

# NEWSLETTER



© FSG - Maru

## 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 RT14PHX.

## UP-TO-DATE WITH RACETECH

Dear sponsors, friends and supporters,

Now that the events in the Netherlands and Germany are behind us, with that we thereby declare the RT14evo season officially over. We would like to review the past year with you in this newsletter and give you an outlook on this season.

You will also learn about our participation in the Zwickau meets Friends, the annual alumni event at the Lohsa go-kart track.

Last but not least, we would like to introduce to you our new board members and module leaders who will lead the team throughout this coming season.

We hope you enjoy reading!

Your Racetech Racing Team

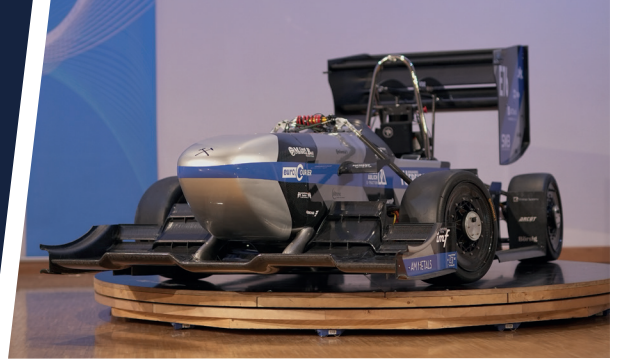
# > 01 LATEST NEWS

## REVIEW RT14EVO

With our RT14evo we chose to continue building into the RT14- our first 4x4 racing car and set our goal to improve it and compete with it in several competitions.

The switch from the previous metal monocoques to the Hybrids, consisting of a front and rear part made of aluminum and a CFRP middle part, gave us great aerodynamic advantages. We also continued to work on the implementation of the autonomous driving system.

In January 2022 we were able to successfully qualify for the Formula Student Netherlands in Assen and the Formula Student Germany in Hockenheim. In July and August we then sent our RT14evo onto the e track of the competitions and contested the static and dynamic disciplines.



The RT14evo at Rollout (o.) and at Zwickau meets Friends (u.)

Author: Svenja Linke



## SEASON RT14PHOENIX

As a further development of the RT14evo, the RT14Phoenix (RT14PHX) will compete this season.

Due to a lack of resources, we are taking over many well-functioning components from last season's vehicle. Components such as the monocoque, on the other hand, are newly manufactured. As with the RT14evo, this will also be a hybrid monocoque, consisting of a front and rear part made of aluminum and a CFRP middle part. The development of the system for autonomous driving is also being continued.

The development of the RT15 is also taking place at the same time. This is characterized by a smaller wheel package and a one-piece CFRP monocoque.



© T.U. Racing e.V.

The RT14evo at the FSN (o.) and the FSG (u.)

Author: Svenja Linke

# > 01 LATEST NEWS

## ZMF 2022

Together with our RT02, RT05, RT12 and RT14e-vo we took part at this year's "Zwickau meets Friends" (ZMF), the alumni event organized by alumni of the WHZ Racing Team.

The annual competition allows teams to bring their racing cars from previous years back onto the track and compete against friendly teams.

With the RT12 we were happy to make 1st place overall and so we would like to take this opportunity to show our thanks again for the great event!



Author: Svenja Linke

The RT02 (o.) and the RT12 (u.) at ZMF



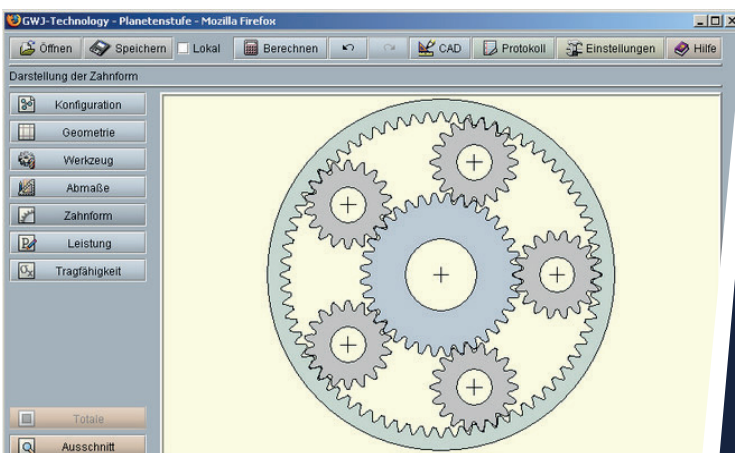
## GWJ WORKSHOP

From October 11th to October 14th, our sponsor GWJ Technology held an evening online workshop on the subject of gearboxes and gearbox design.

Two members of Racetech and students from other Formula Student teams were introduced to the in-house software System Manager and eAssistant. These make it easier and faster to design and assemble different types of gears.

The workshop also showed which calculation is behind gears and what a Formula Student team should pay attention to when designing.

We would like to thank GWJ Technologies for these very informative evenings!



Transmission (o.) und Software (u.)

Author: Erik Döhn

# NEW ARRIVALS IN THE OFFICE

## 1. MEMBER OF BOARD - ORGANISATIONAL HEAD VANESSA RUCKS



**Age:** 20

**Course of studies:** Bachelor Additive Manufacturing

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

I want to grow personally from it. Above all, I would like to improve soft skills, such as teamwork, organizational skills and communication skills.

### **What are your hopes for the upcoming season?**

In recent seasons, work on the team has suffered due to the Covid-related measures. This primarily affected the supply chains and so the schedules, which made the production of a new racing car extremely difficult. I therefore hope that this will not continue in 2023. I also hope that we will revive team life and build a strong team with many new members, with which we can bring a strong racing car to the events.

### **What do you find most important in a team?**

You should create an atmosphere in which everyone feels comfortable, but still motivated to push their limits. However, good planning is just as important.

## 2. MEMBER OF BOARD - CHASSIS SUBDIVISION LEADER IMMANUEL BILZ

**Age:** 21

**Course of studies:** Diplom Materials science and materials technology - forming technology

### **What skills would you like to learn during the season?**

I would like to learn how to successfully lead a part of a larger project with enthusiastic people.

### **What did you learn in your first season at the club?**

Constructing with Solidworks, laminating with CFRP, and handling high-quality aluminum alloys as well as using power tools were the order of the day.

### **What excites you about Racetech?**

I am particularly enthusiastic about the team spirit and cohesion in the team. Because it takes an incredible amount of it not to let a team despair on such a stressful project. Everyone in the team helps with what they can and that makes an extensive project a success.



>

02

## NEW ARRIVALS IN THE OFFICE



**TREASURER**  
SVENJA LINKE

**Age:** 21

**Course of Study:** Diplom Process and Chemical engineering

**What did you learn from your last season at the club?**

In addition to the tasks as treasurer, which were new to me, I learned above all to take responsibility and organize a large team.

**What are your hopes for this season?**

Above all, I would like to develop my organizational skills and look forward to taking on new challenges.

**What do you hope to take away from your job in the coming season for your studies?**

Above all, I would like to take my self-organization and ability to work in a team with me into my studies.

### SUBDIVISION LEADER SUSPENSION AND MECHANICAL DRIVETRAIN ERIK DÖHN

**Age:** 21

**Course of studies:** Diplom Materials science and materials technology - forming technology

**What are your goals for the season?**

My goal is to develop myself further and to drive the car at the events.

**What aspect of working in your subdivision do you find most interesting?**

I like both the design of components and the manufacturing of the car.

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

I got to know Racetech through an acquaintance. My first season was exciting, educational, exhausting and a lot of fun.



## NEW ARRIVALS IN THE OFFICE

### SUBDIVISION LEADER AERODYNAMICS FRANZ SCHUMANN



**Age:** 22

**Course of studies:** Mechanical Engineering

#### **How did you get your position as module manager?**

After last season, some members of the team graduated. As a result, I was given the responsible position as head of the aerodynamics subdivision. I've already had success recruiting members.

#### **What did you learn in your first season at the club?**

I was able to gain a lot of practical experience. In addition to laminating CFRP parts and installing inlays, taking part in events such as Formula Student Netherlands gave me an insight into working at Racetech. The exchange with other teams, nationally and internationally, will be an advantage for me in my new role as subdivision leader.

#### **What do you hope to take away from your job in the coming season for your studies?**

Above all, the experience in team and project management will be a great advantage for me. Contact with our sponsors and working together on the racing cars is also a great opportunity. I will benefit from this not only during my studies, but also later in my professional life.

### SUBDIVISION LEADER SIMULATION HARIHARAN PIRAMANAYAGAM

**Age:** 25

**Course of studies:** Master Mechanical and Process Engineering

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

I got to know Racetech at the Bunte Campus in winter 2021 and joined the simulation subdivision. The first season was quite interesting and I learned a lot about the software and tackled interesting tasks.

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

This season, as a Racetech's subdivision manager, I want to improve my leadership skills, improve my communication and help to organize myself better.

#### **Why do you like working in the simulation?**

In the simulation, we are primarily responsible for the safety of the car. Such a responsibility, where we reduce the weight of the car and still keep the strength at the required level, is quite a challenge that I enjoy doing.



# NEW ARRIVALS IN THE OFFICE

## SUBDIVISION LEADER ELEKTRONIC AND DRIVERLESS ERIC WEIDEHAAS



**Age:** 19

**Course of studies:** Diplom Robotik

### What did you learn in your first season at the club?

In my first season, I was able to expand my knowledge in the field of electrical engineering and put it to practical use. I also learned how to use previously unknown software, such as the PCB layout software Altium. I was also able to further improve my independent way of working.

### What do you see as the biggest challenge of the season?

Fortunately, many new members have joined the team this season. From my point of view, the biggest challenge will be to transfer knowledge as quickly and completely as possible in order to create a knowledge base for this and the following seasons.

### How do you find the close cooperation with the alumni?

The cooperation with the alumni is important for the success of the team. Thanks to the open exchange, we can build on the knowledge and experience of the alumni. Among other things, this enables continuous technical development.

## HEAD OF HV-KONSTRUKTION SOFIE HEINRICH

**Age:** 20

**Course of studies:** Bachelor Engineering

### What goals have you set for this season?

As goals for the car, I have to revise the HV box and bring the battery into shape. Otherwise, I'm looking forward to getting to know the new team members and starting the next season with them.

### How did you come to Racetech?

I came to Racetech through a friend.

### Is there anything that particularly impressed you in your first year at Racetech?

I was particularly impressed by the teamwork amongst team members, so that we were able to take part in the events despite the small number of members.



THANK YOU FOR YOUR SUPPORT!

# OUR SPONSORS



AM METALS





# THANK YOU FOR YOUR SUPPORT!



# RACETECH RACING TEAM



**1. MEMBER OF BOARD**  
**VANESSA RUCKS**

**2. MEMBER OF BOARD**  
**IMMANUEL BILZ**



**TREASURER**  
**SVENJA LINKE**



## >>> CONTACT:

### ADDRESS

Racetech Racing Team  
TU Bergakademie Freiberg e.V.  
Bernhard-von-Cotta-Straße 4  
09599 Freiberg  
Germany

### CONTACT DETAILS

[info@racetech.tu-freiberg.de](mailto:info@racetech.tu-freiberg.de)  
[www.racetech-racingteam.de](http://www.racetech-racingteam.de)

### OFFICE TELEPHONE

Tel.: 03731 39 3962