A person with glasses and a mustache

Description automatically generatedRésumé

Dr. I. Siva ME., PhD.,

3/202, SMT Nagar, Srivilliputtur,

Virudhunagar Dist. 626125,

Tamilnadu, India

Mobile Ph: +91 9994439363

E-mail: [drisivamech@gmail.com](mailto:drisivamech@gmail.com)

Date of Birth: **30.11.1980** Orcid ID: [http://orcid.org/0000-0001-7505-1273](https://www.scopus.com/authid/detail.uri?authorId=55091139100)

Educational Qualification:

**Post-Doctorate** (*Materials Engg.*).

Investigation of hybrid polymer composites using chemically treated curaua and basalt fibers for medium-load applications

**PhD** (*Mechanical Engineering*).

Investigation on the mechanical properties of naturally woven coconut sheath reinforced polymer matrix composite

**Master of Engineering**.

(*Manufacturing Engineering*)

**Bachelor of Engineering**.

(*Mechanical Engineering*)

**2014** (Jan – Dec)

Departamento de Materiais

Universidade Federal do Rio Grande do Sul (UFRGS)

Porto Alegre/RS, **Brazil**

**2007 – 2012**

Kalasalingam University

Anand Nagar, Krishnankoil-626 190

Virudhunagar District, Tamilnadu, India.

**2003 – 2005** (*80%, First Class*)

National Engineering College

Kovilpatti, Tuticorin District.

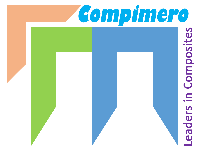
Anna University, Chennai. India

**1998 – 2002** (*71.2%,* *First Class*)

Dr. Sivanthi Adithanar College of Engg. Thiruchendur, TC District.

M.S University, Thirunelveli. India

Awards:

1. Mentor - Student Start-up award – Compimero Pvt. Ltd. (2018)
2. Mentor Student project state awards. (2009 and 2017)
3. Post-Doctoral Fellowship by CNPq-Brazil. (2014)

Service to the Profession:

* Working as a Teaching Faculty & Researcher in Polymer Nanocomposites
* ABET and NBA Program Coordinator, UG Mechanical Engineering
* Founder and Director, Indo-Brazil Joint Center for Composite Materials
* Deputy Director, (Students Affairs, International Relations)
* Director (Competitive Training)

Professional Membership:ISTE, ECI, SAE, iSAMPE

Work Experience: *Teaching & Research:* ***18 Y*** *Industry:* ***1 Y***

|  |  |  |
| --- | --- | --- |
| **Institute/Organization** | **Position** | **Duration** |
| **Kalasalingam University**  *Anand Nagar, Tamilnadu, India* | Professor (7 Y) | *Dec 2016 to May 2023* |
| Associate Professor (4 Y) | *June 2012 to Nov 2016* |
| Assistant Professor (4 Y) | *June 2008 to May 2012* |
| Lecturer (2 Y) | *June 2006 – May 2008* |
| Bharath Niketan Engineering College *Andipatti, Tamilnadu, India* | Lecturer (1 Y) | *June 2005 – May 2006* |
| **RAMCO** **Cements**, Madras Cements Ltd., *RR Nagar, Tamilnadu.* | Drafts Man (1 Y) | *July 2002 – May 2003* |

## Administrative Roles

* Dy. Dean, Freshmen Engineering (Mechanical) (2021 – 2023)
* ABET, NBA Program Coordination, UG Program (2017 – 2023)
* Head, Center for Composite Materials (2013 – 2023)
* Director, Competitive Training (2017 – 2018)
* Head, Mechanical Engineering (2015)
* Dy. Director, Students Affairs (2019 – 2022)
* Dy. Dean, International Relations (2016 – 2018)
* Department Research Coordinator (2015 – 2018)

## Research Recognition

* Joint Supervisor for a Master candidate (Alan da Silva), *UFRGS, Brazil*
* Visiting Researcher to Federal University of Rio Grande do Sul, RS/Brazil
* Guest Editor, Int. J. Comp. Aided Engg. Tech. (IJCAET), Vol. 10: 1-2, 2018
* Guest Editor, Journal Key Engineering Materials, Special issue - 2020
* DC Member for PhD candidates, VTU, *Bangalore and* AU, Chennai*, India*
* Referee, SERB, Department of Science and Technology, Govt. of India
* Referee, National Science Centre Poland, *Poland*

Sponsored Projects: *9 (1 Ongoing, 8 Completed)* ***88 Lakhs***

|  |  |  |  |
| --- | --- | --- | --- |
| **Funding Agency** | **Title** | **Role on the Project** | **Status** |
| DST-SERB, India  Karyasala | Development of Materials for Energy Storage – High-End Workshop | PI  Rs. 6,50,000 | Ongoing  2023-24 |
| **Funding Agency** | **Title** | **Role on the Project** | **Status** |
| AICTE – STTP  1/2018-19 | Software tools used in Finite Element Analysis - 34-65/397/RIFD/STTP/ Policy-1/2018-19, Dated 21.02.2020 | PI-Moderator  Rs. 3,00,000 | Completed  2019-20 |
| DST-Nidhi – Student Entrepreneur Project | Development of Floor Tiles through used PET Bottles | PI  Rs. 10,00,000 | Completed  2018-19 |
| Tamilnadu state council for science & technology TNSCST/SPS/AR2017-18 | Development of Floor Tiles using PET Bottles &Assessment of Filler Addition on Fire Response | PI  Rs. 10,000 | Completed  2017-18 |
| IGCAR and Impex Pvt. Ltd, Chennai | Development of Radiation shielding Materials - Consultancy | PI  Rs. 2,20,000 | Completed  2017-18 |
| AICTE – ISTE Book Writing Project | Handbook for Working Professionals – Eco-friendly composite production | PI  Rs. 50,000 | Completed  2017-18 |
| DST-India/  CNPq-Brazil  401.074/2013-7 and INT/Brazil/P-11/2013 | Investigation of hybrid polymer composites using chemically treated curaua and basalt fibers for medium-load applications | Co-PI  Rs. 31,57,100 | Completed  2014-2018 |
| CNPq-Brazil  Grant No. Processo: 401.741/2013-3 | Research on Curaua and basalt hybrid polymer composites | Post-Doctoral Researcher  Rs. 34,00,000 | Completed  2014 |
| Tamilnadu state council for Science & Tech, TNSCST/SPS/ARL2009-10 | Investigation on the mechanical properties of naturally woven  Luffa reinforced Polymer composite | PI  Rs. 6,000 | Completed 2009-10 |
| **Grand Total** | | **Rs. 87,93,100‬ (105,806 USD)** | |

International Team:

Prof. Sandro C Amico, *UFRGS, Brazil*

Dr. Sivakumar D, *UTeM, Malaysia*

Prof. Xiao-Zhi Gao, *Aalto Univ., Finland*

Prof. J Paulo Davim, *Univ. Aveiro, Portugal*

Prof. Patrick de Baets, *GU, Belgium*

Prof. Aslan, *KTU, Turkey*

Prof. Sunga Ha, *Hanyang University, Korea*

Prof. C P Selvan, *Curtin University, Dubai*

Prof. M T H Sultan, *UPM, Malaysia*

Prof. Shulin Bai, *PU, China*

Prof. Walter, *UP, South Africa*

National Team:

Dr. P. Rameshnarayanan, *ISRO, Trivandrum*

Dr. B. Suresha, *NIE, Mysore*

Dr. Sabu Thomas, *MGU, Kottayam*

Dr. KG. Satyanarayana, *CSIR, Trivandrum*

Dr. S. Anand Kumar, *IIT, Jammu*

Dr. B. Rathna Sunil, *IIIT-AP, Hyderabad*

Dr. Santhakumar, *IIT-P Palakkad*

Dr. Sivashanmugam, *NIT Trichy*

Dr. G. Ragavendra, *NIT Warangal*

PhD Produced: *4+2*

1. **Dr. K. Senthilkumar (2016) - Supervisor**

*Free vibrational and Damping Behaviors of Hybrid Natural Fiber Polyester Composites,* Kalasalingam University, Tamilnadu, India

1. **Dr. G. Kalusuraman (2017) - Supervisor**

*Studies on the Static and Dynamics Behaviors of Surface Treated Luffa Cylindrica/Polyester Composites,* Kalasalingam University, Tamilnadu, India

1. **Dr. Yashwant Munde (2019) - Mentor**

*Analysis and Experimental Investigation of Biocomposites for Automotive Applications*

*S*avitribai Phule Pune University, Pune, Maharashtra, INDIA

1. **Dr. M. Thirukumaran (2020) – Mentor**

*Investigation on the Interface Properties of Fiber Metal Laminates*

Kalasalingam University, Tamilnadu, India

1. **Mr. T. Premkumar (2022) – Supervisor**

*Studies on the Tribological Response of Brazilian Curauá/Polyester Composites* Kalasalingam University, Tamilnadu, India

1. **Mr. Avinash Shinde (2022) – Supervisor**

*Studies on the Nano GO/CNT nanohybrid composites: Shielding applications*

Kalasalingam University, Tamilnadu, India

PhD Students: *2*

1. **Mr. Joel Vinoth Singh (~2024):** *Research on Mines-human vibration*
2. **Mr. M. Thirumurugan (~2026):** *IOT for Industry 4.0*

PhD/Master’s Thesis Examined: *3*

1. **Mr. B. Harshavardhan (2021):** *Visvesvaraya Tech. University,* India*,* **PhD**
2. **Mr. Justin Phillips (2020):** *University of Pretoria,* South Africa, **MTech**
3. **Mr. Alcides Sitoe (2019):** *University of Pretoria,* South Africa, **PhD**

Conference/Seminar/Workshops Organized: *30 (6 International, 24 National) (Sample only)*

* Organized a DST SERB sponsored, One-week High-end Workshop on “Materials for Energy Storage”, 15 – 21/May **2023 – DST Sponsored (Karyasala Scheme)**
* Organized an International Seminar on “Life Cycle Assessment of Polymers and Polymer-based products”, 20/May **2022**
* Organized a One-week Faculty Development Program on “Sustainable Product Realization”, 21 – 25/Jun **2021**
* **Online** AICTE Sponsored FDP on Software tools used in FEA: 27 – 01.08.**2020**, 3 times. **– AICTE Sponsored**
* Co-organized: Publication and Proceeding - Kalasalingam Global Conference International Conference on Sustainable Development 18-20, December **2019**

Book Chapters: *23 (Sample only)*

1. **Ch:** Nanocomposites in aerospace structures, Aerospace Materials and Advanced Structures – **Elsevier**, In Review **(2024)**
2. **Ch:** Aluminum Alloys for Aircraft Structures, Aerospace Materials and Advanced Structures – **Elsevier**, In Review **(2024)**
3. **Ch:** Materials for Aerospace structures and engines, Aerospace Materials and Advanced Structures – **Elsevier**, In Review **(2024)**
4. **Ch:** Effect of Fiber Dosage and Chemical Treatment on the Vibrational Behavior of Luffa/ USP Composite – **Springer** **(2024)**

<https://doi.org/10.1007/978-981-99-8327-8_15>

1. **Ch:** Identifying the Effect of Stacking Sequence on Water Absorption, Mechanical and Fracture Properties of Flax/Glass Hybrid Composites – **Wiley** (**2023**)

<https://doi.org/10.1002/masy.202200161>

Research Publications: ***109*** *Citation: 1514,* ***H: 22****, i10: 40*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| [**Google Scholar**](https://scholar.google.co.in/citations?hl=en&user=6A0iRpQAAAAJ) | | | | [**Scopus**](https://www.scopus.com/authid/detail.uri?authorId=55091139100) | | | |
| H-index | Citation | High IF | Avg IF | H-index | Citation | High IF | Avg IF |
| 22 | 1514 | 8.4 | 3.2 | 19 | 1113 | 8.4 | 3.2 |

Sample only

* Selvan, M.C.P., Sankar, I., **Siva, I**. Yu Dong. (**2024**) Synergistic effect of fiber surface treatment and nanoclays on the damping behaviors of polyester composites reinforced with palmyra fruit fibers. Polymer Bulletin, 81: 577–591 – *(IF: 3.2)*

<https://doi.org/10.1007/s00289-023-04722-8>

* Shinde, A., **Siva, I**., Munde, Y., Sankar, I., Sultan, M., Shahar, F., Gaff, M. & Hui, D. (**2023**). *Appraising the dielectric properties and the effectiveness of electromagnetic shielding of graphene reinforced silicone rubber nanocomposite*. Nanotechnology Reviews, 12(1), 20220558 – *(IF: 7.4)*

<https://doi.org/10.1515/ntrev-2022-0558>

* S. Avinash, **I. Siva**, M. Yashwant, THM. Sultan, (**2022**), *The impacts of graphene dosage on the friction and wear performance of a graphene-reinforced silicone rubber nano composite*. J of Materials Research and Technology, 21, 1570-1580 – *(IF: 6.4)*

<https://doi.org/10.1016/j.jmrt.2022.10.007>

* Avinash Shinde, **I. Siva**, Yashwant M, Vishal D, MTH Sultan, Ain Umaira Md Shah, Faizal Mustapha (**2021**), *Testing of Silicon Rubber/Montmorillonite Nano Composite for Mechanical and Tribological Performance*, Nanomaterial 11:11, 3050 – *(IF: 5.3)*

<https://doi.org/10.3390/nano11113050>

* G. Kalusuraman, **I. Siva,** Yashwant M, CP Selvan, S. Anand Kumar, SC. Amico, (**2020**), *Dynamic-mechanical properties as a function of luffa fibre content and adhesion in a polyester composite*, Polymer Testing, 87:106538 – *(IF: 5.1)*

<https://doi.org/10.1016/j.polymertesting.2020.106538>.

* G Kalusuraman, S Thirumalai Kumaran, M Aslan, T Küçükömeroğluc, **I Siva** (**2019**), *Use of waste copper slag filled jute fiber reinforced composites for effective erosion prevention*, Measurement, 148: 106950 – *(IF: 5.6)*

<https://doi.org/10.1016/j.measurement.2019.106950>

* K. Senthil Kumar, **I. Siva**, P. Jeyaraj, J.T. Winowlin Jappes, S.C. Amico, N. Rajini **(2014):** *Synergy of fiber length and content on free vibration and damping behavior of natural fiber reinforced polyester composite beams*. Materials and Design, 56:379–386.

<https://doi.org/10.1016/j.matdes.2013.11.039> – *(IF: 8.4)*

* **I. Siva**, J. T. Winowlin Jappes, B. Suresha **(2012)**: *Investigation on Mechanical and Tribological Behavior of Naturally Woven Coconut Sheath-Reinforced Polymer Composites*. Polymer Composites, 33(5): 723-732 – *(IF: 5.2)*

<https://doi.org/10.1002/pc.22197>

Articles Published in Conference Proceedings: ~110 (Recent only)

* M. Yashwant, Prashant Anerao, S. Avinash and I. Siva (**2023**), Identifying the Effect of Stacking Sequence on Water Absorption, Mechanical and Fracture Properties of Flax/Glass Hybrid Composites, LSPM 23, King Mongkut's University of Technology North Bangkok, Bangsue, Bangkok 10800, Thailand
* Avinash Shinde, Yashwant Munde, I. Siva, Chithirai Pon Selvan, Smita Deore, Ajit Bhosale. (**2023**) Investigation on Mechanical and Tribological Performance of Biodegradable Polylactic acid (PLA)-Hemp composite. International Conference on Innovation, Sustainability and Applied Sciences (ICISAS 2023), 9th and 10th December 2023, Curtin University, Dubai.
* Yashwant Munde, Avinash Shinde, Prashant Anerao, I. Siva, Ajit Bhosale (**2023**). Statistical Analysis of Mechanical Properties of FDM 3D Printed PLA-Based Composites. International Conference on Innovation, Sustainability and Applied Sciences (ICISAS 2023), 9th and 10th December 2023, Curtin University, Dubai.
* Shinde, I. Siva, and Y. Munde (**2022**). Micromechanical simulation of silicon rubber reinforced with MMT nanoclay. International Conference on Engineering Materials, Metallurgy and Manufacturing - (ICEMMM2021). 16–17 December 2021 | Chennai, Tamil Nadu, India

Patent: ***2***

|  |  |  |
| --- | --- | --- |
| **SN.** | **Title** | **Status** |
|  | Hard hat Helmet for Civil Engineers  India | CBR No. 2238/CHE/2012  Under Inspection |
|  | Floor tiles from PET Waste  India | CBR No. 201841018905  Under Inspection |

Guest Lectures Delivered:

|  |  |  |
| --- | --- | --- |
| **Name of the Organization** | **Topic** | **Audience** |
| Cummins College of Engineering for Women, Pune, India | Tribology of polymer composite materials | Faculty Members, Research Scholars |
| Kongu Engineering College, Erode, Tamilnadu, India | Tribology of polymer composite materials | Faculty Members, Research Scholars |
| National Institute of Engineering, Mysore, Karnataka, India | Degradation of Natural Fiber Composites | Faculty Members, Research Scholars |
| Kumaraguru College of Engineering, Coimbatore, Tamilnadu, India | Manufacturing technology of Composite Materials | Faculty Members, Research Scholars |
| Government College of Engineering, Thirunelveli, Tamilnadu, India | Environment, DMA and FIRE Properties of PMCs | Faculty Members, Research Scholars |

*\* and more in Kalasalingam University*

Subjects Taught:

* Materials Science and Engineering
* Composite Materials
* Surface Engineering
* Advances in Material Characterizations
* Mechanical Behavior of Materials
* Engineering Mechanics
* Advanced Machine Tools
* Manufacturing Processes
* Metrology and Measurements
* Statistical Quality Control
* Engineering Visualization
* Sustainable Design & Manufacturing

Personal Information

|  |  |
| --- | --- |
| Full Name | Siva (I. Siva) |
| Filiation | S. Irulappasamy & R. Vasantha |
| Birth/Age | 30/11/1980 & 43 |
| Aadhar ID (National) | 3701 2822 3885 |
| Passport | B9505126 |
| Marital Status | Married – R. Lavanya Devi |
| Dependents | 2 Kids |
| Languages Known | Tamil – Mother tongue  English – Work proficiency  Portugues – Elementary level |
| Permanent Address | 3/202 SMT Pappa Anguraj Nagar  Pillaiyarnatham Post, Srivilliputtur 626125  Virudhunagar District, Tamilnadu  India |

Reference

Prof. Dr. Sandro C Amico

Professor/Materials Engineering

Federal University Rio Grande do Sul.

Porto Alegre/RS Brazil

[amico@ufrgs.br](mailto:amico@ufrgs.br)

Prof. Ir. Ts. Dr. M T H Sultan

Director UPM Press

Universiti Putra Malaysia, 43400 UPM Serdang, Selangor Darul Ehsan, MY

[thariq@upm.edu.my](mailto:thariq@upm.edu.my)

Prof. Dr. Saravana Sankar

Former Vice Chancellor

Kalasalingam University

Anand Nagar/TN India

[ssaravanasankar@klu.ac.in](mailto:ssaravanasankar@klu.ac.in)

Prof. Dr. Suresha

Director Research

National Institute of Engineers (NIE)

Mysore/KA India

[sureshab@nie.ac.in](mailto:sureshab@nie.ac.in)

***Dr. I. Siva***