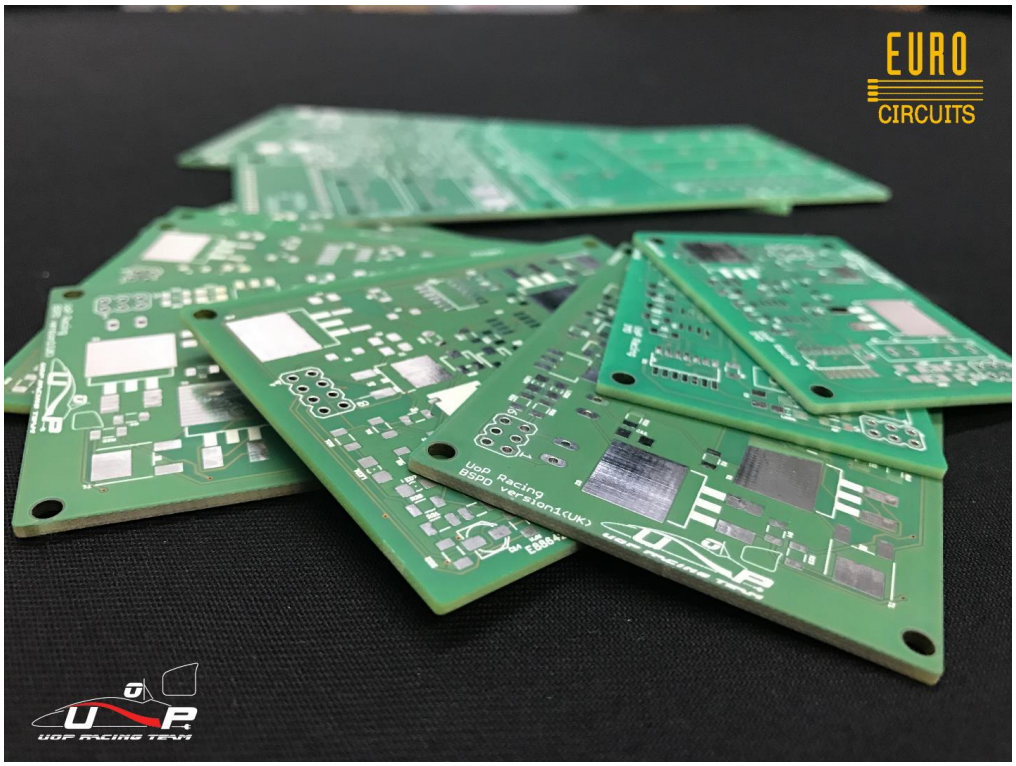
# UoP Racing Newsletter #2

As the Formula Student competitions are closing in fast, all of us at UoP Racing started work early in the season to make sure we were on the best possible state while developing our new racecar. Let's take a look together at what went down these past months for our team.

Our primary point of focus was the powertrain system and how we could improve upon it. After disassembling the battery packs, the motor and the ECU, the powertrain and drivetrain subteam constructed a testing rig that would provide a safer and more convenient environment to dyno-test UoP5e's EMRAX 228 motor. The dyno-testing provided us with valuable feedback regarding the characteristics of the motor in relevance to the input voltage, such as torque and power graphs. This allowed us to determine that we were in a position to upgrade the battery subsystem and increase the car's total voltage, which will lead to increased power output and a wider high torque span. That in turn will lead to a few more changes, since the transmission needs to be redesigned to compensate for the upgrades and the cooling system needs to step up its game too to succeed in keeping the

engine bay environment within acceptable temperatures. Conclusively, following these upgrades will make the new car faster and more responsive power-wise, which is always welcome!




*A look at the PCB's we received from Eurocircuits. These will be used throughout our powertrain subsystem.*

Moving on with more changes, the aerodynamics subteam has been busy as well, redesigning UoP5e's aerodynamic devices to be eligible for the Formula Student competitions of 2017. The whole process is definitely one of the most interesting ones, since the changes in the competition ruleset meant that the existing aerodynamic parts had to be scrapped anyway and

everything had to be remade from scratch. This allowed the subteam to use some of the drivers' feedback and implement a few of their suggestions on the on-going design process. Finally, the team is looking into different ways of manufacturing the devices themselves, in order to improve their strength and their production quality.

After deciding on what worked and what didn't when it came to the chassis and the vehicle dynamics subteams, the two groups shifted their focus towards weight reduction and minor part upgrades. In more detail, the chassis guys and gals commenced a search for parts installed on UoP5e that could be remade through a different procedure or using different materials, which could lower its weight even further than the 213 kilos the scale displayed during the 2016 competitions. The vehicle dynamics subteam on the other hand, disassembled the Ohlins suspensions to assess their condition, after a few indications of wear were noticed during one of the test sessions.

The marketing subteam kept up the intensity as well by organizing an open day event in the Athens Circuit of

Megara, in collaboration with the country's biggest and longest-running car magazine, 4Troxoi (tran: 4Τροχοί = Four Wheels). Aside from the live presentation from the team members to the crowd that honored us with their presence, the day included a photoshoot and a drag race with a BMW i8 hybrid supercar, a video of which can be found on 4Troxoi's official YouTube channel.




*The UoP5e completing some laps with a BMW i8 in the Athens Circuit Racetrack at Megara.*

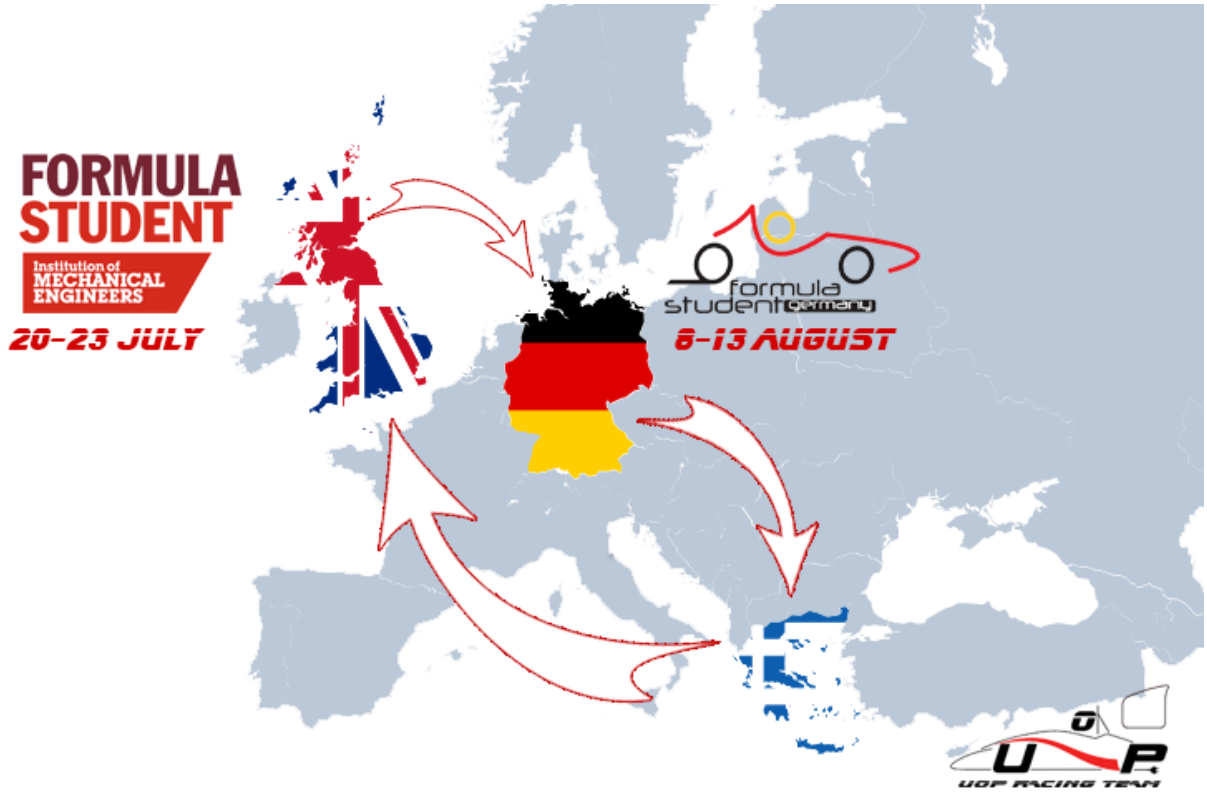
Moreover, the team was fortunate enough to secure a sponsorship by Bosch Hellas, the Greek division of the multinational firm. Having won the competition between other Greek Formula Student teams held by Bosch Hellas, now one of the Grand Sponsors of UoP Racing, the team will benefit from technical and financial support from the company, a support which will prove greatly significant in the short and long run.




Regarding the acquisition of new members, the team opened up the application form to recruit new people back in October and the results were astonishing. More

than 90 people handed in a request to join the UoP Racing family, which was a team all-time record, as well as proof of the appreciation of the great work that has been done over the years in this team. After a basic screening process and a series of detailed interviews, the new members that made the cut received their first tasks in early December and are currently working to get up to speed with the needs of the subteam they got recruited in.

In terms of the upcoming Formula Student competitions of 2017, the preparation phase that the team emerged themselves in, proved to be solid, as UoP Racing manage to qualify for Formula Student, Formula Student Germany e.V., Formula Student Czech Republic and Formula Student East 2017. With these options in mind, as well as the team's needs and aspirations, the team decided to compete in the IMechE Formula Student and Formula Student Germany e.V. competitions of 2017. We are very excited to be able to participate in the most iconic competitions of the 2017 calendar and we will certainly work extra hard to meet our goals for the season.




*Things will be busy for us this summer at IMechE Formula Student 2017 and Formula Student Electric 2017.*

In conclusion, these months have been full of tasks, satisfying conclusions and most importantly progress, both in the development of our racecar and in the team's personnel and skill level. As we are going through the team's 15$^{th}$ year of operation, things are looking bright and we are excited to see how we will fare in the Formula Student competitions of 2017.