to others.

Having had some good teachers who encouraged me to walk their path of educating young minds, I, as a teacher, hope to carry forward their legacy in manners befitting the changing times and needs.

1. Name Dr.A.Muthuchamy
2. Designation: Asst. Professor
3. Office Address: No. 207, MME Annexe
4. Telephone (Direct) (Optional):
Telephone : Extn (Optional):
Mobile (Optional):
5. Email (Primary): muthuchamy@nitt.edu Email (Secondary) :
6. Field(s) of Specialization: Metal matrix composites, Solid-state welding, Welding metallurgy, Powder Metallurgy, Structure property correlations, Phase transformation

7. Employment Profile

Job Title	Employer	From	To
Teaching and Research	NIT Trichy	June 2020	Till date
Teaching and Research	VIT University	Jan 2016	June 2020
Researcher	Tata Steels R & D	July 2009	November 2010

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
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Ph.D.	IIT Madras	2018	1 st class with distinction	Metal Matrix composites
M.Tech	IIT Kanpur	2009	1 st class with distinction	Process Metallurgy
BE	Govt. Engg college	2006	1 st class with distinction	Metallurgy & Materials Engineering
High School	Gayathri Matriculation Hr.Sec. School	2002	1 st class with distinction	--

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Ph.D admission coordinator	Department of MME	June 2020	Till date
QIP & MS admission coordinator	Department of MME	June 2020	Till date
Comprehensive exam coordinator	Department of MME	17-07-2020	17-07-2020
Laboratory in charge	Corrosion and Surface Engineering, Advanced Welding Laboratory, Ceramics Laboratory	04-03-2021	Till date

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization

12. Fellowships

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Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)

13. Details of Academic Work

(i) Curriculum Development

(ii) Courses taught at Postgraduate and Undergraduate levels --- MTPC12, MTPC24, MTPE12, MT606, MT703.

(iii) Projects guided at Postgraduate level --- 3

(iv) Other contribution(s)

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Microwave Sintering of Particulate Reinforced Tungsten Heavy Alloy Composites for Defense Application	DRDO	28.06.2018	28.06.2021	Completed
Exploring the Practicability of Extracting Platinum and Palladium From the Mineral Beds of Sittampudi Village in Salem District of Tamil Nadu: An Experimental and Molecular Dynamics Approach	Ministry of Mines	01.03.2021	-	Ongoing

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award

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16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue

18. Invited Talks delivered

Topic	Date	Inviting Organization

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date

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20. Academic Foreign Visits

Country	Duration of Visit	Programme

21. Publications

(A) Refereed Research Journals:

1. Effect of Wettability and Uniform Distribution of Reinforcement Particle on Mechanical Property (Tensile) in Aluminum Metal Matrix Composite—A Review

James J.; Annamalai A.R.; Muthuchamy A.; Jen C.P.

Review Nanomaterials, Volume 11, Year 2021

[DOI:10.3390/nano11092230](https://doi.org/10.3390/nano11092230)

2. Effect of Nano Copper on the Densification of Spark Plasma Sintered W–Cu Composites

Madhur V.; Srikanth M.; Annamalai A.R.; Muthuchamy A.; Agrawal D.K.; Jen C.P.

Article Nanomaterials, Volume 11, Year 2021, Pages 1-11

[DOI:10.3390/nano11020413](https://doi.org/10.3390/nano11020413)

3. A review of the latest developments in the field of refractory high-entropy alloys

Srikanth M.; Raja Annamalai A.; Muthuchamy A.; Jen C.P.

Review Crystals, Volume 11, Year 2021

[DOI:10.3390/cryst11060612](https://doi.org/10.3390/cryst11060612)

4. Effect of TiB₂ addition on the microstructural, electrical, and mechanical behavior of Cu–TiB₂ composites processed via spark plasma sintering

C Ayyappadas and Ravi Teja and A. Raja Annamalai and Dinesh K Agrawal and Shaik Dilkush and A. Muthuchamy

article International Journal of Materials Research, Volume 112, Year 2021, Pages 118--129

[DOI:doi:10.1515/ijmr-2020-7849](https://doi.org/10.1515/ijmr-2020-7849)

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5. Effect of Microwave and Conventional Modes of Heating on Sintering Behavior, Microstructural Evolution and Mechanical Properties of Al-Cu-Mn Alloys

Muthuchamy A.;Srikanth M.;Agrawal D.K.;Annamalai A.R.

Article Molecules, Volume 26, Year 2021

[DOI:10.3390/molecules26123675](https://doi.org/10.3390/molecules26123675)

6. Effect of TiB₂ addition on the microstructural, electrical, and mechanical behavior of Cu-TiB₂ composites processed via spark plasma sintering

Ayyappadas C.;Teja R.;Annamalai A.R.;Dinesh K Agrawal ;Dilkush S.;Muthuchamy A.

Article International Journal of Materials Research, Volume 112, Year 2021, Pages 118-129

[DOI:10.1515/ijmr-2020-7849](https://doi.org/10.1515/ijmr-2020-7849)

7. Powder Metallurgical Processing and Characterization of Molybdenum Addition to Tungsten Heavy Alloys by Spark Plasma Sintering

Annamalai A.R.;Muthuchamy A.;Srikanth M.;Natarajan S.;Acharya S.;Khisti A.;Jen C.P.

Article Materials, Volume 14, Year 2021

[DOI:10.3390/ma14195756](https://doi.org/10.3390/ma14195756)

8. Effect of Molybdenum (Mo) Addition on Phase Composition, Microstructure, and Mechanical Properties of Pre-Alloyed Ti6Al4V Using Spark Plasma Sintering Technique

Rajadurai M.;Muthuchamy A.;Annamalai A.R.;Agrawal D.K.;Jen C.P.

Article Molecules, Volume 26, Year 2021

[DOI:10.3390/molecules26102894](https://doi.org/10.3390/molecules26102894)

9. Spark Plasma Sintering and Characterization of Al-TiB₂ Composites

Annamalai A.R.;Srikanth M.;Muthuchamy A.;Acharya S.;Khisti A.;Agrawal D.K.;Jen C.P.

Article Metals, Volume 10, Year 2020, Pages 1-12

[DOI:10.3390/met10091110](https://doi.org/10.3390/met10091110)

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10. Microwave heating synthesis and thermoelectric property characterization of highly dense Ca₃Co₄O₉ bulk

Raja Annamalai A.;Ravi Teja P.;Agrawal D.K.;Muthuchamy A.

Article Ceramics International, Volume 46, Year 2020, Pages 17951-17956

[DOI:10.1016/j.ceramint.2020.04.105](https://doi.org/10.1016/j.ceramint.2020.04.105)

11. Particulate-Reinforced Tungsten Heavy Alloy/Yttria-Stabilized Zirconia Composites Sintered Through Spark Plasma Sintering

Muthuchamy A.;Boggupalli L.P.;Yadav D.R.;Naveen Kumar N.;Agrawal D.K.;Raja Annamalai A.

Article Arabian Journal for Science and Engineering, Volume 45, Year 2020, Pages 9283-9291

[DOI:10.1007/s13369-020-04732-y](https://doi.org/10.1007/s13369-020-04732-y)

12. Effect of Nickel Addition on Microstructure and Mechanical Properties of the Spark Plasma Sintered Ti-6Al-4V Alloy

Muthuchamy A.;Rajadurai M.;Annamalai A.R.;Agrawal D.K.

Article Transactions of the Indian Institute of Metals, Volume 72, Year 2019, Pages 2127-2134

[DOI:10.1007/s12666-018-1550-2](https://doi.org/10.1007/s12666-018-1550-2)

13. An investigation on tribological and electrical behaviour of conventional and microwave processed copper-graphite composites

Ayyappadas C.;Muthuchamy A.;Kumar N.N.;Agrawal D.K.;Raja Annamalai A.

Article Materials Research Express, Volume 6, Year 2019

[DOI:10.1088/2053-1591/ab1027](https://doi.org/10.1088/2053-1591/ab1027)

14. Effect of La₂O₃ addition and sintering mode on the mechanical properties and microstructural evolution on an 8YSZ ceramic alloy

Muthuchamy A.;Nagaraju N.;Agrawal D.K.;Annamalai A.R.

Article Ceramics International, Volume 45, Year 2019, Pages 3668-3674

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[DOI:10.1016/j.ceramint.2018.11.028](https://doi.org/10.1016/j.ceramint.2018.11.028)

15. Nd₂O₃ doped yttria stabilized zirconia ceramics fabricated by conventional and microwave sintering methods

Muthuchamy A.;Nagaraju N.;Raja Annamalai A.;Agrawal D.K.

Article Ceramics - Silikaty, Volume 63, Year 2019, Pages 45-50

[DOI:10.13168/cs.2018.0044](https://doi.org/10.13168/cs.2018.0044)

16. Reaction Kinetics at the Fiber/Matrix Interface of SiCf/Ti-15-3 Composites

Muthuchamy A.;Janaki Ram G.;Subramanya Sarma V.

Article Transactions of the Indian Institute of Metals, Volume 71, Year 2018, Pages 941-949

[DOI:10.1007/s12666-017-1227-2](https://doi.org/10.1007/s12666-017-1227-2)

17. Structure-property correlations of W-Ni-Fe-Mo heavy alloys consolidated using spark plasma sintering

Muthuchamy A.;Yadev D.;Agrawal D.;Annamalai R.

Article Materials Research Express, Volume 6, Year 2018

[DOI:10.1088/2053-1591/aae349](https://doi.org/10.1088/2053-1591/aae349)

18. Microstructural Evolution of Iron Based Alloys Produced by Spark Plasma Sintering Method

Muthuchamy A.;Annamalai A.R.;Karthikeyan M.;Thakur A.;Nagaraju N.;Agrawal D.K.

Article Physics of Metals and Metallography, Volume 119, Year 2018, Pages 678-684

[DOI:10.1134/S0031918X18070062](https://doi.org/10.1134/S0031918X18070062)

19. Effect of TiC Addition and Heating Mode on the Electrochemical Response of Powder Metallurgy Processed Corrosion-Resistant Austenitic and Ferritic Steels

Muthuchamy A.;Raja Annamalai A.

Article Metal Science and Heat Treatment, Volume 60, Year 2018, Pages 121-127

[DOI:10.1007/s11041-018-0249-7](https://doi.org/10.1007/s11041-018-0249-7)

National Institute of Technology, Tiruchirappalli:
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20. Effect of heating mode on sinterability of YSZ+CeO₂ ceramics

Raja Annamalai A.;Nagaraju N.;Agrawal D.K.;Muthuchamy A.

Article Metals, Volume 8, Year 2018

[DOI:10.3390/met8030189](https://doi.org/10.3390/met8030189)

21. Influence of sintering temperature on mechanical properties of spark plasma sintered prealloyed Ti-6Al-4 v powder

Muthuchamy A.;Patel P.;Rajadurai M.;Chaurisiya J.K.;Annamalai A.R.

Article Materialpruefung/Materials Testing, Volume 60, Year 2018, Pages 283-288

[DOI:10.3139/120.111149](https://doi.org/10.3139/120.111149)

22. Microstructural and electrochemical behaviour of aluminium alloy composites produced using different sintering techniques

Muthuchamy A.;Annamalai A.R.;Acharyya S.G.;Nagaraju N.;Agrawal D.K.

Article Materials Research, Volume 21, Year 2018

[DOI:10.1590/1980-5373-MR-2017-0321](https://doi.org/10.1590/1980-5373-MR-2017-0321)

23. Laser surface modification of 316L stainless steel

Balla V.K.;Dey S.;Muthuchamy A.A.;Janaki Ram G.D.;Das M.;Bandyopadhyay A.

Article Journal of Biomedical Materials Research - Part B Applied Biomaterials, Volume 106, Year 2018, Pages 569-577

[DOI:10.1002/jbm.b.33872](https://doi.org/10.1002/jbm.b.33872)

24. Spark plasma consolidation of continuous fiber reinforced titanium matrix composites

Muthuchamy A.;Ram G.;Sarma V.

Article Materials Science and Engineering A, Volume 703, Year 2017, Pages 461-469

[DOI:10.1016/j.msea.2017.07.085](https://doi.org/10.1016/j.msea.2017.07.085)

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25. Densification of SiC Particle Reinforced W–Ni–Fe Heavy Alloy Composites Through Conventional and Spark Plasma Sintering

Chaurasia J.;Muthuchamy A.;Patel P.;Annamalai A.

Article Transactions of the Indian Institute of Metals, Volume 70, Year 2017, Pages 2185-2191

[DOI:10.1007/s12666-017-1041-x](https://doi.org/10.1007/s12666-017-1041-x)

26. An investigation on the effect of sintering mode on various properties of copper-graphene metal matrix composite

Ayyappadas C.;Muthuchamy A.;Raja Annamalai A.;Agrawal D.

Article Advanced Powder Technology, Volume 28, Year 2017, Pages 1760-1768

[DOI:10.1016/j.appt.2017.04.013](https://doi.org/10.1016/j.appt.2017.04.013)

27. Conventional and microwave assisted sintering of copper-silicon carbide metal matrix composites: A comparison

Ayyappadas C.;Annamalai A.R.;Agrawal D.K.;Muthuchamy A.

Article Metallurgical Research and Technology, Volume 114, Year 2017

[DOI:10.1051/metal/2017033](https://doi.org/10.1051/metal/2017033)

28. An investigation on effect of heating mode and temperature on sintering of Fe-P alloys

Muthuchamy A.;Raja Annamalai A.;Agrawal D.;Upadhyaya A.

Article Materials Characterization, Volume 114, Year 2016, Pages 122-135

[DOI:10.1016/j.matchar.2016.02.015](https://doi.org/10.1016/j.matchar.2016.02.015)

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year

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(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number