

Simon Langton Grammar School for Boys Regional Champions in both Entry and Development Class competitions

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On Friday 14th February 2020, after many months of devoted preparation, including a visit to the Mechanical Engineering Department at UCL, three teams of students from Simon Langton Grammar School for Boys competed in the London South Regional Final of the F1 in Schools Competition. The school's Entry Class team, Corpus, was made up of six students and the two Development Class teams, Emerus and Ignite, were made up of six and five students respectively.

The competition, held at Garth Hill College in Bracknell, assessed the students' ability to deploy CAD and CAM (computer aided design and manufacture) software in order to design, analyse, manufacture, test and race miniature cars which are powered by compressed air. Throughout the course of the day, the teams had to demonstrate a huge array of knowledge and skills to a panel of judges ranging from professional Engineers to a recent school leaver and current F1 in Schools Global Champion. The teams were required to produce professional standard portfolio work, submit cars for careful scrutiny, set up and man a pit display, discuss their designs with engineers, give a verbal presentation and, of course, race their cars on the 20 metre long racetrack.

The Development Class students, many of whom competed in the Entry Class competition last year, were up against a strong field of seven other teams, including Golden Motorsports, the Entry Class champions from 2019. In addition to the competition requirements detailed above, these two teams had to complete detailed project plans, raise sponsorship and manage a budget. All of this was presented in an additional Enterprise Portfolio.

For Ignite, sponsored by Prime AI, Zanskar Marine and Neo Orthodontics Limited, a beautifully engineered car saw the team dominate on the track, with exceptional race times that left some of the professional class cars in the dust. With an excellent set of engineering drawings, an innovative design and a commendable understanding of aerodynamics the team looked set to perform well in the categories of Best Engineered Car and Fastest Car. Unfortunately, a last minute alteration to the car dropped the weight to half a gram below the minimum threshold, this took them out of contention and saw them finish fourth overall.



Even as Emerus were putting the finishing touches to their pit display early in the morning of the competition, they were drawing the attention of event organisers. With their unique focus on sustainability and an excellent team dynamic, they worked through the day with slick professionalism, maintaining a calm focus despite being the only team that was not making heavy use the elevator to travel across the three floors where the different competition elements took place. Coming out of the design judging and perfectly timed verbal presentation, the team were feeling confident. On the track, the car put in a very respectable performance and the lightning fast reaction times of George Gove, which ultimately saw Emerus take home the first award of the day, inspiring the team up

the race leader board. As the day started drawing to a close, the team began discussing what they would improve in future years. Having surveyed the exceptional standard of teams they were competing against, the students did not expect to be competing again in less than seven weeks' time. Much to their surprise, Emerus, sponsored by Charles Bainbridge Estate Agents, Burgess Hodgson, Astin Consulting and Rob Moulton, will be competing at the F1 in Schools National Final, held under the wings of Concorde at the Bristol Aerospace Museum, as the London South Development Class Regional Champions! This is an exceptional achievement for students taken exclusively from Years 8 and 9.



Team Corpus competed against 22 teams in the Entry Class competition. Their careful precision and attention to detail was evident in all that they did throughout the day. With a car that would have stood out amongst some of the Development and Professional class cars, the boys went about the day with infectious enthusiasm and it was clear they were in contention for at least a mention in the final awards ceremony. Unsurprisingly, their rather speedy and beautifully branded car, with its exceptionally precise weight and intricate wing design, saw them collect the prize for The Best Engineered Car in Entry Class. However, the team were surprised and undoubtedly delighted to be crowned the Entry Class Regional Champions. As a result of this achievement, the students walk away with a golden envelope containing VIP guest tickets to watch their friends and siblings in Emerus compete in the National Finals. This is an opportunity which will give them a fantastic insight into what they need to do in order to excel in the Development Class competition in 2021.

F1 in Schools is a global competition that is open to all students aged nine to nineteen. With the excellent calibre of the students in all three teams, it does not come as a shock to me that we, as a school, have the ability to excel in such arenas. However, it has been the continued support of the Parents' Association and the 1248 Society that has allowed us to not only maintain a good supply of consumables, but also to purchase a CNC router, a 20 metre test track and a miniature smoke track wind tunnel. Some of these are resources that not even the global champions have had available to them. Undoubtedly, these resources have fuelled both the enthusiasm for the project and the subsequent successes of our teams. On behalf of the students benefitting from this incredible experience, I would like to thank these organisations and the companies that sponsored our teams for their ongoing support.



The teams will now need to raise further sponsorship in order to attend the National Finals on the 1st and 2nd of April. If anyone is interested in sponsoring our teams in the future, particularly companies that can support Emerus in their sustainability endeavours, please contact the school.