



EV-VIT

NEWSLETTER OF THE

ELECTRIC VEHICLES INCUBATION TESTING AND RESEARCH CENTRE

EVIT-RC

CHENNAI

Volume I, Issue I, July-September 2023



What's inside

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The Electric Vehicles Incubation, Testing and Research Centre at Vellore Institute of Technology Chennai is focussed on carrying out cutting edge research in EV technology, publishing patents, developing products and carrying out sponsored and consultancy projects in EV and allied fields.

This quarterly news letter is meant to communicate information and achievements of the centre with academia, industry and various other interested parties working in the field of electric vehicles.

This first edition of the news letter contains details of publications, patents, projects, industrial visits, faculty and student achievements etc.

Dr. M. Sreekanth

ELECTRIC VEHICLE INCUBATION TESTING AND RESEARCH CENTRE

About the Centre

The Electric Vehicles Incubation Testing and Research Centre at Vellore Institute of Technology Chennai Campus was started in the month of June 2020 with the aim of becoming a Centre of Excellence in the field of Electric Vehicles. The aim of the centre is to carry out cutting edge research in multidisciplinary fields related to electric vehicles as well as file patents, develop products and conduct sponsored research and industrial consultancy. On the other hand, the centre also aims to establish connections with national and international laboratories/universities/institutes for its growth both vertically as well as horizontally.

Initially, the centre was headed by Dr. N.C. Lenin and Dr. M. Sreekanth, Dr. Febin Daya, Dr. M.C. Lenin and Dr. Balamurugan P were the members. Currently it is headed by Dr. M. Sreekanth and Dr. Febin Daya, Dr. P. Ganesan, Dr. Sujoy Sarkar and Dr. Florence Gnana Poovathy are its members. The centre has expertise in the fields of battery chemistry, battery management system and charging.

Physically the centre is located in the 1st floor of the Academic Block 2 at VIT Chennai while the faculty and equipment are placed at various locations in the campus.

Vision Statement

To become the go to place for solutions, innovations, product & technology development and fabrication of electric vehicles and their components.

FACULTY CORNER

Centre Faculty Research Profile

Manavalla, Sreekanth

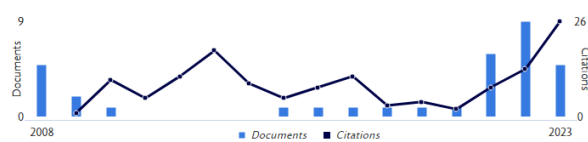
[Vellore Institute of Technology, Chennai, Chennai, India](#) [23668981100](#) <https://orcid.org/0000-0003-4965-0920> [View more](#)

134 Citations by 120 documents | 34 Documents | 6 h-index [View h-graph](#)

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Document & citation trends



Most contributed Topics 2018–2022

Synchronous Machine; Permanent Magnets; Hot Temperature
4 documents

Fuel Tests; Diesel Engines; Biofuel
3 documents

Pump; Impellers; Centrifugal Pumps
3 documents

Daya, Febin L.

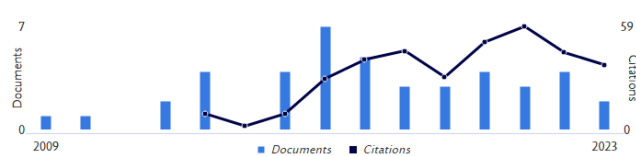
[Vellore Institute of Technology, Chennai, Chennai, India](#) [55755676300](#) <https://orcid.org/0000-0001-6938-9040> [View more](#)

354 Citations by 264 documents | 43 Documents | 11 h-index [View h-graph](#)

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Document & citation trends



Most contributed Topics 2018–2022

Coil; Charging (Batteries); Electric Vehicles
7 documents

Induction Motors; Sensorless Control; Observer
2 documents

Grid; Performance Ratio; Monocrystalline Silicon
2 documents

Ganesan, Pandian

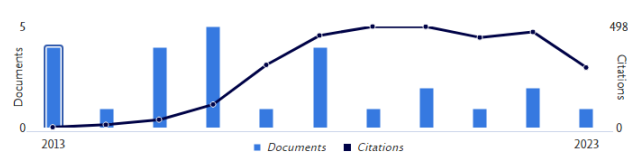
[Vellore Institute of Technology, Chennai, Chennai, India](#) [57197371920](#) <https://orcid.org/0000-0003-2449-8096> [View more](#)

3,138 Citations by 2,905 documents | 26 Documents | 20 h-index [View h-graph](#)

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Document & citation trends



Most contributed Topics 2018–2022

Oxygen Production; Electrocatalysts; Catalyst
6 documents

Zinc Air Batteries; Electrocatalysts; Catalyst
1 document

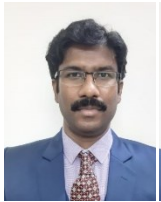
Methanol; Electrooxidation; Electrocatalysts
1 document

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Centre Faculty Research Profile

Sarkar, Sujoy

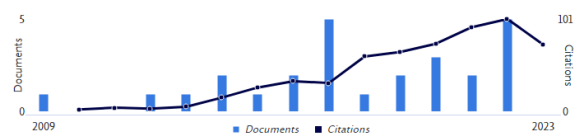
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Document & citation trends



Most contributed Topics 2018–2022

- Electrode; Cobaltous Sulfide; Electrode Materials
2 documents
- Zinc Air Batteries; Electrocatalysts; Catalyst
2 documents
- Scanning Electrochemical Microscopy; Electrode; Microelectrodes
2 documents

Florence Gnana Poovathy, John

Vellore Institute of Technology, Chennai, Chennai, India 56986444400 <https://orcid.org/0000-0003-3194-3717> [View more](#)



24 Citations by 17 documents | 15 Documents | 3 h-index [View h-graph](#)

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Document & citation trends



Most contributed Topics 2018–2022

- Compressed Sensing; Matching Pursuit; Signal Reconstruction
4 documents
- Lizards; Robot; Adhesives
2 documents
- Fog Computing; Network Protocol; Internet of Things
1 document

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Patents

S. No	Faculty	Title	Application Number	Date of Publication
1	Dr. Manavalla Sreekanth	A Device for Treating Exhaust Gases from a Vehicle and a Method to Operate the Same	202341051065	1-9-2023

Consultancy Projects

S. No	Investigators	Title	Company	Amount (in Lacs)
1	Dr. P. Ganesan & Dr. Florence Gnana Poovathy	Algorithm development for Battery Management System for HCL Technologies	HCL Technologies Ltd., India	18.65

Publications

1	Mishra N, Mitra S, Thapliyal A, Mahajan A, Khan TY, Manavalla S , Baig RU, Janvekar AA. Exploring the Effects of DEE Pilot Injection on a Biogas-Fueled HCCI Engine at Different Injection Locations. Sustainability. 2023 Jul 7;15(13):10713.
2	Jin Nishida, Eiichi Kobayashi, Takeharu Sugiyama, Atsunori Matsuda, Shoichi Toh, Pandian Ganesan and Naotoshi Nakashima. Simple Method to Enhance the Oxidation–Reduction Reaction Activity of a Carbon Nanotube-Based Nickel–Iron Layered Double Hydroxide as a Bi-functional Electrocatalyst. The Journal of Physical Chemistry, September 2023.

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Corporate Training

S. No	Resource Person, Date	Company	Topic	Amount (in Lacs)
1	Dr. M. Sreekanth 12-13th August 2023	Maxwatt Turbosystems Pvt Ltd., Bengaluru, India	Hands-on training in simulating Cogeneration systems using Cycle-Tempo	0.5
2	Dr. M. Sreekanth 22-23rd August 2023	Kalki Communications Ltd., Bengaluru, India	Hands-on training in simulating thermal power plants using Cycle-Tempo	0.5



Corporate training at Maxwatt Turbosystems Pvt. Ltd., Bengaluru

Corporate training at Kalki Communications Ltd., Bengaluru



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Visit to Industries



Visit to Motorz, Centre for Battery Engineering and Electric Vehicles (C-BEEV) and Centre for Excellence in Energy and Telecommunications (CEET) at IIT Madras Research Park on 23rd July 2023



Visit to Centre for Battery Engineering and Electric Vehicles (C-BEEV) at IIT Madras Research Park on 1st September 2023

FACULTY CORNER

Faculty External Activities



Dr. M. Sreekanth delivered a talk titled “Thermodynamics behind the Thermal Management of Electric Vehicles” at Rajalakshmi Engineering College, Chennai on 25th August 2023.

QUOTE

“Strive for perfection in everything. Take the best that exists and make it better. If it doesn’t exist, create it. Accept nothing nearly right or good enough”

Sir Henry Royce, Co-founder of Rolls Royce

EDITORIAL TEAM:

- ◆ Dr. Sreekanth Manavalla

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Next issue will be released on 1st January 2024

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Twitter: