

NEWSLETTER



TOPICS:

>01 LATEST NEWS

Current topics as well as past and future events.

>02 NEW ARRIVALS IN THE OFFICE

Short introduction of the new subdivision leader group of the RT15.

UP-TO-DATE WITH RACETECH

Dear sponsors, friends and supporters,

after two years of RT14, we are optimistic about the next season and the development of our new racing car, the RT15. We would like to thank you once again for your support over the past two years and we are looking forward to continuing our good cooperation!

This year, we again participated in the annual alumni event "Zwickau meets Friends" of the WHZ Racing Team. We also organized our sponsors' race days. Our annual general meeting took place on the 25th of September 2021. Current affairs in the club were discussed and the cash report was presented. Juel Kassou was re-elected as 2nd board member. In addition, Philipp Geisler was appointed to the 1st member of board and Svenja Linke to the treasurer. We are happy to introduce you to our new subdivision leader group.

Your Racetech Racing Team

> 01 LATEST NEWS

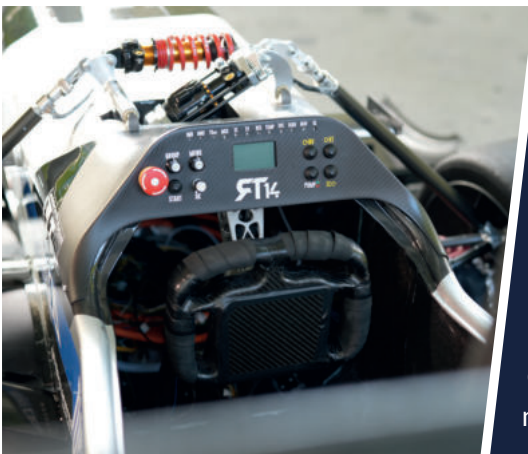
REVIEW 2019-2021

With the RT14, we set a new milestone in the history of our club. We developed the motors of our first four-wheel drive racing car in-house. The focus was on more deductible moment, less weight, and improved control options. This step also made the use of new concepts in all areas of the vehicle possible. These include, for example, the new hybrid monocoque made of CFRP and aluminum and the aerodynamics concept of the car. At the same time, we began developing and testing the integration of a system for autonomous driving of our racing cars. The COVID-19 pandemic presented us all with new challenges. In 2020, all Formula Student competitions were cancelled. However, there was a successful alternative with Formula Student Online, in which we were able to achieve 7th place in the overall ranking. The digital version of the FS also contained static and dynamic disciplines in which we could prove ourselves.

Author: Svenja Linke



The RT14 at the rollout (t.) and at the sponsors' race days



Blacked out RT15 (t.) and the RT14 at the rollout

SEASON RT15

During the development and manufacturing of the RT14, we were able to gain valuable experience that we now want to incorporate into the RT15. The change from the previous metal monocoque to the hybrid, consisting of a front and rear section made of aluminum and a CFRP center section, brought us a lot of aerodynamic advantages. The next step in the further development of our racing cars is the switch to a one-piece CFRP monocoque. In addition to lower weight, this also allows us more freedom of form, which offers advantages for aerodynamics and packaging. Another milestone will be the integration of a system for autonomous driving of our prototype. As a result of a realignment in Formula Student, from the 2021/22 season onwards, vehicles will have to take part in dynamic disciplines both conventionally with a driver and without a driver. In contrast to the previous seasons, the set of rules does not intend for any modification on the car for operation by a driver. It is therefore one of our most important goals to design the driverless system in such a way that the vehicle's performance is minimally influenced during manual driving.

Author: Dominik Kögler

> 01 LATEST NEWS

ZWICKAU MEETS FRIENDS 2021

A special highlight for the team this year again was the event "Zwickau meets Friends", organized by alumni of the WHZ Racing Team. From September 3rd to 5th, the Kartbahn Lohsa was the scene of an exciting event. The annual competition allows the teams to bring their racing cars from previous years back onto the race-track and compete against other befriended teams. Of course, the focus is on having fun, but at the end of the day, you of course celebrate winning one or two trophies. Since it is not given that all the cars that are passionately cared for by the alumni and team members will finish their races, a completed discipline is a cause for joy. This year, Cat Racing from Coburg, HofSpannung Motorsport e.V. from Hof, Rennteam Uni Stuttgart, GreenTeam Uni Stuttgart, University Racing Eindhoven (URE), TMM – Technikum Mittweida Motorsport, Blue Flash HAWK from Göttingen, Campus Motorsport Hannover, T.U.C. Racing from Chemnitz, the WHZ Racing Team and of course we, the Racetech Racing Team Freiberg participated.

With the RT12 we won 2nd place overall. We also took part in the competition with our oldest roadworthy vehicle – the RT02, our last prototype with a combustion engine – the RT05 and our most successful racing car to date – the RT13. We want to thank the organizers for the invitation and are already looking forward to the next edition in 2022.

Author: Svenja Linke



RT05



RT02



RT12



RT13



RT05 (f) and RT13 (b.)

> 01 LATEST NEWS

SPONSORS' RACE DAYS 2021

On the weekend from October 23rd to 24th, we welcomed our sponsors to our annual sponsors' race days in Freital. We developed a hygiene concept in compliance with the corona regulations at that time beforehand. With the sun shining almost all the time, they could sit behind the steering wheel and test the RT13 and RT12 on the track. Our racing car from the last season, the RT14, could also be examined and completed several successful test laps itself. It was a very nice and successful weekend for all of us. Thanks to all the participants and helpers!

Author: Svenja Linke



NEW ARRIVALS IN THE OFFICE



1. MEMBER OF BOARD - SUBDIVISION LEADER CHASSIS PHILIPP GEISLER

Age: 20

Degree course: Diploma Mechanical Engineering

How did you come to Racetech and how was your first season?

I've always been a hands-on type of person, so at the information evening it quickly became clear to me the chassis was the perfect subdivision for me. Since the RT14 was almost completely designed, I was mainly involved in the fabrication of all frame components, whereby I was able to gain the necessary experience for the job as a subdivision leader.

What do you hope for the upcoming season?

I hope that there will be little hoping necessary. I prefer to try having a well-thought-out plan in every situation. Then situations, in which only hope helps, will rarely arise. I hope so anyway.

What do you hope to take with you from your position in the coming season for your studies?

In addition to the theoretical knowledge from my studies, I would like to gain experience in the practical application of this and thus better understand the future content.

2. MEMBER OF BOARD - SUBDIVISION LEADER ELECTRONICS AND DRIVERLESS JUEL KASSOU

Age: 22

Degree course: Diploma Robotics

What is it that particularly appeals to you about the development of the driverless system?

The ability to see how such a vehicle moves without a person sitting in it has always fascinated me personally. All the connections between the modules give everyone in the team the opportunity to master new challenges.

How do you like the close cooperation with the alumni?

The knowledge of the alumni is irreplaceable and it is always a great pleasure to tackle and solve problems with them.

What do you see as the biggest challenge in the season RT15?

In my opinion, this will be the integration of the autonomous system into the rest of the electronics, as this was not previously built in and a lot has to be developed from scratch there.





02

NEW ARRIVALS IN THE OFFICE



TREASURER
SVENJA LINKE

Age: 20

Degree course: Diploma Process Engineering

What did you learn in your first season in the team?

I learned how to organise myself efficiently. Additionally, I've never worked with image editing programs and in such a big team before.

How did you get your position as treasurer?

I was mostly active in the subdivision management and marketing, but took on smaller tasks in the financial area at the same time. In the end, I decided to take over this position and get to know task areas that aren't part of my degree.

What do you hope to take away for yourself from your position?

Above all, I hope to gain new experience and gain deep insights into the organization of such a large team.

SUBDIVISION LEADER SUSPENSION AND MECHANICAL DRIVETRAIN **MAX REICHERT**

Age: 22

Degree course: Automotive Construction: Materials and Components

What are your goals for the season?

My goal is to successfully implement all technical changes and get the RT15 on the track.

Which aspect of the work in your subdivision do you find most interesting?

What interests me most is the kinematics design. However, I also find other areas such as construction and fabrication very exciting.

Where do you see the biggest changes compared to last season?

The biggest change in suspension and mechanical drivetrain is the switch to 10-inch tires. This means that there is significantly less space available in the wheel package.



>

02

NEW ARRIVALS IN THE OFFICE

DEVELOPMENT LEADER AERODYNAMICS DOMINIK KÖGLER



Age: 26

Degree course: Diploma Automotive Construction: Materials and Components

What is your history in the club so far?

In the RT08 season, I joined the suspension subdivision as a freshman. I was active there until the RT10 season, then as a subdivision leader. In the RT11 season, I led the team as a technical project manager and discovered my current area of responsibility for myself. Since the RT12 season, I've been the aerodynamics development leader.

What are your goals for this season?

In addition to some improvements to the aerodynamics package, my main goal this year is to find a successor and to pass on my knowledge, as I am slowly approaching the end of my studies. It is also important to me to support the team in successfully launching the RT15 at the events and in realizing a clean implementation of the driverless components in the vehicle package.

What do you love about Racetech?

On the technical side, especially the conception and packaging of the vehicles. On the part of the team, the short time in which the members can grow, complex technical problems can be solved and components can be further developed, the latter on the part of sponsors or the team alike.

SUBDIVISION LEADER SIMULATION YUE GUAN

Alter: 26

Degree course: Master Mechanical Engineering

Why do you like working in simulation?

Simulation is playing an increasingly important role in mechanical engineering. In addition, I can learn practical software here that the university does not teach me.

What do you hope to take away for yourself from your position?

In contact with other subdivision leaders, I now have the opportunity to find out how such a large team works and how we overcome difficulties.

What skills would you like to learn during the season?

As a foreigner, I had little experience of doing anything with Germans. That's why I want to improve my ability to work in a team and ideally also gain more knowledge about the racing car.



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THANK YOU FOR YOUR SUPPORT!



RACETECH RACING TEAM



1. MEMBER OF BOARD
PHILIPP GEISLER

2. MEMBER OF BOARD
JUEL KASSOU



TREASURER
SVENJA LINKE

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