universität freiburg

# Alumni Magazine 2022



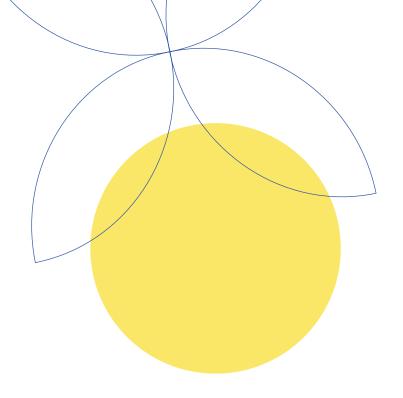


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#### Foreword by the Rector





Prof. Dr. Kerstin Krieglstein, Rector at the University of Freiburg

Dear Alumnae and Alumni,

The second year of my term as Rector has also flown by. Since Christina Leib taking office as our new Chancellor on 1 April 2022, the Rectorate is completely reorganised itself: With our prorectorates, we want to strengthen the topic of sustainability as well as bring together the areas of academic human resources development and gender and diversity to view them in their entirety. Science communication and communication in general also have a special significance for us. After all, it is part of the self-image of a contemporary and forward-looking university to live these topics in all areas.

We launched our overall strategy process as early as autumn 2021: In ten working groups on different topics, numerous representatives of the University, together with the Rectorate, have begun to draft visions for the future of the University of Freiburg. In addition, we have made a selection of Excellencecluster initiatives with which we want to enter the next round of the Excellence Strategy competition by the federal government and the federal states. The participation in the Excellence Strategy is an important milestone in the overall strategy process. All signs point to confidence.

But unfortunately, the fatal political developments of the past months have brought new and unforeseen challenges that also keep the universities on their toes. Our thoughts are with all the victims of Russia's war of aggression on Ukraine. As a community, the University of Freiburg stands by the Ukrainian people who are fighting for their freedom, their country and for democracy. The aggression emanating from Russia contradicts the values we stand for as a university. Within the possibilities available to universities, we try to help Ukrainians and people who oppose the government in Russia.

As you may have noticed when looking at this magazine, the external image of the University of Freiburg is changing: it has been given a new, modern corporate design. It will apply from January 2023 - so you are holding in your

hands the first publication to appear in the new look. We explain the background to this process in this issue. In addition, your contact persons in the Relationship Management and Alumni Department as well as the newly elected board of the Förderverein Alumni e.V. introduce themselves. With an entertaining selection of texts and pictures, we also would like to give you an impression of special events and research results at your alma mater at the turn of the year.

I wish you an enjoyable read.

With best regards

KKul

Prof. Dr. Kerstin Krieglstein, Rector

The Rectorate of the University of Freiburg (f.l.):

Prof. Dr. Stefan Rensing, Vice-President for Research and Innovation, Christina Leib, Head of Administration, Prof. Dr. Michael Schwarze, Vice-President for Academic Affairs, Prof. Dr. Kerstin Krieglstein, Rector, Prof. Dr. Sylvia Paletschek, Vice-President for University Culture, Prof. Dr. Marc H. Scholl, Chief Information Officer, Julia Wandt, Rectorate, Science Communication and Strategy, Prof. Dr. Daniela Kleinschmit, Vice-President for Internationalization and sustainability. Photo: Jürgen Gocke



# Relationship Management in the Service of the University

Full of energy and with new ideas, the Department of Relationship Management and Alumni is looking forward to the year 2023 under new management

It's mid-November: rain is pelting against the window, and a Zoom conference is about to begin – as so often in the past years. Looking at tiles on a screen instead sitting together at a table. But this digital conference is different: The atmosphere is warm, relaxed, and humorous right from the start. Sonja Jost, head of the Department of Relationship Management and Alumni since 1 August 2022, and alumni manager Heike Kapp are eager to talk about the work they've done these past months and the ideas they want to realize as soon as possible. Not only do the two of them radiate a pleasant confidence, but they're also very pleased that "there's a great deal of openness for our work at the University of Freiburg," says Sonja Jost.

#### Making Contacts, Positioning Topics, Enabling Funding

She sees the additional value of their work in a "concentrated mediation of interests," emphasizes the department head. Among other things, this involves establishing contacts, maintaining long-standing relations, and positioning topics in the appropriate places. An example is politics, for which the already established format "FreiRäume," a parliamentary breakfast in Stuttgart and Berlin, is very well suited. "It's important that we always be informed about the aims of the University of Freiburg, which is why we cooperate very closely with the Rectorate, the relevant administrative departments – particularly those in our business unit Science Communications and Strategy – and experts from the faculties. This allows us to serve as a kind of sounding board and help get people excited about our topics," explains Jost. It's also important element in getting the sponsors involved: "There's great commitment among people close to the university. We need to take this up and integrate it into our plans for the future."

Together with Julia Deimel, the new deputy director and head of cooperation and fundraising, and her team of five, Jost would like to set new priorities, establish new processes that benefit students and alumni, and focus on working with external groups from politics, with foundations and sponsors, and of course with alumni. Their work is facilitated by the link with Alumni Freiburg e.V., whose managing director is Jost.



Sonja Jost heads the department Relationship Management and Alumni. Photo: Sandra Meyndt

#### **Students as a Target Audience**

Alumni manager Heike Kapp nods in agreement. She's in charge of maintaining relations with all of the University of Freiburg's former students and creating an attractive program for everyone. That's no easy task, because "the target audience of alumni ranges in age from 23 to 103 and is also very diverse in terms of interests, so it's necessary to have a mix in the way we address them," explains Kapp. The department uses all available channels for this purpose: publications like this magazine, social media, emails, letters, and of course direct personal contact.

"We want to try and get the large and important audience of students, which is to say future alumni, involved in our work early on, preferably right from the first semester. In addition, we know that older and younger people like to interact with each other," says the alumni manager. Jost nods and adds: "There are also plans, for example, to use interesting alumni as a kind of 'testimonial' in order to facilitate and sustainably promote networking among alumni," adds Jost. It can be helpful to take a look at the USA, where alumni work has a very high standing, and to maintain intensive contact with the "Friends of Freiburg" club in New York, says Jost.

#### **Basketball and Mentoring**

Networking is something the department head is also very familiar with in her private life. The Freiburg native moved to Hesse after completing school at the Wentzinger Gymnasium to study ecotrophology at the Fulda University of Applied Sciences. She had to maintain contact from afar for several years, for example with her teammates from the Freiburg Eisvögel basketball team. "I played basketball with the Eisvögel for many years in my youth. That had a big impact on me," says Jost. Accordingly, her work is also enriched by the values of team sports: discipline, dedication, the feeling of wanting to take part and being part of the group. She still enjoys playing basketball as a hobby today and uses the sport as a welcome change from her desk work, not least because she is also writing a doctoral dissertation about political network structures.



As Alumni Manager, Heike Kapp maintains contact with all the alumni. Photo: Sandra Meyndt

Heike Kapp, on the other hand, profits in her work as alumni manager from being a University of Freiburg alum herself. "I'm actually from Wuppertal and came to Freiburg to study biology," she explains. She then went back to North Rhine-Westphalia for several years, for an interdisciplinary, in-service degree program in organizational psychology and a mentoring program with professionals and managers, including many alumni of the Bochum University of Applied Sciences. In this context, a good ten years ago, she came across a job offer involving the establishment and management of the Student Mentoring Competence Network at the University of Freiburg. "It fit me so well that my husband and I didn't think twice about it, packed our suitcases right then and there, and moved to Freiburg," remembers Kapp with a smile. From then on, she began building up a large network at the university - with faculties, volunteer mentors from business and academia, students, and also disseminators from various university institutions. And that's what led her to her current position.



The team (f. l.): Robert Niculescu, Julia Deimel, Sonja Jost, Daniela Mast, Diana Sack, Heike Kapp. (not pictured: Martin Gutry). Photo: Sandra Meyndt

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# New Look

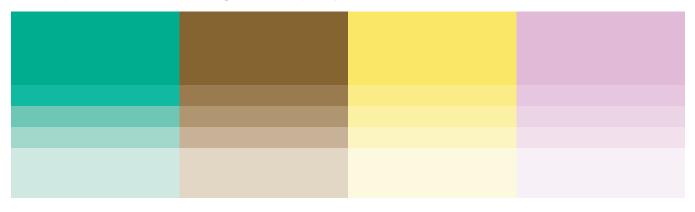
# The University of Freiburg's word mark and website are being fundamentally overhauled

As can already be seen with this magazine, the University of Freiburg will get a new corporate design in January 2023, future-proof corporate design. The new design should bridge the gap between the university's tradition and and forward-looking, it can be used for all forms of forms of media and is designed to be continuously to be developed further on an ongoing basis. It includes, among a revised word mark, typography, colour as well as colour and imagery. It will also be used for the new university website, the relaunch process is currently underway.

On the basis of workshops in which university members of different departments were involved, an agency is developing the corporate design. The process, which lasted several months, started in January 2022, and was led by the Marketing and Events department. "The media world has become more and more dynamic in recent years. dynamic in recent years - digital media formats in particular are are constantly evolving," says Katja Stempfle- Eberl, Head of Marketing and Events and, together with her team, is in charge of the corporate design process launched by the University of Freiburg.

"As a university, we have to and want to react to this react to this - also and especially in the corporate design, for example, when websites evolve or we want to communicate via new channels. For this the new corporate design, we now have the best and a successor to the previous corporate design, which was developed more than ten years ago and was no longer able to meet current communicative requirements.

The colour palette of the new corporate design added to the primary colours blue and white.



#### Aim of the new corporate design

One of the most important goals is to reflect the university's traditional and future orientation of the University of Freiburg - in a corporate design that is contemporary, sustainable and unique. Among other things, the agency has used the university seal as a source of inspiration for new graphic elements and used them to develop key building blocks for the corporate design, such as stylised blossoms or heraldic figures, which can be used in a variety of applications.

The new colour scheme also reflects the bridge between tradition and modernity. Blue and white as the central primary colours are retained, in accordance with the basic order of the university, but now shine in fresher tones. The secondary colours also offer a palette for different areas of application. In addition, like other elements of the elements of the corporate design, they can be continuously developed - in order to adapt to new areas of application and challenges.

Another essential goal is to make the social positioning of the university a key factor. The logo is now a graphic link between the terms "university" and "Freiburg". First impressions and further information on the new corporate design of the University of Freiburg are available at: https://uni-freiburg.de/university/ corporate-design/

### Website relaunch: project for the coming years has started

The University's websites are being completely relaunched and under a common roof. They will be easy to use, both for our visitors and for university visitors and for the university staff who maintain the pages. The pages will have to be completely redesigned, both visually and technical. The entire university has been invited to contribute ideas since the beginning of the year. Theare is a support group, workshops and surveys, as well as the opportunity to submit ideas, needs and ideas, needs and suggestions directly on a project website.

The steering group and the university as a whole are supported by an agency with expertise in the area of website, contemporary target group and user guidance as well as design and multimedia. Further information on the website relaunch will be published on the following page: https://uni-freiburg.de/website-relaunch-en/ project/

The university seal was the source of inspiration for new graphic elements: Stylised flowers or heraldic representations can be used variably.



The FRIAS is a world-renowned flagship of the University of Freiburg. Photo: Sandra Meyndt

## New Board of Directors at the Freiburg Institute for Advanced Studies (FRIAS)

The Institute is a place of unconditional scientific freedom and forward-looking research

Every year, around 40 to 50 outstanding scientists from Freiburg and many other countries around the world come to FRIAS-Freiburg Institute for Advanced Studies as fellows, where they can spend six to twelve months conducting research and developing their scientific projects in an international environment. Intensive work, lectures and lively debates on current social, political and scientific issues as well as public events characterize life at FRIAS. Founded in 2008, the Institute has become a world-renowned flagship of the University of Freiburg and has attracted a number of top international researchers. The fact that this also promotes the careers of highly qualified Freiburg researchers is a further strength. As of October 1, 2022, Executive Director Prof. Dr. Bernd Kortmann, professor of English linguistics, handed over the office he had held since 2013 to Prof. Dr. Ralf von den Hoff, professor of classical archaeology at the University of Freiburg.

"Bernd Kortmann succeeded in securing the continued existence of the institute with the support of the other members of the board of directors and the FRIAS team, with commitment, inventiveness, and persistence", says Prof. Dr. Kerstin Krieglstein, rector of the University of Freiburg. "Today FRIAS is firmly integrated into the University of Freiburg and an essential part of its profile. The Rectorate and the entire university thank him for that, and we are at the same time looking forward to the directorship of Ralf von den Hoff and the future joint developments."

Alumni Magazine of the University of Freiburg 2022

The three-member board of directors is completed by the part-time speakers Prof. Dr. Veronika Lipphardt (historian of science / social sciences) and Prof. Dr. Barbara Di Ventura (biologist / natural sciences). "Innovative research ideas are developed, tested and implemented at FRIAS. It is a place of absolute academic freedom and forward-looking research in an inspiring community of researchers," says von den Hoff, who himself was a Research Fellow at the then School of History at FRIAS between 2012 and 2014.

## Von den Hoff is heading a successful collaborative research center

Von den Hoff has been Professor of Classical Archaeology and Director of the Archaeological Collection at the University of Freiburg since 2006. Previously, after completing his doctorate in Bonn, he worked for many years at the Archaeological Institute of the University of Munich, where he habilitated in 2000. As a fellow of the Alexander von Humboldt Foundation, he spent a year as a visiting professor at Johns Hopkins University in Baltimore. Since 2012, von den Hoff has been spokesman for the Freiburg Collaborative Research Center (SFB) 948 "Heroes - Heroisations – Heroismen" from the German Research Foundation (DFG), which will continue to study the significance of heroes and heroines from antiquity to the present until 2024. In addition, von den Hoff is very well connected as a member of numerous scientific committees and organizations.

#### The new board of directors' plans

In addition to the international fellowships, FRIAS offers numerous funding opportunities for Freiburg researchers. These include funding for project groups that support research ideas at an early stage, one-year research focuses in which interdisciplinary collaborations open up a thematic field. The Freiburg Research Collaboration Programme (FRESCO) aims to create long-term collaborations between excellent researchers from Freiburg and renowned national and international colleagues. "In future offerings, we want to focus even more on supporting scientists in the early stages of their careers, because their ideas shape the future," says von den Hoff.

At the beginning of its term, the new board of directors wants to pay special attention to the issue of academic freedom. "The freedom of science is in danger, and its threat has many facets: from the aggressive rejection of scientific findings to the personal endangerment of scientists," says von den Hoff. "We want to rise against this and consolidate FRIAS as a place for freedom and open exchange." Thus, he says, ways will be sought to continue to give researchers suffering from acute threats to science, such as those currently from Ukraine, space for their work. FRIAS had already facilitated new funding for this purpose in the summer of 2022. In addition, a series of public lectures, the 'Lunch Lectures' will be devoted to the topic of academic freedom in the 2022/23 winter semester.

#### FRIAS as part of the strategic process at the University of Freiburg

Another concern of the new directorate is an even stronger integration of the life and natural sciences in the activities of FRIAS. "With the Staudinger Lectures, there is an established format that has already invited 29 Nobel laureates to give lectures at the University of Freiburg," says Di Ventura, the responsible board spokesperson. In the Young Academy for Sustainability Research (YAS), based at FRIAS, the natural sciences, humanities and social sciences are also work closely together on urgent issues and topics. "In the future, we want to create offerings in exchange with the natural and life science institutions that will benefit their researchers in Freiburg and beyond", Di Ventura explains, "and also in exchange with other research fields."

#### www.frias.uni-freiburg.de/en/home







The new board of directors of FRIAS (f. l.): Ralf von den Hoff, Veronika Lipphardt and Barbara Di Ventura. Photos: Markus Schwerer

# Archaeologist explores 3,400-year-old city in the Tigris River

Drought reveals urban center of the Mittani Empire

The archaeological site of Kemune in the dried-up area of the Mosul reservoir. Photo: Universities of Freiburg and Tübingen, KAO

A team of German and Kurdish archaeologists have uncovered a 3400-year-old Mittani Empire-era city once located on the Tigris River. The settlement emerged from the waters of the Mosul reservoir early this year as water levels fell rapidly due to extreme drought in Iraq. The extensive city with a palace and several large buildings could be ancient Zakhiku – believed to have been an important center in the Mittani Empire (ca. 1550-1350 BC).

#### Bronze Age city resurfaced due to drought

Iraq is one of the countries in the world most affected by climate change. The south of the country in particular has been suffering from extreme drought for months. To prevent crops from drying out, large amounts of water have been drawn down from the Mosul reservoir – Iraq's most important water storage – since December. This led to the reappearance of a Bronze Age city that had been submerged decades ago without any prior archaeological investigations. It is located at Kemune in the Kurdistan Region of Iraq.

This unforeseen event put archaeologists under sudden pressure to excavate and document at least parts of this large, important city as quickly as possible before it was resubmerged. The Kurdish archaeologist Dr. Hasan Ahmed Qasim, chairman of the Kurdistan Archaeology Organization, and the German archaeologists Jun.-Prof. Dr. Ivana Puljiz, University of Freiburg, and Prof. Dr. Peter Pfälzner, University of Tübingen, spontaneously decided to undertake joint rescue excavations at Kemune. These took place in January and February 2022 in collaboration with the Directorate of Antiquities and Heritage in Duhok (Kurdistan Region of Iraq). The German-Kurdish archaeological team was under immense time pressure because it was not clear when the water in the reservoir would rise again.

### Massive fortification, multi-storey storage building, industrial complex

Within a short time, the researchers succeeded in largely mapping the city. In addition to a palace, which had already been documented during a short campaign in 2018, several other large buildings were uncovered – a massive fortification with wall and towers, a monumental, multi-storey storage building and an industrial complex. The extensive urban complex dates to the time of the Empire of Mittani (approx. 1550-1350 BC), which controlled large parts of northern Mesopotamia and Syria.

"The huge magazine building is of particular importance because enormous quantities of goods must have been stored in it, probably brought from all over the region," says Puljiz. Qasim concludes, "The excavation results show that the site was an important center in the Mittani Empire." The research team was stunned by the well-preserved state of the walls – sometimes to a height of several meters – despite the fact that the walls are made of sun-dried mud bricks and were under water for more than 40 years. This good preservation is due to the fact that the city was destroyed in an earthquake around 1350 BC, during which the collapsing upper parts of the walls buried the buildings.

#### Ceramic vessels with over 100 cuneiform tablets

Of particular interest is the discovery of five ceramic vessels that contained an archive of over 100 cuneiform tablets. They date to the Middle Assyrian period, shortly after the earthquake disaster struck the city. Some clay tablets, which may be letters, are even still in their clay envelopes. The researchers hope this discovery will provide important information about the end of the Mittani-period city and the beginning of Assyrian rule in the region. "It is close to a miracle that cuneiform tablets made of unfired clay survived so many decades under water," Pfälzner says.

### Conservation project to prevent damage by rising water

To avert further damage to the important site by the rising water, the excavated buildings were completely covered with tight-fitting plastic sheeting and covered with gravel fill as part of an extensive conservation project funded by the Gerda Henkel Foundation. This is intended to protect the walls of unbaked clay and any other finds still hidden in the ruins during times of flooding. The site is now once more completely submerged.





Work on the excavated large buildings from the Mittani period. Photos: Universities of Freiburg and Tübingen, KAO





A new tram connection runs between the the university library and the Kollegiengebäude I. Photo: Sandra Meyndt



Joy over events in presence: the newly enrolled students started the winter semester students started the winter semester with a la-la wave. Photo: Patrick Seeger

# **Impressions 2022**



Orange-the-World-Campaign: Buildings, such as the Kollegiengebäude I, shine in orange at the end of orange at the end of November, to send a signal against discrimination and any forms of violence against against women. Photo: Sandra Meyndt

The basketball team of the Eisvögel USC Freiburg is German Women's Champion 2022. Photo: Patrick Seeger



After digital semesters caused by the pandemic, the students are back in the university buildings. Photo: Sandra Meyndt



The semester welcome took place for the first time in the new Europa-Park stadium of the Bundesliga football team SC Freiburg. Photo: Patrick Seeger



# **The Third Dimension**

# An archaeologist is investigating how students can experience ancient objects with the help of digital technologies

Archaeological instruction has lost sight of the third dimension, says Dr. Fabian Stroth. Not everywhere, of course, but perceptibly: "We work primarily with images of objects," explains the Freiburg junior professor of Byzantine archaeology. As useful as it is to work with photographs, drawings, or floor plans, a lot also gets lost in the process: "That's the dilemma of two-dimensionality." Stroth would like to bring the third dimension back to the classrooms – with the help of digital technologies and computer graphics experts from the University of Furtwangen. The name of their joint teaching project is "MARBLE – Mixed and Augmented Reality in Blended Learning Environments."

#### A Research and Teaching Project

The project is also a research project, emphasizes Stroth: Where and how can instruction in a cultural studies discipline be enriched by so-called augmented reality - that is, by the production of three-dimensional digital images and the use of smartglasses together with the corresponding software? "We assume that there is a demand for it in teaching and are including the technology and methodology for it in all of our considerations." Digital elements should not replace physical presence and joint learning but provide a useful complement as additional elements, therefore also adding a new dimension to them in this sense for example when students examine Jordan's famous Byzantine churches. They have magnificent mosaic floors showing figures, ornaments, and inscriptions. Current archaeological research also investigates their arrangement and spatial effect and explores the relationship between the texts and images of various



subject areas as well as the role the movement of the visitors in the church space plays in the perception of certain image programs. "Archaeology is a material, visual cultural studies discipline," says Stroth. The spatial effect of a mosaic, for example, is not adequately conveyed to students if they only look at photographs of mosaic sections or read copies of inscriptions.

#### **Photography and Flatness**

In the eighteenth century and at the beginning of the nineteenth century, when the field was primarily the domain of well-to-do dilettantes, archaeologists still worked with cork models, for example of Pompeii, or with plaster casts of ancient sculptures, says Stroth. That changed in the course of the nineteenth century: "Put in polemical terms, the invention of photography flattened everything out." Even today, many universities have extensive glass slide collections of archaeological objects, and photographs are used in books as well as in seminars, where they are projected onto the wall with a digital projector. All of these media have their merits, emphasizes Stroth, but their intensive use leads students to lose sight of the spatial dimension: "For example, looking at floor plans is not actually a mode of reception of architecture. It's a matter of comparing our own abstractions - not our impression of a building." And whether an inscription hangs in large golden letters over a gate or is carved into a small clay tablet is just as important for its interpretation as its wording.

The examination of artifacts as spatial objects in archaeological research has been gaining in importance again in recent years, says Stroth. In teaching, field trips are of course irreplaceable in this context – to large collections in Berlin, Paris, or London and to important

Fabian Stroth does not want digital elements to replace personal not replace personal presence and joint learning, but to complement them as building blocks. Photo: Klaus Polkowski sites of Byzantine culture in modern-day Turkey, Greece, Syria, Jordan, or North Africa. However, such trips always remain the exception in courses of study: "Byzantium is pretty far away," says Stroth. "Field trips require time, money, and a lot of organization." And even then, many objects are only partially accessible. The mosaic floors in Jordan, for example, are for the most part covered with sand for reasons of conservation; only a few images can be viewed from footbridges.

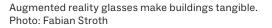
#### Walking over Mosaics Virtually

Researchers produce large 3D datasets of their objects, for example of the Jordanian mosaics. This is where the MARBLE project comes in: The idea is to use such data to enable students in the seminar room to walk over a mosaic with the help of augmented reality glasses and thus come as close as possible to experiencing the effect it had in Byzantine times.

#### **Social Togetherness**

"We want three-dimensional learning as social learning," says Stroth. This is very different from virtual reality, in which a person moves alone. However, making it possible for several students to view and study a three-dimensional digital object like a mosaic together in a so-called mixed-reality environment requires sophisticated technology. The smartglasses the students wear need to communicate with each other and respond to their movements in real time as they move around the seminar room – only in this way can they all see the same object at the same time from their various perspectives and thus compare notes on it.

The "MARBLE Creator" is a software program that makes the 3D data of archaeological objects readable for augmented reality glasses. The "MARBLE Player" is a user-friendly application that allows even non-specialists to interactively animate a model and provide it with tasks or questions. Both programs are open-source software and are also designed to be usable by other disciplines and other users.







With the data goggles, students can, for example, collect inscriptions from a mosaic, locate them in space and interpret them together. Photo: Klaus Polkowski

Stroth is collaborating on the project with the University of Freiburg's Departments of E-Learning and Teaching and Learning. "There's little sense in simply holding a traditional seminar and having all 15 students put on smartglasses at some point," says Stroth. Instead, the application of technology is embedded in a so-called blended learning scenario designed to support the students primarily in independent, inquiry-based learning: First they receive access to digital materials and tasks on the online learning platform ILIAS, which they can use to prepare and familiarize themselves with an artefact and its significance. Then, in the on-campus phases of the seminar, the students work on a 3D object in teams: "For example, they can collect inscriptions from a mosaic, locate them in space, and interpret them with each another," explains the Freiburg researcher. "They thus work their way through monument together - something we teachers always hope for."

#### **Analyzing Potential and Problems**

Some people are fundamentally skeptical about the digital transformation in teaching, while others see it as a kind of panacea, says Stroth. He sees particularly great potential for it in cultural studies, as the example of spatial concepts in archaeology shows. But it is still an open question how this potential can be used in concrete terms. The MARBLE project, which runs until 2023, aims to answer this question.

# Teaching formats thought out in European terms

University of Freiburg is successful with the European university alliance EPICUR in the call for the "European Universities"



Photo: rustamank/stock.adobe.com

Together with the university alliance EPICUR, the University of Freiburg has been selected in the European Commission's call for proposals. Freiburg will receive around two million euros in the "European Universities" initiative (total funding for the alliance: 14.4 million euros). That makes it possible to continue the successful pilot phase under the project name EPICUR SHAPE-IT.

#### Shaping a changing European society

The EPICUR alliance, including nine universities from seven European countries, supports young adults in facing the challenges of an increasingly complex world as a new generation of European citizens and shaping a changing European society in a constructive and sustainable way. The combined strength of the nine member universities as well as the experience and creative potential of their regions will enable EPICUR to strategically address these challenges. To this end, the University of Freiburg will continue to place emphasis on innovative teaching formats, cross-border learning, and extended opportunities for student and teacher mobility.

#### **Eucor and EPICUR: A common vision**

As an associated partner in the full funding phase, Eucor can now contribute its experience from 30 years of regional cooperation on the Upper Rhine: "It's a win-win situation for the two alliances," says Dr. Verena Kremling, project director of EPICUR and Eucor at the University of Freiburg. "Eucor and EPICUR follow the common vision of developing the universities in a sustainable and European direction, a task that can only be accomplished together."

### EPICUR therefore now includes the following member institutions:

- University of Freiburg
- Karlsruhe Institute of Technology (KIT)
- University of Strasbourg/France
- University of Upper Alsace/France
- University of Amsterdam/Netherlands
- Adam Mickiewicz University of Poznań/Poland
- University of Natural Resources and Life Sciences, Vienna/Austria
- Aristotle University of Thessaloniki/Greece
- University of Southern Denmark, Odense/Denmark

www.epicur.education/

# Focus on Sustainability

In teaching and research as well as in and governance, this topic is firmly anchored at the university

Photo: Sandra Meyndt

The University of Freiburg looks at the topic of sustainability: in research and teaching, in operations and governance.This means, for example, that academics in a variety of subjects are concerned with sustainability. And they pass on their knowledge to students in lectures and seminars. Whether in a single course, in a degree programme with a focus on sustainability or in an interdisciplinary course all students have the opportunity to engage with this topic. And of course the university, which also has anchored in one of its prorectorates, also wants to become more sustainable itself: By gradually becoming more climate-neutral.



The Sustainability Certificate is a voluntary course for students of all students of all disciplines. Photo: Harald Neumann

#### Example from teaching: Sustainability certificate

In the winter semester of 2021/22, the University of Freiburg launched the "Sustainability Certificate: interdisciplinary, reflexive, practical" - a voluntary teaching offer for students of all disciplines. In seminars, lectures and practical courses, they can deal with sustainability issues in an interdisciplinary way and receive up to 14 ECTS credits for this. "Joint, interdisciplinary thinking and action is essential, to strengthen sustainable development scientifically and practically development scientifically and practically - with the certificate we also want to anchor this in teaching," explains Prof. Dr. Michael Schwarze, Vice-President for Academic Affairs. The sustainability certificate and the teaching was developed on the initiative of the student sustainability office developed jointly by the Centre for Key Qualifications, the Office of Safety, Environment and Sustainability and a programme advisory board with academic experts from the faculties and student representatives.

### Example from research: Special research area ECOSENSE

The German Research Foundation (DFG) will fund the Collaborative Research Center CRC 1537 "ECOSENSE" from July 1, 2022. The SFB will receive about 10.5 million euros over four years for its interdisciplinary, detailed research on ecosystem processes in forests.

The team led by CRC spokespersons Prof. Dr. Ulrike Wallrabe, Professor of Microactuators at the Institute of Microsystems Engineering, and Prof. Dr. Christiane Werner, Professor of Ecosystem Physiology at the Institute of Institute of Earth and Environmental Sciences at the University of Freiburg, would like to be able to more precisely and quickly detect and predict critical changes in the forest ecosystem - which are occurring as a result of climate change.

### Sensor network sends measurement data to database in real time

To do so, the CRC is developing an autonomous, intelligent sensor network based on novel microsensors. Tailored to harsh forest environments, these will measure the spatio-temporal dynamics of ecosystem states and fluxes in a natural, complex-structured forest in a minimally invasive manner. "The measurement data will be transferred in real time to a sophisticated database and will be immediately available for process analysis, deep learning and improved simulation models for short- and medium-term predictions," Wallrabe explains. "Currently, there is a lack of suitable measurement, data and modeling tools for comprehensive quantification of change processes in real time at the highest spatio-temporal resolution. That's where we come in and develop mobile, easily deployable systems."



## Impacts of climate change on complex forest ecosystems are largely unexplored

"Climate change is threatening forest ecosystems worldwide, which serve an important regulatory function in the climate system as carbon reservoirs. The impacts on complex forest ecosystems with their multiple processes and interactions between soil, plant and atmosphere are largely unexplored. Future changes are therefore hardly predictable," Werner explains. "Improved process understanding of carbon and water cycles is imperative for accurate predictions of climate change impacts on our forests." The two CRC spokespersons Werner and Wallrabe are convinced: "The ECOSENSE toolkit, validated under controlled climate stress experiments and in our ECOSENSE forest, will enable a rapid assessment of any ecosystem in the future; even in remote areas."

In research and teaching, questions about the effects of climate change are to be of climate change are to be investigated. Photos: chokniti-khongchum/pexels.com; Harald Neumann





The model for sustainable building in the Botanical Garden at the University of Freiburg. Photo: IntCDC, University of Stuttgart / Robert Faulkner

# Robotically wound natural fibre construction

The "livMatS Pavilion" in the Botanical Garden of the University of Freiburg is a model for a bioinspired sustainable construction.

The building industry is currently facing the challenge of consuming fewer resources and is thus moving towards sustainable development. This requires new resource-efficient approaches in architecture with regard to the use of renewable materials. In a joint project, researchers from the Universities of Freiburg and Stuttgart together with master's students from the University of Stuttgart have designed a lightweight pavilion. With this "livMatS Pavilion" - named after the Freiburg Cluster of Excellence "Living, Adaptive and Energy-autonomous Materials Systems" (livMatS) in the Botanical Garden of the University of Freiburg, the team presents a model for a sustainable, resourceefficient alternative to conventional construction methods. The pavilion illustrates how a combination of natural materials with advanced digital technologies enables a unique, bio-inspired architecture. The pavilion's supporting structure is made of robotically wound flax fibre, a naturally renewable and biodegradable material.

### Efficient lightweight construction with natural fibre materials

Unlike glass or carbon fibres and many other natural fibres, flax fibres are regionally available and grow in annual crop cycles. They are entirely renewable, biodegradable, and therefore provide an excellent basis for the development of innovative resourcesaving alternatives in the construction industry. They offer the potential, especially in combination with efficient bioinspired lightweight design, to significantly reduce the environmental footprint of buildings. For these reasons, the load-bearing elements of the *"liv*MatS Pavilion" are made of flax fibres.

#### **Bioinspiration: Nature as a model**

The researchers were guided by nature in the development of the pavilion. The "livMatS Pavilion" was inspired by the saguaro cactus (Carnegia gigantea) and the prickly pear cactus (Opuntia sp.), which are characterized by their special wood structure. The saguaro cactus has a cylindrical wooden core that is hollow inside and thus particularly light. It consists of a net-like structure, which gives the wood additional stability. "This structure is formed as a result of the intergrowth of its individual wood elements", says Prof. Dr. Thomas Speck, Director of the Botanic Garden Freiburg and member of the spokesperson team of the Cluster of Excellence Living, Adaptive and Energy-autonomous Materials Systems (livMatS) at the University of Freiburg. "The tissue of the flattened side shoots of the prickly pear cactus is also interwoven with net-like wood fibre bundles, which are arranged in layers and interconnected. As a result, the tissue of the prickly pear cactus has a particularly high load-bearing capacity." The scientists abstracted the network structures of the biological model, and implemented them in the "livMatS Pavilion" by winding, the "coreless winding" of the natural flax fibres. Through this abstraction - plants have no winding or braiding processes - the researchers were able to transfer the mechanical properties of the cross-linked fibre structures to the lightweight structural elements of the "livMatS Pavilion".

The "*liv*MatS Pavilion" in the Botanical Garden of the University of Freiburg. Photo: Sandra Meyndt





The robotic manufacturing process at FibR GmbH. Photo: IntCDC, University of Stuttgart / Robert Faulkner

#### **Future use**

In the future, the pavilion in the Botanical Garden of the University of Freiburg will serve as an outdoor lecture room for of the Cluster of Excellence *liv*MatS to vividly communicate the research of the Cluster. Researchers will present their work to the public there, for example, in guided tours or workshops. The Cluster of Excellence *liv*MatS conducts research on life-like material systems inspired by nature. The material systems will be purely technical objects, so they can be produced through synthetic methods.

"By its very nature, the pavilion offers points of contact to highlight similarities and differences between biological and technical materials systems and to show the possibilities that bioinspiration offers, for example in architecture but also in other areas of technology," says Prof. Dr. Jürgen Rühe from the Institute of Microsystems Engineering at the University of Freiburg and member of the *liv*MatS Cluster of Excellence's team of spokespersons.

#### www.livmats.uni-freiburg.de www.botanischer-garten.uni-freiburg.de

#### **Construction details**

The load-bearing structure of the pavilion consists of 15 flax fibre components, robotically prefabricated exclusively from continuous spun natural fibres in a coreless filament winding process. A fiber keystone forms the center of the structure. The distinctive, intricate surface appearance of the of the structural flax elements is evocative of both vernacular examples of latticework and biological systems. The elements vary in overall length from 4.50 to 5.50 meters and weigh only 105 kilograms on average. The entire fibre structure weighs approximately 1.5 tons while covering an area of 46 square meters. of the Universities of Freiburg and Stuttgart and master's students from the University of Stuttgart.

www.intcdc.uni-stuttgart.de

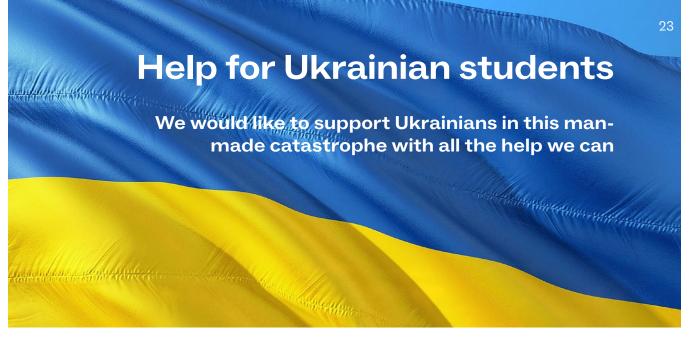


Photo: luzitanija/stock.adobe.com

Our thoughts and full solidarity are with Ukraine and the Ukrainians - and we condemn the strongly condemn cooperation and the will to help. With support of the Russia's war of aggression on its neighbouring country, which is causing many deaths among soldiers and civilians among soldiers and civilians on both sides. As the University of Freiburg, we want to and must oppose this attack on the lives of millions of people and to the freedom, democracy and security. Also we would like to support the Ukrainians in this man-made humanitarian catastrophe with all the possible help. The applications of Ukrainian students and researchers who are already enrolled in from day to day and there are also more and more requests for a stay at the University of Freiburg.

Many already existing initiatives show an impressive sponsoring associations close to the university Friends of the University of Freiburg, Scientific Society and the New University Foundation Freiburg and in cooperation with the Studierendenwerk Freiburg-Schwarzwald, the University of Freiburg and Alumni Freiburg e.V. would like to help to as many of them as possible, as well as those who have to flee their home countries, to continue their studies and research at our university.

So often you have shown us your sympathy, your solidarity and commitment, and with your donation you have helped our students in particular to keep up courage and to concentrate on what is most important: Their future. For this, I thank you once again. Let us also now unite to set an example.

Please help us with your donation at Alumni Freiburg e.V. Sparkasse Freiburg Nördlicher Breisgau IBAN: DE92 6805 0101 0014 0016 00; BIC: FRSPDE66XXX Donation purpose: "Ukraine"

I would be very grateful.

With kind regards from your University of Freiburg Yours

Kerstin Krieglstein Rector and First Chairwoman Alumni Freiburg e.V.

Further information on current events and offers of help on the website of the University of Freiburg on the war in Ukraine at https://www.alumni-foerdern.uni-freiburg.de/cause/1-mit-ihrer-hilfe-ukraineuniversitaet-freiburg/

Photos (f.l.): Sandra Meyndt, privat, BNP Paribas

# **Booster Association Alumni Freiburg e.V.**

### A new board of directors was elected in May 2022

As a charitable organization, Alumni Freiburg e.V. wants to give you the chance to stay involved at "your university" even after you conclude your studies. Most of the more than 1500 members of the booster association Alumni Freiburg e.V. are former students and former employees. However, it also includes some current students and employees, our future alumni, who benefit from the advantages offered by our network. The network of association members extends across the globe: Many countries have their own alumni clubs or individual alumni who serve as ambassadors for their alma mater. Besides networking between the university and its former students as well as among the alumni themselves,

#### Prof. Dr. Kerstin Krieglstein Chair

The first female rector in the history of the University of Freiburg took up office on 1 October 2020: Prof. Dr. Kerstin Krieglstein served previously, since 1 August 2018, as rector of the University of Konstanz. She studied chemistry and pharmacy, earned her doctorate in pharmacology at the University of Marburg in 1900, and completed her habilitation qualification in anatomy and cell biology at the University of Heidelberg in 1997. After serving in professorships at the University of Göttingen and the University of Saarland, she accepted an offer for the Chair of Anatomy at the University of Freiburg. The Faculty of Medicine elected her as its first full-time dean in 2013. She held this office from 1 April 2014 until her move to Konstanz and was thus at the same time a member of the board of directors of the Medical Center - University of Freiburg. In addition, she has been a member of the German National Academy of Sciences Leopoldina since 2007.

our association also has the goal of providing funding and support for the University of Freiburg. The booster association focuses on raising funds for students and student projects according to the principle "former students support current students."

The booster association elected a new board of directors at its general assembly meeting in May 2022. It is now composed of Prof. Dr. Kerstin Krieglstein, who chairs the association by virtue of her office as rector of the University of Freiburg, as well as a deputy chair and a further board member elected from among the alumni.



Upon completion of her studies in the fields of political science, Slavic studies, and Sinology in Heidelberg, Dr. Christine D. Althauser lived in Taiwan to conduct various studies abroad and in the former Soviet Union on a scholarship from the German Academic Exchange Service DAAD. Later she completed her doctorate with a dissertation on Russia's path to the Council of Europe and took on a lectureship at the University of Freiburg's **Department of Political Science** between 2005 and 2007. Dr. Christine D. Althauser is a member of the German Foreign Service, becoming ambassador of North Macedonia in 2014 and leading the German Consulate General in Shanghai until 2021. She has served as deputy chair in the board of directors of the booster association Alumni Freiburg e.V. since May 2022.



#### Dr. Eva Voß Further board member

Dr. Eva Voß studied political science, history, and gender studies at the University of Freiburg and completed her doctorate in 2011. Her dissertation received the Austrian Johanna Dohnal Prize and the Freiburg Bertha Ottenstein Prize, among others. Her last position at the University of Freiburg was as director of the Office of Gender & Diversity. Afterwards, she worked as director of diversity management at Bertelsmann S.E and for several years as team leader fo<mark>r</mark> New Ways of Working at EY (Ernst & Young). She has served since 2020 as head of diversity, inclusion, and people care at BNP Paribas Germany & Austria. Voß is a speaker and the author of several specialist books and informs professionals about the most important trends and developments in diversity with her "Diversity Check" column in Human Resources Manager. She is deputy chair of the Charta der Vielfalt e.V. and a board member of the BNP Paribas Foundation. She has served as a member of the board of directors of the booster association Alumni Freiburg e.V. since May 2022.

www.alumni-foerdern.uni-freiburg.de



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