

# SHEFFIELD FORMULA RACING

2022 September Issue

END OF AN ERA



Edited By Daniel Hazel



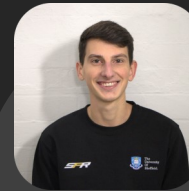
## Formula Student UK 2022

FSUK 22 was a great experience for everyone on the team, especially for those who had missed out on attending previous years due to the pandemic. While we may not have placed as high as we hoped we are still proud of what we managed to achieve this year.

### Event Standings

- Costing Event: 13th
- Design Event: 8th place
- Business Presentation: 16th
- Overall Result: 17th

## Reflecting On The Past



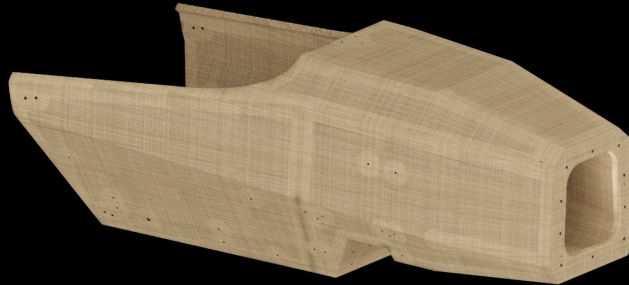
### FSUK 22 Summary from George Boufidis (Previous Team Principal)

We had one of the best cars in the competition. The second lightest and we believe the most beautiful as well! This year we have done major changes to the design including our first carbon fibre monocoque and wishbones. We have created unprecedented knowledge in the team in composites design and manufacture. I am really proud of what we have achieved. Due to the limited time available for testing prior to the competition, we faced some reliability issues that prevented us from scoring the points that we could. Regardless, I am confident that we have set solid foundations in the design of a new car that will help the team thrive for many years to come! A big thank you to all sponsors and supporters as you are the reason we can still push the limits, learn, and create an amazing car. We hope that you love it as much as we do!



# Looking Ahead

## SFR 14B



**A message from the new team leads about our 2023 Plans:**

SFR is in such a strong position to produce one of the most competitive FS cars in our history. The efforts of the team last year have delivered us a highly optimised monocoque. We will take this design forward with an improved layup to produce an ever lighter chassis. The priority for SFR14 will be to follow strict testing deadlines to ensure that all of our systems are reliable enough to battle for the crown of every dynamic event.

Because the composites knowledge of SFR is at an all-time high we are running an additional program this year. We will be delivering a concept class car in which we will be testing the latest and greenest (brownest) composites. Together with composite evolution, we are aiming to build the most bio-based formula student car ever. We have already begun work on designing a monocoque chassis using bio-based composites. To ensure this design will meet the competition safety standards we are testing a range of bio-resin composites with both natural fibres and carbon and comparing the results with materials from our previous chassis. We aim to build an aero package for SFR14 using this material technology to prove that going green doesn't need to eradicate performance.

# New Team Structure

 <b>Team Principal</b> Sam Harris	 <b>Head Of Composites</b> Thomas Nalson	 <b>Head Of Mechanical Design</b> Matt Boland	 <b>Manufacturing Director</b> Eddie Warden
 <b>Chassis and Driver Environment</b> James Cheng (Lead) Izzy Humphreys Ted Barganski Toby Smith Daniel Hazel Edward Priestly	 <b>Vehicle Dynamics</b> Kai Damni (Lead) Stuart Hassel Matt Parkes Edward Melvin George Brown	 <b>Power Train</b> Rahman Pervaiz (Lead) Alex Burg Alex Waldron Guy Darby James Ferguson	 <b>Aerodynamics</b> Leftheris Karamanis (Lead) Max Dawson Kaitlyn Henden Alex MacWaters Edward Davenport
 <b>Marketing</b> Lara Abouelnour (Lead) Alex Burg Daniel Hazel Matt Parkes Alex MacWaters Alex Waldron Izzy Humphreys Stuart Hassel George Brown	 <b>Business</b> Edward Priestly (Lead) Ed Davenport Ted Barganski Morgan Manly	 <b>Costing</b> Toby Smith (Lead) Rahman Pervaiz Kaitlyn Henden Edward Melvin Guy Darby Toby Brown	 <b>Electronics</b> Charlie De Beaux (Lead) Ami Jerger Morgan Manly Toby Brown
 <b>Social/Events</b> Max Dawson (Lead)	 <b>Wellbeing Officer</b> Kai Damani (Lead)	 <b>First Year Integration</b> Alex MacWaters (Lead) Ed Priestly	 <b>H&amp;S Officer</b> Edward Davenport
 <b>Head of Structures</b> Youssef Elesaway	 <b>Vehicle Operations</b> Phoebe Tolliday (Lead) Lara Abouelnour		

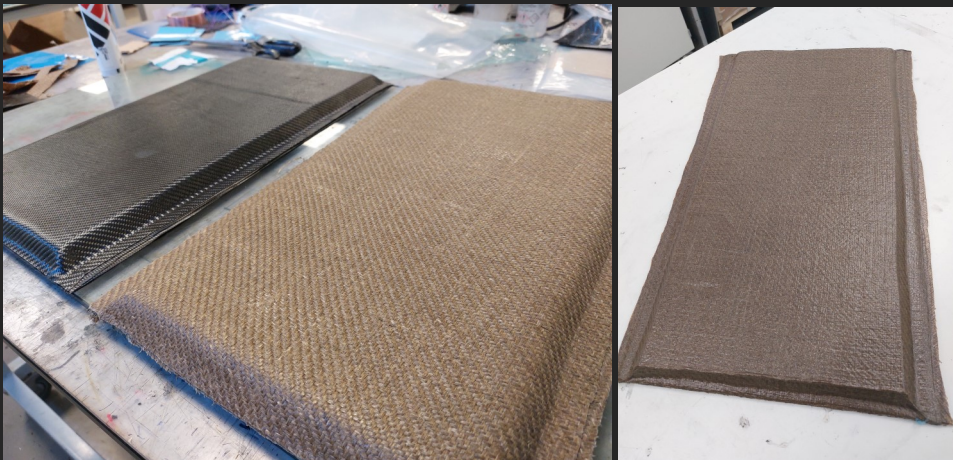


## Team Updates

Now that we are back in September the team have started the design of Sheffield Formula Racing's 2023 car – SFR14. The potential for this car is already looking huge with alterations already being made to the revolutionary monocoque from SFR12 that could save potentially 5kg.

The team last year faced reliability issues with parts at competition. The team have plans to increase the testing of components. We will do this using an off car setup as an initial test to stress components and then at the track on the car. Both will make sure that we have a more reliable car when it comes to racing at the 2023 competition.

### Early Composite Test Panel Samples



We are also designing a sustainable concept class car, which will be in partnership with Composite Evolution. Composite Evolution specialises in prepregs and are developing Bio-based resins for both Carbon and AmpliTex™ composites.

## First Year Integration

### First year Integration:

Since our involvement in the University Open days, we have started our recruitment process for this year through our expression of interest google form which we have advertised through engineering fairs throughout the university and departmental emails to first year students. After this they will begin the application process.

We plan to integrate the new team members through socials and introductory team design meetings so that they are able to grasp how the team operates. This will also allow them to decide which sub-teams they would prefer to be in.

## How You Can Support

If you feel like you have the capability to support us and our project please do not hesitate to click the link below to reach out to us for information on our sponsorship packages. Any help is greatly appreciated!

[Learn More](#)

# THANKS TO ALL OUR SPONSORS

