

Volunteer with Formula Hybrid

Geek Out with Race Cars

[Request for IEEE Reviewers](#) | [About Formula Hybrid](#) | [Reviewer Considerations](#) | [Contact](#)

Request for IEEE Reviewers

The Formula Hybrid competition is requesting IEEE volunteers to act as electrical reviewers for university teams. Your IEEE section is in close proximity to one of the 2015 teams (see list at end), so we are contacting Section and Technical Chapter Chairs who might be interested or able to identify appropriate candidates.

The reason we are asking for volunteer electrical reviewers, is that we have had one persistent challenge over the years. An unacceptably high percentage of teams never get to compete, because they arrive with a vehicle that is not ready to pass our safety inspections.

To address this problem, we have initiated a new program wherein the teams will present their vehicles for an electrical review three weeks prior to the competition – while there is still time for them to fix issues that might be uncovered.

Consequently, we are recruiting electrical engineers with practical, high power experience who would be able to spend a few hours at the students' home institutions performing these technical reviews.

About Formula Hybrid (www.formula-hybrid.org)

Formula Hybrid is a student engineering design competition where students are challenged to design, construct and compete a hybrid-electric or electric powered race car. It is a member of the SAE Collegiate Design Series and is endorsed by the IEEE.

The competition, now in its ninth year, takes place each spring at the New Hampshire Motor Speedway in Loudon, NH. It is sponsored by the IEEE along with Ford, GM, Fiat Chrysler, Toyota, LG Industries, and others who have an interest in recruiting from the pool of creative students that take on this challenge.

There are presently 28 teams registered for the 2015 competition. These teams consist of engineering students from 6 different countries, who are currently engaged in the design and construction of these vehicles, which can take between one and two years to develop.

Reviewer Considerations

We are asking you to do an unofficial technical review of their vehicle to help the teams prepare for the full inspection that will take place at the competition on April 27 – 30, 2015.



It is important to note that we are not asking you to perform an actual safety inspection. We understand the concerns of many engineers who feel they might not have adequate experience with hybrid or electric race cars, or who are wary of being held responsible for the safety of these cars.

To assist you during the review, we plan to have experienced Formula Hybrid Electrical Inspectors available via Skype during the inspection. These inspectors can provide guidance as well as real-time rules lookup. They can also save the Skype images of areas of concern to be used for reference during the final inspections at the competition.

Formula Hybrid organizers have developed a thorough “Reviewer’s Guide”, to help volunteers understand what to expect, and how to approach the review.

We have made it clear to the teams that these on-site reviews are not official inspections; they are strictly for the benefit of the teams.

The commitment time required is approximately three to four hours over the course of one or two days in the beginning of next April.

Finally – we see this as a great opportunity for the volunteer reviewers. You get to “climb into the trenches” and spend some quality time with an enthusiastic group of young engineering students. You may even decide you want in on the action of race day events – volunteers always welcome to join us onsite at the Speedway.

Thanks very much for considering our request!

Doug Fraser, SAE, IEEE, Director; Formula Hybrid Competition

Amy Keeler, Coordinating Manager; Formula Hybrid Competition

Hal Flescher, IEEE Fellow, Formula Hybrid “Engineering the Future” Judge

Contact

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2015 Registrants: Atilim University | Binghamton University | Carnegie Mellon University | Dartmouth College | Georgia Institute of Technology | Illinois Institute of Technology | Lawrence Technological University | McMaster University | Middle Tennessee State University | Milwaukee School of Engineering | Nitte Meenakshi Institute of Technology | North Carolina State University | Princeton University | Purdue University | Rensselaer Polytechnic Institute | RV College of Engineering | Tufts University | University of Houston | University of Idaho | University of Illinois – Urbana Champaign | University of Massachusetts – Lowell | University of Michigan – Ann Arbor | University of Vermont | University of Victoria | University of Waterloo | University of Western Australia | Wayne State University