

भारतीय गैर न्यायिक

पचास
रुपये
रु.50



FIFTY
RUPEES
Rs.50

INDIA NON JUDICIAL

കേരളം കേരള KERALA
AGREEMENT ON TRANSFER AND UTILIZATION OF **EN 882446**
PLAN FUND 2023-2024 FOR SETTING UP OF CENTRE
OF EXCELLENCE FOR E- MOBILITY RESEARCH,
INNOVATION AND SKILL DEVELOPMENT BY SREE
CHITRA THIRUNAL COLLEGE OF ENGINEERING

THIS AGREEMENT is made on this the 4th day of January 2024 at Thiruvananthapuram, Kerala State BETWEEN the GOVERNOR OF KERALA, represented by Sri. Sreejith S IPS, Transport Commissioner, Motor Vehicles Department, Transport Commissionerate, Trans Towers, Vazhuthacaud, Thiruvananthapuram – 695014 (hereinafter referred to as “MVD” which expression shall, unless it be repugnant to the context or meaning thereof, be deemed to mean and include its successors and assignees) of the FIRST PART AND Dr. C. Sathish Kumar, Principal, Sree Chitra Thirunal College of

Sreejith S

C. Sathish Kumar

PRINCIPAL
Sree Chitra Thirunai
College of Engineering
Trivandrum - 18



82226 dt 1.1.2024

The Principal
SCT Engg college
Dannanamcode PO

Rs.50/-

A. SURESH KUMAR
STAMP VENDOR KARAMANA

भारतीय गैर न्यायिक

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CN 882447

Engineering, Pappanamcode, Thiruvananthapuram (hereinafter referred to as "SCTCE" which expression shall, unless it be repugnant to the context or meaning thereof, be deemed to mean and include its successors and assignees) of the SECOND PART. They are collectively referred to as "PARTIES".

WHEREAS Government of Kerala vide G.O. (Ms) No. 24/2019/Trans dated 10.03.2019 has formulated an Electric Vehicle policy with a view to popularize the use of electric vehicles by implementing various schemes and establishment of Centres of Excellence in the EV value chain is a major component as part of Human Capacity Building and Re-skilling which aims to build world class training/skill centres for EV professionals with niche skills for the global EV industry.

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PRINCIPAL
Sree Chitra Thirunal
College of Engineering
Trivandrum - 18

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A. SURESH KUMAR
STAMP VENDOR, KARAMANA

82227 dt 1.1.2024
The Principal
SCT Engg College
Pappanamcode PO

RS.50/-

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CN 882448

AND WHEREAS SCTCE, a state-sponsored engineering college has submitted a proposal to MVD for financial assistance for setting up of a Centre of Excellence for E-mobility Research, Innovation, and Skill Development.

AND WHEREAS on request of MVD vide Letter No. C3/156/2022-TC dated 13.12.2022 Government have accorded Administrative Sanction for the proposal vide G.O. (Rt) No. 209/2023/TRANS Dated 30.05.2023 for transferring an amount of Rs 95 lakhs(Rupees Ninety Five lakhs only) by debiting the expenditure from the amount allocated in Head of Account 3055-00-800-93-(PV) under the scheme E-mobility promotion fund in the Annual Plan Schemes 2023-24.

S. Sreedhars
S. SREEDHARS
ADSP & TRANSPORT COMMISSIONER
KERALA

[Signature]
PRINCIPAL
Sree Chitra Thiruna
College of Engineering
Trivandrum - 18

[Signature]
A. SURESH KUMAR
STAMP VENDOR, KARAMANA

82228 dt 1.1.2024

The Principal
SCT Engg College

Pr. Manamcode PO Rs. 50/-

भारतीय गैर न्यायिक

पचास
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FIFTY
RUPEES

Rs.50

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AND WHEREAS MVD was entrusted to take necessary action to release the above amount to the PSTSB account No.799012700002151 of SCTCE subject to the condition that the amount may be utilized within 31st March 2024.

AND WHEREAS SCTCE shall implement the project successfully within the stipulated time, adhering to the Government norms, by inviting E-tender for setting up of the Centre of Excellence.

S. SUREJITH IPS
ADDP, TRANSPORT COMMISSIONER
KERALA

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A. SURESH KUMAR
TAMP VENDOR, KARAMANA

82229 dt 1.1.2024

The Principal
SCT Egg College
Padanambal, D.

RS.50/-



NOW, IN CONSIDERATION OF THE AFORESAID DECISION, THE PARTIES HEREBY AGREED AS FOLLOWS:

1. The following documents shall form part of this Agreement, as if incorporated herein:-

- (a) Proposal from SCTCE on setting up of the Centre of Excellence (Annexure 1).
- (b) Letter No. C3/156/2022-TC dated 13.12.2022 of MVD to Government for Administrative Sanction (Annexure 2).
- (c) G.O.(Rt) No. 209/2023/TRANS Dated 30.05.2023. Administrative Sanction from the Government (Annexure 3).
- (d) Work Order No C3/156/2022-TC dated 04.01.2024.

2. This Agreement is for setting up of infrastructure for Centre of Excellence for e-Mobility research, innovation, and skill development (COE-EV). The objectives of the COE-EV:-

- (a) COE-EV shall be used as a source to train and skill, re-skill and up-skill workforce for experimental, research, prototyping and testing setups for EV and Hybrid EV technologies.
- (b) To give comprehensive training in Electric Vehicle to
 - (i) The students of Engineering Colleges, Polytechnics and ITIs so as to create a strong work force in Engineer, Supervisor and Technician level, throughout the State.
 - (ii) To give technical training on electric vehicles to the Technicians, Engineers and professionals.
 - (iii) To provide Research & Development opportunities to the students and researchers of the State.
 - (iv) To provide awareness among the public about the electric vehicles.
- (c) To develop training Centre for value added courses in electric vehicle technology and to generate income to meet

(i) the recurring expenditures and (ii) the expenditures for future development of the COE-EV, if necessary.

3. The COE-EV shall be established at the premises of SCTCE, TRIVANDRUM only and land possession of the SCTCE. Any change in the location shall be subjected to the approval of the Government on written request from SCTCE with due intimation to MVD.
4. SCTCE shall constitute a Technical Committee for overall monitoring of project implementation and activities of COE-EV. A representative of MVD shall be mandatorily included in the Technical Committee subject to the approval from the Transport Commissioner.
5. (a) The details of infrastructure setup and item-wise estimate amount is detailed below:-

Sl.	Setup Name	Specifications	Qty.	Cost (in Rs)
1	EV Drive Train Experimental Setup with Data Acquisition System	Power/Maxpower – 48V, 4.5 kw/ 9.0 kw, 3000 RPM, Controller – 50 Amp, 48 V, DC-DC convertor – Electrical MC4, 48V – 12V – 10A, Differential – 33 inches, Weighing Loading System – Customized, Connector, Charger, Throttle & Brake pedal etc.	1	6,50,000/-
2	Hybrid Drive Train Experimental Setup with Data Logger - combined	Power/Maxpower – 4.5 kw/9.0 kw, Controller – 50 Amp, 48V, Enginer – 1 20+ CC, Dynamo meter – 2 kw, 3000 RPM, 48V,DC-DC convertor – Electrical MC4, 48V-12V-10A, Differential – 33 inches, Battery storage – 48V-20Ah, coupler, connector etc.	1	7,75,000/-
3	EV Electrical Circuit Training Workbench	Motor-2kw, controller – 50 amp – 48V, Charger – 48V, DC-DC convertor – Electrical MC4, 48V-12V-10A, power source – 48V, indicator, lighthing, horn, circuit breaker, brake pedal etc.	1	2,75,000/-
4	2-Wheeler Electric Vehicle Training Workbench	Open chassis – 1.2 kw, Hub motor – 48V, 3000 RPM, Controller – 20tube 50 amp, DC-DC convertor – 48V-12V, 10 amp, circuit breaker, lighting, indicator, horn, circuit breaker etc.	1	2,00,000/-

S. SREEJITH IPS
ADGP & TRANSPORT COMMISSIONER
KERALA

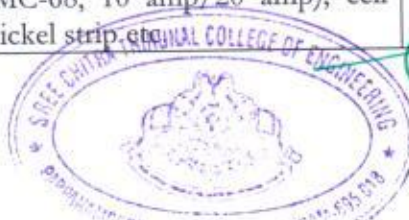


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College of Engineering
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		hand throttle, Aluminum panel with wiring structure diagram etc.		
5	2-Wheeler conversion kit	10 inch hub motor 1.2 kw with disc/drum brake, controller – 24 tube, 50 amp, throttle – hand operated, head lights, LV & HV harness, SMF battery – 48V, 28Ah, charger etc.	1	75,000/-
6	3-Wheeler electric vehicle training workbench	Open chassis – 2 kw, BLDC – 48V, 3000 RPM, Controller – 20 tube 50 amp, DC-DC convertor – 48V-12V, 10 amp, circuit breaker-10 amp, harness, lighting, indicator, horn, circuit breaker, hand throttle, Aluminum panel with wiring structure diagram etc.	1	3,75,000/-
7	4-Wheeler electric vehicle working model for training – golf cart	Open chassis type, 10 kw or higher PMSM Motor, Motor controller, BMS, onboard charger, VCU, Battery pack, thermal management system and all required sensors.	1	8,00,000/-
8	4-Wheeler Tata Tiago electric car for training along with toolkit & service platform	Tata Tiago electric car, battery capacity – 19.2 kwh, Motor type – PMSM, Max power – 60.34 bhp, charging time – 3.6 hour, power steering, ABS and Hydraulic service platform with service tool kit etc.	1	13,50,000/-
9	2-Wheeler service training toolkit with platform	2 W electric vehicle, Motor & power – 1.2 kw, BLDC, battery capacity & rating – 51.2V/30 Ah, Speed – 25 Kmph, Charging time – 5 hours, hydraulic service platform with service tool kit etc.	1	2,50,000/-
10	Cell capacity tester (8 points)	Cell charging discharging – cylindrical BTS-S21-8-6V 3A.	1	2,00,000/-
11	Battery pack testing machine	12V-100V, 100 Amp with computer system and software.	1	5,50,000/-
12	Battery, BMS with CAN protocols training workbench	Power/Maxpower – 3.0 kw/6.0 kw, Battery-48V, 50Ah Li-Ion, Smart BMS, Data logger, controller – 24 tubes, 50 Amp, Throttle with android display and CAN Analyzer.	1	4,25,000/-
13	Cell Sorting Machine (Manual)	Model: IRT – 2000 (standard machine), measuring time – four terminals completely connected for 100 mS, measuring frequency – 1 KHz+/-5% square wave, maximum voltage - < 20V etc.	1	80,000/-
14	Learning & Development Kit	NMC Cells (18650-1200 MAH), Connector Box (L-229, W-182, H-170 mm, 180 cells), Connector (SB 50 L-47, H-15, W-35 mm), Silicon Wire (07A WG/10A WG/12A WG/14A WG), BMS (NMC-68, 10 amp/20 amp), cell holder, Nickel strip, etc.	10	35,000/-

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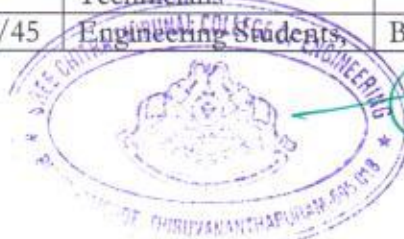
15	Cell Bucket (LFP&NMC)	NMC cell (18650-1200/1800 MAH, 2550 MAH (A/B grade) & LFP (32700-6000 MAH EV Grade/Solar grade)	300	75,000/-
16	Cell Capacity Tester (2 points) – Prismatic	Voltage – measuring range 0-5V & output range 10mV-5V, current-measuring range 0-30A & output range 50mA-30A, Power- measuring range 0-1200 w & output range 0-1200 w etc.	1	2,75,000/-
17	Pneumatic spot welding for prototyping	Welder – 5000A DC welding power supply, Power supply – AC 380V/220V, cell type support – all types of cylindrical cell along with Pneumatic system for welding machine	1	2,00,000/-
18	On Grid Charging Station (2W, 3W & 4W EV)	Customized AC charging station for 2W & 3W EV charger – 1.5 kw, 220V AC (input) 4W EV charger – 7.4 kw, 230V AC – 16/32 Amp (input)	1	5,40,000/-
19	Technology Layout poster	It includes poster of all the workbenches	15	45,000/-
20	Modeling software	PTC University plus Academic Lap Pack, 50 users, 3 year subscription	1	5,35,000/-
21	Desktop computers	12 th Gen Intel Core i5 processor for fast performance, 27-inch FHD to get the ultimate visuals, 256GB SSD and 1TB HDD to storage, 8GB DDR4-3200 MHz RAM	20	12,00,000/-
22	Air Conditioner	2 Ton split AC, 3 star rating	3	1,50,000/-
23	Laser Printer	Multi-function Laser Printer	1	25,000/-
24	Overhead expenses	Furniture, installation and commissioning cost, equipment and software training etc		4,15,000/-
	Total Cost			95 lakhs

(b) All the equipments shall be duly taken into stock and entered in the stock register with details of warranty and certified by the authorized officer of SCTCE.

6. (a) The COE-EV shall be utilized for conducting courses as detailed below. Necessary exposure to associated industries and factories shall also be a mandatory part of the courses.

Sl.	Program Name	Duration	Target Group	Mode of Delivery
1	Short Term Certificate Program	1-7 days	Engineering Students, Faculty, Industry Professional/ Technicians	Blended (online + live + hands-on) / Live/ Offline
2	Medium Term	15/30/45	Engineering Students	Blended (online +

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	Certificate Program	days	Faculty, Industry Professional, Drop-Outs, School Students	live + hands-on) / Live/ Offline
3	Certification in Electric Vehicle Service Technician	3 months	Engineering Students, Fresh Graduates, Polytechnic, ITI, Drop-Outs, 10 th etc.	Offline
4	Certification in Electric Vehicle Assembly Technician	3 months	Engineering Students, Fresh Graduates, Polytechnic, ITI, Drop-Outs, 10 th etc.	Offline
5	Certification in Electric Vehicle Charging Station Technician	3 months	Engineering Students, Fresh Graduates, Polytechnic, ITI, Drop-Outs, 10 th etc.	Offline
6	Certification in Electric Vehicle Test Engineer	6 months	Engineering Students, Fresh Graduates, Academician & Industry Professionals	Blended (Online + Live + Hands-on) / Offline
7	Master Certification in EV Powertrain, Architecture & Energy Storage	6 months	Engineering Students, Fresh Graduates, Academician & Industry Professionals	Blended (Online + Live + Hands-on) / Offline
8	Master Certification in EV Design Simulation & Component	6 months	Engineering Students, Fresh Graduates, Academician & Industry Professionals	Blended (Online + Live + Hands-on) / Offline
9	PG Program in Electric Vehicle Engineering	1 year	Fresh Graduates, Industry Professional / Diploma with 3+ year experience	Blended (Online + Live + Hands-on)

An EV retro-fitment hackathon will be conducted to encourage entrepreneurs, start-ups and students to EV and Hybrid technologies.

(b) Trainees/beneficiaries:-

Sl.	Trainees	Courses offered
1	Mechanical Engineering/ Automobile Engineering/ Electrical Engineering / Electronics Engineering students throughout the State.	Long term training programs – 3 to 6 months duration.
2	Diploma students of Mechanical/ Automobile Engineering / Electrical Engineering/Electronics Engineering throughout the State.	Long term training programs – 3 to 6 months duration.
3	ITI students of Mechanical/ Automobile Engineering / Electrical Engineering / Electronics Engineering	Long term training programs – 3 to 6 months duration.

S. SRZEJITH IPS
ADGP & TRANSPORT COMMISSIONER
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	throughout the State.	
4	Technicians and engineers of the automobile industry.	Short term training programs – 2 weeks to 3 months duration.
5	General public of the State – Green transport awareness program.	1 day to 6 days training on e-mobility.
7	MVD officials	Short term or Long term training depends on their requirements.


(c) SCTCE shall select candidates on first come first serve basis from eligible candidates in each category and shall keep a course-wise and year-wise list of candidates which shall be produced for inspection on demand by MVD/Government. The applicants from MVD will be given preference over the other categories.

(d) SCTCE shall collect fees from the trainees of each course. The Fee so collected shall be remitted in a joint account opened in the name of Principal, SCTCE and Project Manager of Centre of Excellence. Fee shall be collected through bank payment/account transfer or any other legal method approved by the Government. The applicants from MVD will be exempted from the fee payment on production of valid authorization from MVD. The trainings shall be given free of cost for MVD officials. Separate Cash Book /Subsidiary Cash Book shall be maintained for the receipts and payments with respect to the Centre Of Excellence and shall prepare Receipts and Payments Account on expiry of every financial year and shall be approved and certified by the Technical Committee.

(e) Training shall be conducted by the internal faculty/instructors of the college from the Department of Mechanical/ Automobile/ Electrical/ Electronics Engineering. Sufficient training shall be given to the instructors from the vendors who provide this facility. If deemed necessary, subject experts from other institutions can be utilized as resource persons of the training programmes and workshops.


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- (f) Faculty/instructors for conducting training shall be selected based on their qualification, experience and their knowledge in electric vehicles after inviting an expression of interest from them.
- (g) The rate of assistance to the faculty/instructors shall be based on the existing rules of the Centre for Continuing Education (CCE) of the college and shall be disbursed through online payment.
- (h) The Technical Committee constituted shall formally approve the following and submit the details to the Government/MVD:-
- (i) List of courses to be conducted, eligibility for admission, course duration, course fee, and mode of collection of fee.
 - (ii) Mode of selection of training faculty/instructors, qualification criteria, rate of honorarium paid and disbursement.
 - (iii) Further Expansion/Development proposals of COE- EV, if necessary.
7. MVD shall release an amount of Rs. 95 lakhs to the PSTSB Account No. 799012700002151 of SCTCE maintained in the District Treasury, Thiruvananthapuram.
8. (a) SCTCE shall utilize the amount of Rs. 95 lakhs only for the purpose and works mentioned herein and any deviation or escalation in price without the prior approval of the Government shall not be acceptable and in such cases SCTCE shall be liable to repay the whole amount with interest, if any, as and when demanded by the Government.
- (b) The rate for equipment and works shall be payable on pro-rata basis based on the invoice submitted but limited to the total amount of Rs. 95 lakhs.
9. The fund may be utilized within 31 March 2024 by SCTCE.


S. SREEJITH IPS
ADGP & TRANSPORT COMMISSIONER
KERALA

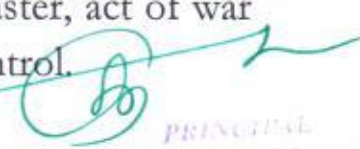



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10. The fund utilization includes the taxes and duties to be paid as per statutory requirements in connection with the implementation of the Project.
11. If the amount spent for the Project is less than the amount deposited by MVD, the remaining amount with interest, if any, shall be returned to Government/MVD within 30 days from the expiry of the term of the Agreement (i.e. 31st March 2024).
12. SCTCE shall submit quarterly progress report to MVD regarding the stage-wise implementation and fund utilization.
13. A comprehensive Utilization Certificate for the amount transferred shall be submitted by SCTCE to MVD within 30 days of project completion failing which, without any valid reason, SCTCE shall be liable to pay penalty as and when demanded by the Government/MVD. The amount of penalty shall be 0.25% of the project cost for the delay of every month or part thereof. The Utilization Certificate shall be signed by the Chairman of the Technical Committee and countersigned by the Principal of SCTCE, if principal is not the Chairman.
14. MVD shall not be liable for any breach of contract agreement between SCTCE and any third party and shall not be a party in any case resulting thereto.
15. Both the parties indemnify to redress the loss sustained to the other party due to action/inaction/violation of the clauses of this Agreement.
16. This Agreement shall not be amended, modified or supplemented without the written agreement of the parties at the time of such amendment, modification or supplement.
17. Neither party shall be liable for failure of performance to the extent caused by force majeure such as natural disaster, act of war or terrorism, riot beyond the parties' reasonable control.


S. SREEJITH IPS
ADGP & TRANSPORT COMMISSIONER
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18. The parties shall attempt to resolve any dispute arising out of or relating to this contract through negotiations between senior executives of the parties, who have authority to settle the same. In the event of any dispute, difference or question arising out of or in respect of this Agreement or the commission of any breach of any terms thereof or of compensation payable thereof or in any manner whatsoever in connection with it, which cannot be settled so, the same shall be referred to the sole Arbitrator(s) appointed on mutual consent. The decision or award so given shall be binding on the parties thereto. However, decision of the Government of Kerala will be binding on both the parties.
19. The Courts at Thiruvananthapuram shall have the jurisdiction to try any case resulting out of this Agreement.

IN WITNESS WHEREOF the parties hereto have caused these present to be signed by their respective authorized officers and affixed their seal in the presence of the following witnesses on the day and year first above written.

S. SREEJITH IPS
ADGP & TRANSPORT COMMISSIONER

Signed and delivered
For and on behalf of MVD
S. Sreejith IPS,
ADGP & Transport
Commissioner

In the presence of Witnesses

1.

SHAJI MADHAVAN
Senior Deputy Transport Commissioner
(Taxation)
Transport Commissionerate
Kerala, Thiruvananthapuram-14

Signed and delivered
For and on behalf of SCTCET
Dr. C Sathish Kumar,
Principal, Sree Chitra Thirunal
College of Engineering,



In the presence of Witnesses

1.

Dr. Shyji S
Associate Professor in Mech Engg.