

The Innovators Educational Foundation (IEF) is a 501c3 non-profit organization that organizes the collegiate US solar car events. In 2019, IEF is celebrating its 10 year anniversary of organizing the Formula Sun Grand Prix and the American Solar Challenge, continuing these events that began with Sunrayce in 1990. IEF is made up of a core group of dedicated volunteers, mostly former competitors, that know first-hand the value of the solar car project and these "brainsport" events to both the educational experience and public awareness of the capabilities of solar power.

> Thank you to all of the teams, sponsors, and volunteers that have made it possible to continue these solar car events for the past decade! With your continued support, these events will continue to challenge the next generation of engineers and business leaders.

Contact us to get involved!

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FSGP 2019 MADE POSSIBLE BY

Thank you to our sponsors for their generous support! Contact us to get involved with future events or make a donation at any time through our website via PayPal. With your support, these STEM learning opportunities can continue to challenge the next generation of students!



Austin Energy Electrek Love's Travel Stops **Powersim QuoteWizard** Sutliff & Stout, PLLC **University of Calgary Solar Car Team**

Experiential Learning

Promoting STEM and hands-on problem solving, the Formula Sun Grand Prix is a collegiate student design competition that explores the possibilities of solar energy. University teams design and build a solar powered vehicle for either the single-occupant or multi-occupant vehicle class.

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Scrutineering | July 1-3

Before the solar cars are allowed on the track, each vehicle must complete a series of inspections, including mechanical and electrical systems, body and sizing, and dynamic testing. This detailed process checks for safety concerns and regulation compliance.

Solar Raycing | July 4-6

Teams have 24 hours of drive time spread across 3 days (8 hours per day) to complete as many laps as possible on the track, using only the power of the sun and any stored energy in their battery pack. Teams make pit stops to change tires, switch drivers, and perform other maintenance as needed.

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Formula

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#3 University of Kentucky Gato del Sol VI | USA SOV | 250kg | 4.50m x 1.75m x 1.12m 967W Silicon Array | 4.5kWh Li-ion Batteries 2 Mitsuba Motors | Fiberglass/Aluminum Frame



#17 Illinois State University Mercury 6 | USA | Mercury SOV | 220kg | 4.50m x 1.40m x 1.10m 800W Silicon Array | 5.2kWh Li-ion Batteries 1 Mitsuba Motor | Carbon Fiber Monocoque



#49 Georgia Tech SR-3 | USA | GT Solar Racing SOV | 200kg | 5.00m x 1.25m x 1.20m 880W Silicon Array | 4.75kWh Li-ion Batteries 2 Marand Motors 4130 Steel Monohull



#87 University of Virginia Rivanna | USA | Solar Car Team at UVA Car Name TBA | USA | SolarPack SOV | 200kg | 3.40m x 1.70m x 1.10m TBA Array | 4.94kWh Li-ion Batteries 2 QS Motors | Carbon Fiber Monocoque



#5 University of Florida Cielo | USA | Solar Gators SOV | 315kg | 4.10m x 1.80m x 1.36m 900W Silicon Array | 5kWh Li-ion Batteries 1 Mitsuba Motor | Aluminum Space Frame



#22 University of Illinois Argo | USA | Illini Solar Car SOV | 224kg | 4.50m x 1.80m x 1.00m 900W Silicon Array | 5.1kWh Li-ion Batteries 2 Mitsuba Motors | Semi-Carbon Monocoque



#55 Polytechnique Montréal Esteban 9 | CAN | Esteban Solar Car SOV | 198kg | 3.30m x 1.84m x 1.00m 1000W Silicon Array | 5kWh Li-ion Batteries 2 Mitsuba Motors | Carbon Composite



#99 North Carolina State MOV | 1050kg | 4.80m x 2.00m x 1.40m 1000W Silicon Array | 26kWh Li₂TiO₃ Batteries 1 EMRAX Motor | Steel/Aluminum Space Frame



#6 UC Berkeley Tachyon | USA | CalSol MOV | 400kg | 4.90m x 2.14m x 1.26m 1200W Silicon Array | 15kWh Li-Ion Batteries 2 NGM Motors | Carbon/Aluminum Monocogue



#24 University of Waterloo MSXII | CAN | Midnight Sun MOV | 475kg | 4.68m x 2.02m x 1.23m 1200W Silicon Array | 14kWh Li-Ion Batteries 2 NGM Motors | Chromoly Steel Tube Frame



#57 SIUE

NOVA | USA | SIUE Solar Racing SOV (Grandfathered) | 215kg | 4.5m x 1.7m x 1.1m MOV | 545kg | 4.50m x 1.80m x 1.20m 500W Silicon Array | 4.66kWh Li-ion Batteries 1 NGM Motor | 4130 Chromoly Space Frame



#314 Purdue University Renatus | USA SOV



#9 Iowa State University Eliana | USA | PrISUm MOV | 416kg | 4.98m x 2.10m x 1.12m 900W Si/Ga Array | 16kWh Li-Ion Batteries 2 Mitsuba Motors | Carbon Monocogue/Chromoly



#26 UBC Daybreak | CAN | UBC Solar Car SOV | 160kg | 4.50m x 1.40m x 1.00m 1022W Silicon Array | 5.14kWh Li-ion Batteries 1 NGM Motor | Chromoly Steel Space Frame



#66 Rutgers University Arctan | USA SOV | 250kg | 4.50m x 1.80m x 0.95m

RaX | USA



#786 Western Michigan Farasi | USA | Sunseeker SOV | 317kg | 4.20m x 1.70m x 1.00m 2 Csiro Motors | Carbon Fiber Hybrid



#65 University of Calgary The Schulich Elvsia | CAN 1000W Silicon Array | 17.88kWh Li-ion Batteries 2 Mirand Motors | Carbon Monocoque Catamaran



#406 Montana State University Bridger Beamer | USA | Bridger SOV | 180kg | 4.39m x 1.85m x 1.42m 800W Silicon Array | 5.18kWh Li-ion Batteries 1 Mitsuba Motor | Steel Tubular Frame



#11 Northwestern University Seven | USA | NUsolar SOV | 295kg | 4.50m x 1.80m x 1.20m 928W Silicon Array | 4.7kWh Li-Ion Batteries 2 Mitsuba Motors | Steel Space Frame



#32 Principia College

SOV | 150kg | 3.40m x 1.60m x 1.10m 1000W Silicon Array | 5kWh Li-Polymer Batteries 1 Mitsuba Motor | Chromoly Steel Frame



800W Silicon Array | 4.65kWh Li-ion Batteries 1 Mitsuba Motor I Carbon/Aluminum Monocoque

1000W Silicon Array | 5.1kWh Li-ion Batteries



#13 Michigan State University Aurora | USA | MSU Solar Racing MOV | 425kg | 4.20m x 1.75m x 1.10m 1138W Silicon Array | 13.1kWh Li-Ion Batteries 1 Mitsuba Motor | Chromoly Steel Space Frame



#42 Missouri S&T Independence | USA

SOV | 175kg | 4.45m x 1.43m x 1.12m 967W Silicon Array | 5.3kWh Li-ion Batteries 1 Mitsuba Motor | Carbon Monocoque Catamaran



#86 New Jersey Institute of Technology EL 1 | USA | NJIT Solar Car Team SOV | 283kg | 5.00m x 1.82m x 1.10m 800W Silicon Array | 4.7kWh Li-ion Batteries 2 QS Motors | 4130 Steel Space Frame

#787 Puerto Rico-Mayaguez El Pitirre | PRI | SERRT SOV | 317kg | 3.30m x 1.80m x 1.08m 790W Silicon Array | 5.1kWh Li-ion Batteries 1 NGM Motor | Aluminum Tubular Frame