

# SOLAR ELECTRIC VEHICLE CHAMPIONSHIP "Emerging Future Mobility"



**Event Information Document** 

# **ABOUT EVENT**

# "Emerging Future Mobility"

SEVC (Solar Electric Vehicle Championship) is a national level electric vehicle design competition aimed at training engineering students with practical knowledge of recent technologies in engineering domain. At this event, students will form an interdisciplinary team of enthusiastic students to build an electric vehicle from the beginning. In addition to vehicle manufacturing, the team is also working on many industry-level reports. Participation in SEVC will enhance the technical skills of the students paving way for their professional success. Also, students will improve themselves in many areas like team coordination, managerial skills, business development, financial management and entrepreneurship.

**Battery Electric Vehicle** 

Solar Electric Vehicle

"For most of history, humans have had to fight nature of survive; in this century, we beginning to realize that in order to survive, we must protect nature". – Jacques Yves Cousteau

Increased-levels of pollution and global warming has made it so important to transform ourselves into eco-friendly transportation.



With the vision of protecting mother nature, our event encourages the participating student teams to create their own **Battery Electric Vehicle (BEV)**. In this journey, students will learn various aspects of design and fabrication including recent technologies related to battery, BMS and so on. This is the first category of SEVC 2024.

"The sun with all those planets revolving around it and depending on it, can still ripen a bunch of grapes as if it had nothing else in the universe to do". - Galileo Galilei

Incorporation of renewable energy resources in the electric vehicles can provide humanity an extra-edge in protecting and preserving nature. This resulted in the second category of SEVC, namely, Solar Electric Vehicle (SEV), in which teams can use solar panels on their vehicles in order to charge their battery. This might provide an extended range for the vehicles and effective utilization of energy. The concept of SEV will also plant the seed of creating next generation automobiles.

Category 1: Battery Electric Vehicle (BEV)

Category 2: Solar Electric Vehicle (SEV)

Teams can choose any one of the above-mentioned categories to build their vehicle for SEVC 2024.





- Educate, impart knowledge and create a multi-dimensional thinking for students to develop innovative concepts and make them excel in their domain.
- To establish an eco-friendly means of transportation by the incorporation of future concept electric vehicles.



- Conduct events with innovative concepts satisfying society needs. Make them learn through practical approach. Create Opportunity for students to get placed in their desired fields.
- To train and equip students with industrial level technical knowledge making them sound professionals enabling them to contribute to the development of our nation.



# **ABOUT US**

# "Creating Green Mobility"

Solar Electric Vehicle Championship (SEVC) is conducted by the collaboration of two societies, Hindustan Innovative Product Development Society (HIPDS) and Society for Science, Technology, Management and Humanities (SSTMH).

#### **Hindustan Innovative Product Development Society (HIPDS)**

Hindustan Innovative Product Development Centre is a space fornew age entrepreneurs and young minds to transform their innovative ideas into viable business propositions. This Incubation Centre was approved by the Ministry of Small and Medium Scale Enterprises (MSME), Govt. of India, New Delhi to implement the scheme of "Entrepreneurial and ManagerialDevelopment of SMEs through Incubators". Incubation Centre will provide technological assistance to incubates which will be generated through mentors with multidisciplinary expertise. HIPDC will be a startup hub offering infrastructure of co-working spaces and full-spectrum business resources including hiring assistance, legal assistance and seed money.



# Society for Science, Technology, Management and Humanities (SSTMH)

SSTMH is a National Level society, registered under the Society's act from Govt. of Karnataka with an aim to nurture & develop researchers, technocrats, Entrepreneurs and Business leaders globally to serve the needs of humanity. Society further has the vision to be renowned internationally in Science, Technology, Management and Humanity by serving the needs of Industry and Institutes through Educational Programs, Industry interactions, Entrepreneurship development, innovation and incubation.







# **GENERAL GUIDELINES**

SEVC Event focuses on providing a platform for vehicle designing under a well-monitored structure.

The following are the guidelines:

# a) Event Timeline:

S.No	Description	Tentative Timeline
1	Event Launch	Jul 20, 2023
2	Start of Registration Jul 20, 2023	
3	Release of Technical Rulebook	Jul 25, 2023
4	Workshop / Internship (Design and Analysis of Electric Vehicles)	Aug 2023- Jan 2024
5	Rulebook + General Engineering Test	Nov 2023
6	Virtual Event Report Submission	Dec 10, 2023
7	Virtual Round	Dec 2023 – Jan 2024
8	College Level Vehicle Inspection	Feb 2024
9	Event Reports Submission	Feb 12, 2024
10	Vehicle Readiness Video Submission	Feb 25, 2024
11	Dynamic Event	Mar2024

<sup>\*\*</sup> The above-mentioned dates are tentative and subjected to change. \*\*



#### b) Team Requirements:

Team Size				
Team Members	5 [Minimum]	35 [Maximum] (Inclusive of female Participants)		
Faculty Advisor	1 [Maximum]			

- Teams registering for SOLAR ELECTRIC VEHICLE CHAMPIONSHIP (SEVC) must have a *Team Name* and *Team Captain*.
- There is no limit on the number of teams that can participate from one college/University. But the team's name, logo, Captain, Vice-Captain, and Faculty advisor should be exclusively separate for each team.
- Teams can have a maximum of 35 members including female participants.
- Teams are encouraged to choose members from various engineering disciplines like Mechanical, Electrical, Electronics, Instrumentation, etc., as building an electric vehicle requires the support of several departments.



#### c) Eligibility:

- Students pursuing an undergraduate program in any engineering discipline at any registered College/University can form a team to participate in SEVC.
- Team must have Two drivers with a valid government-issued 4W (Four-Wheeler) driving license.
- Each team member and faculty advisor are advised to complete the Covid vaccination, both 1<sup>st</sup> and 2<sup>nd</sup> dose, by the time of the dynamic event.

#### d) Registration Procedure:

#### I. Details filling

 Teams shall do their initial registration through the link on our official website and are requested to follow the procedure mentioned in our registration guidelines document.

#### **SEVC**

- It is mandatory to have an official team email ID to register for the event.
   Personal student or faculty mail ID will not be considered valid.
- After initial registration, teams will receive a confirmation mail from our registration committee. For further updates, check your team mail frequently.



#### II. Fee Structure

- Total registration fee for SEVC 2024 is ₹ 40,000/-
- Fee payment stages

Phase	Registration Fees for Team  (Registering before 15th of November)  (₹)	Registration Fees for Team  (Registering after 15th of November)  (₹)
1	10,000 + GST = 11,800	10,000 + GST = 11,800
2	15,000 + GST = 17,700	17,500 + GST = 20,650
3	15,000 + GST = 17,700	17,500 + GST = 20,650
Total	40,000 + GST = 47,200	45,000 + GST = 53,100

- Teams can also pay the entire registration fee as a single payment if they are comfortable with it.
- Teams must do their Phase I Registration before the 15<sup>th</sup> of November to claim the fees of Rs. 40,000/-

#### III. Registration fee payment and Confirmation

- Teams are requested to pay the phase registration on their log-in page.
- Teams must upload a copy of the payment proof, on the payment page itself.
- Confirmation mail will be sent after the verification of payment.



#### **IV. Contact Us**

Registration	+91-8148093826	
Queries		
Technical support	191 0110093020	sevcevent@gmail.com
Reports		



### V. Award details

Award	Solar Electric Vehicle	Battery Electric Vehicle		
	Winner –	SEVC 2024		
	I Runner Up – SEVC 2024			
	II Runner Up - SEVC 2024			
S	Dynamic Champion	Dynamic Champion		
ard	Endurance Winner	Endurance Winner		
4wa	Solar Endurance Winner	Load Haul Winner		
Dynamic Awards	Hovering & Drag Winner	Hovering & Drag Winner		
ıam	Maneuverability Winner	Maneuverability Winner		
Dyr	Acceleration Winner	Acceleration Winner		
	Durable Vehicle			
	Motor Man Award			
	Autonomous Driving Award			
S	Virtual Round Winner			
Static Awards	Static Champion			
4wa	Design Award			
tic /	Lightest Vehicle	Lightest Vehicle		
Sta	Build Quality Award			
	Future Startup Award			
	Optimum Cost Award			
	Innovation Award			
_	Team Spirit Award			
Appreciation Awards	Inspiring Faculty Award			
preciati Awards	Best Captain			
pre Awa	Femina Award			
Apj	Shutter Bug Winner, Ist Runner Up			
	Trending Team Award			
	Surprise Awards			
(Will be revealed in final event)				



# **FOLLOW US**















Keep in touch with us for regular updates!!!!



# **SUPPORTED BY**



















