

Address from the President of Technische Universität Berlin Professor Christian Thomsen addresses the New Year's Reception 2021

Check against delivery.

*Due to the coronavirus, the address was recorded and made available online at:
<https://youtu.be/hEb2qUbnFOY>*

Dear Ladies and Gentlemen,
Dear Members of Technische Universität Berlin,

This year as every year, I have the pleasure of addressing you from the Atrium at TU Berlin. But this is the first time in my seven years as president that you have not been able to join me in this wonderful space to celebrate the start of a new year. And I am sure that it is also the first time in the entire history of our tradition of new year receptions.

Today, I would like to talk about the extraordinary events of the past twelve months, the restrictions and changes we have all experienced. But I would also like to talk about how we as a university have prevailed during that time and will continue to do so. Firstly, we have fulfilled our task of freely conducting research and teaching. Secondly, we have fulfilled to the best of our ability what is generally understood as the role of a university. And we have done so as a university – that is all the individual members of TU Berlin, students, professors, research associates and teaching assistants as well as all other members of staff. Our teaching staff, who have succeeded in offering a near full program in digital format and who through their efforts have gained acceptance at TU Berlin for new instruments such as asynchronous lectures. Our students, who have adapted so well to digital teaching and made the very best of the situation. The numbers alone for 2020 pay testament to the success of our efforts to adapt to digital formats. There were almost 30,000 digital meetings hosted by 2,500 different people with a total of 1.5 million minutes of meeting time and some 140,000 participants.

The extra efforts made by teaching staff have brought many benefits. We have seen an increase in the number of students attending lectures and courses. And let us not forget the huge contribution made by all members of staff working in the faculties and departments! Each and every department, central institute and all other units established procedures in the shortest period of time to enable staff to work from home and keep our university functioning effectively. I WOULD LIKE TO EXPRESS MY DEEPEST GRATITUDE TO YOU ALL!

But of course, working with digital formats is not always easier or more effective. The US American philosopher Judith Butler, whose lecture one year ago in the TU

Audimax received much attention, recently commented that the atmosphere in a digital event is simply different. That it is a very different experience to lecture to silent computer screens. Particularly when the cameras are switched off to free up bandwidth and you cannot even see the reactions to what you are saying in the audience's faces.

2020 will go down in the annals of history and people will continue to talk about how we were forced to close our campus for a longer period for the first time in the history of TU Berlin since its reopening in 1946. However, it was the campus which we closed – not TU Berlin. Together, we as a university with some 40,000 members have succeeded in preventing our campus becoming a coronavirus hotspot. We have also been able to fulfill our commitments as a university in the areas of teaching and research and as such our responsibility to society. I would particularly like to praise the efforts of our crisis committee, which was set up just under a year ago under the leadership of Lars Oeverdieck. As you may know, Lars has also been acting vice president for administration at TU Berlin since summer 2020. The many measures initiated by the Crisis Committee communicated in the many bulletins to staff and students have helped guide us through the pandemic.

In addition to our success in offering a near complete teaching program, I am also particularly proud of what we have achieved in the area of research and our contributions to discussions affecting society. I would like to provide a few examples to illuminate certain aspects of our work that have played and will continue to play an important and defining role for our university in the coming years:

The Center for Research on Antisemitism, led by Stefanie Schüler-Springorum, has worked with other organizations to address the issue of freedom of research as defined in Article 5 (3) of the Federal Constitution. At a press conference held at the end of last year, many artists and academics launched a debate on the Bundestag's resolutions on BDS, a topic probably familiar to many of you. The arts and opinion pages of many newspapers in Germany and abroad continue to publish articles discussing the views expressed at this press conference.

One of the prizes we received last year was a particular source of pleasure. Professor Giuseppe Caire was awarded the DFG's renowned Leibniz Prize for 2021, worth 2.5 million euros. Giuseppe Caire, who is a Humboldt Professor at TU Berlin, was awarded an ERC Advanced Grant with a similar value in 2017 and has been a highly cited researcher in the area of information technology for a number of years now. His research is in the area of communications engineering. We congratulate Professor Caire on his success and are proud to number him among our colleagues.

The opening of the Humboldt Forum at the end of last year breathed fresh life into the discussion concerning museum exhibits from the era of German colonialism. Our colleague Bénédicte Savoy spoke very trenchantly about this topic a number of years ago, but her views were sharply criticized and ignored by the establishment in Berlin, who view the museum exhibits collected and stolen within the context of colonialism as the property of German museums. And this despite Professor Savoy's international reputation as winner of the Leibniz Prize in 2016. Now we have reached the stage where Nigeria has demanded the return of the Benin Bronzes and an opportunity to reappraise the situation has been missed. A European-run museum in the Sub-Saharan region of Africa may once have been a possible option. Today, we can see that the arrogant approach adopted was ill advised.

The world was taken unawares by the coronavirus pandemic. This is why it was so important for our researchers to set up projects and intensify their work on virus research. The first COVID projects at TU Berlin were initiated as early as April 2020. The bioanalytical project led by Juri Rappsilber looked to decipher the protein structure of the virus, while his colleagues Roland Lauster and Peter Neubauer worked on developing a test to establish the immune status of the population. A major contribution and one which attracted much media attention was made by Martin Kriegel and his team. The main focus of their research was on the distribution of particles containing SARS-CoV-2 in room air and the quantity of particles inhaled. This enables us to calculate the level of infection risk in internal spaces, whether in schools or concert halls. Kai Nagel and his team used transport planning methods to simulate the spread of the virus. They generated different models for hard and light lockdowns during the Christmas and New Year periods. An important contribution was also made by our social scientists, who conducted research into working from home, the acceptance of coronavirus measures among the population and our altered perceptions of spaces and borders. All of these achievements, which represent only a sample of the work conducted at TU Berlin, demonstrate our scientists' innovative drive and ability to adapt research quickly to new developments. We are all very proud of this work and I would like to thank everyone involved for what they have achieved. There could be no better way to illustrate TU Berlin's guiding principle: "We've got the brains for the future for the benefit of society."

We have been putting our skills to good use in other areas too, such as digitalization. Drawing on the expertise of the Einstein Center Digital Future, which I set up and which is run by Odej Kao, we were asked in December of last year to advise the Senate administration on the digitalization of schools. Anyone who has used the ineffective and sometimes uncontactable learning platform "Lernraum Berlin" over the past months, anyone in other words who has children and has had to rely on this

system during the pandemic, appreciates that the situation could have been much better managed by the school authorities.

For the first time in its history, TU Berlin has achieved the status of University of Excellence as part of the Berlin University Alliance along with FU Berlin, HU Berlin and the Charité. In addition to process definitions and a legislative procedure for our cooperation platform, we have established competitive processes to support and promote major interdisciplinary research questions known as Grand Challenge Initiatives. These Grand Challenge Initiatives, which were included in our Excellence application as interdisciplinary and inter-institutional structures, enable us to address topics in Berlin which are too big to be dealt with by any single institution alone. We are currently researching the issues of social cohesion and the coronavirus pandemic and are actively contributing with our partners to science communication and the advancement of junior scholars. Since May of last year, our vice president for strategic development, junior scholars and teacher education, Angela Ittel, has represented TU Berlin on the Executive Board of the Alliance established by the heads of the partner institutions.

We expect the framework agreement on teaching to be approved by the Academic Senate in January or February of this year. This will provide the regulations for joint degrees, degree programs, certificate courses, new joint modules and the development of digital teaching as well as all courses offered within the Berlin University Alliance. Our vice president for education, digitalization and sustainability, Hans-Ulrich Heiß, has also been involved as a member of the relevant steering committee. These measures help ensure that our students benefit from the successes of the Berlin University Alliance and enable us to deliver on our promise to make excellence a part of all aspects of the University.

What have we achieved so far? We have brought together more than 560 scientists in Berlin to work on more than 130 joint research projects financed via the BUA. Together with our structural projects, this means that over 100 projects in our eight key areas of focus are funded at TU Berlin.

In the coming years, we want to focus more on communication between science and society. We want to identify future topics that affect science and society equally, to move these topics forward, and address them scientifically. Methodologically, the various topics will be practically implemented in our Research Forums by our first vice president for research, appointment strategy, knowledge & technology transfer, Christine Ahrend.

I would like to take this opportunity to invite you to contribute to devising one of our next Grand Challenges. Like TU Berlin itself, the University Alliance, lives from the

commitment of its members in the areas of research, teaching and administration. I would like to express my gratitude to everyone for their tireless efforts.

TU Berlin is particularly successful in the areas of artificial intelligence and machine learning. One success story I would particularly like to share with you is the BIFOLD project – which stands for “Berlin Institute for the Foundations of Learning and Data”. BIFOLD emerged from two of the six BMBF-funded AI projects in Germany, namely Berlin Big Data Center (23 million euros) and the Berlin Center for Machine Learning (18 million euros). These projects enabled Berlin and more specifically TU Berlin to establish a focus on AI in the capital city. In 2018, the federal government took the decision to provide a permanent basis for these centers, which led to the amalgamation of the two TU centers as BIFOLD. In an innovative measure, it is planned to establish BIFOLD as Berlin’s first inter-university central institute. The main structural significance of the center lies in the fact that it enables the technological fundamentals of AI to be researched and developed by public universities and not just by commercial businesses and non-university research institutions. This achievement is largely due to our involvement in discussions with the BMBF back in 2018.

On 13.11.2020, the federal government and the federal states concluded an agreement to ensure the long-term future of these centers with annual funding of 15-25 million euros from 2022. The state of Berlin has agreed to provide 50 percent of the funding and we would like to express our thanks for this commitment. Examples of projects include AI in health care and AI in the city. I am sure you can imagine just how important the incorporation of large quantities of data is for a successful predictive use of artificial intelligence in these two areas. I wish my colleagues Volker Markl and Klaus-Robert Müller every success with their projects!

I would like to reiterate at this point that all these scientific advances have been achieved despite the difficulties of the last nine months by 8,000 staff working from home the length and breadth of the city.

I would also like to address a topic here that greatly affects TU Berlin and that you are all actively contributing towards: the sustainable development of society.

It may seem that this issue has been pushed into the background by the pandemic. In reality, however, the development of the pandemic actually confirms the importance of sustainable thinking. The coronavirus is a crisis affecting both the environment and society. It forces us to question our relationship to nature, changes our lifestyles and patterns of consumption and affects our use of resources. There are also, as yet little discussed, ecological aspects associated with the causes of the pandemic. As scientific studies show, the risk of epidemics grows and our capacity to withstand them decreases whenever global living space vanishes, the loss of

biological resources accelerates and biodiversity is placed under ever greater pressure. Sustainable development is not just an add on to be pursued whenever we have time or interest. We are fully committed to the goals laid down by the Fridays for Future movement, take part in protests to demonstrate our commitment and actively seek to implement these goals in our teaching and research.

In the near future, TU Berlin will conclude a climate protection agreement with the state of Berlin. By doing so, we are making a binding and visible commitment to a broad range of ambitious measures and goals including: A sustainable mobility concept for our campus, the reduction of official trips and pursuing forms of carbon emission compensation, an increase in the number of staff working in the area of climate protection, the introduction of a sustainability prize for teaching from 2021 and much more besides.

Adopting an interdisciplinary and transdisciplinary approach to sustainable development is also the defining theme of our involvement in the Smart City model project proposed by Berlin and selected to receive funding in a national competition in September. Our living lab “StadtManufaktur Berlin”, set up in 2019 with pilot funding from the Berlin Senate, is part of a wide-ranging lighthouse project run by the Federal Ministry of the Interior. Topics covered include data governance, modeling a water sensitive city, communal open government and smart citizen participation.

For us, climate change also impacts on our science. We believe that in Berlin and Brandenburg we have the right conditions to develop solutions to overcome the climate crisis. This is why we decided to establish the Climate Change Center Berlin-Brandenburg. As a university, we have a responsibility to contribute our expertise and to set a process of change in motion through our research and innovations. Over the past year we have made considerable strides in setting up the Climate Change Center. We have succeeded in attracting partners from the region such as the University of Potsdam, the BTU Cottbus, and the Eberswalde University for Sustainable Development as well as the Wuppertal Institute. We can also benefit from the advantages of our unique location: Outstanding university research, internationally renowned non-university research institutions, direct links to politics in the capital, an active network of actors from the civil society and an innovative business culture are all defining features of our location, making it unique in Germany.

It remains something of a surprise that it is proving hard to obtain financing for a project of such central importance for both Berlin and beyond. It is of course understandable that the coronavirus pandemic has made it harder to obtain financing from private sources. However, we will need to present further convincing

arguments to public funding bodies over the next weeks and months to secure the basic funding for the Climate Center.

Despite everything we have achieved over the past year, we still need to address the challenge presented by the difficulties faced by our central administration. These difficulties are particularly clear in everyday working procedures, such as delays in employing new staff or not being able to carry out construction work.

We have had these problems for some time and we have already introduced a number of improvements and discussed further measures with the faculties. For example, we created 40 new positions in 2020 to provide further support for administrative procedures. Most of these positions have now been filled. We are continuing to digitalize our administration with a view to simplifying and expediting processes such as paying invoices for travel expenses and call-out services. These and other measures will help us to improve the situation in the medium term and enable the central administration to provide a reliable and effective service for all members of the University.

We also view the crisis as an opportunity to review and improve our everyday working lives. In my weekly bulletin, I asked TU staff how they would like to work in the future. There was a clear majority in favor of working from home and the introduction of flexible working times. Work-life balance is an important consideration for many of our staff, many of whom have care duties. In my view, this is something that really needs to be taken into consideration. We are going to conclude a TU Berlin/Staff Council agreement to allow staff, wherever it makes sense, to work from home in the future (including post-coronavirus). This paradigm shift will represent one of the major changes in the administration of universities and will help make TU Berlin a very attractive place to work.

I am coming to the end of my address and I very much hope that both you and your families remain in good health as we enter the new year. I am sure that all of you have your own personal stories to tell from this year, stories that will form part of the history of your lives.

The word history brings me to my next theme:

Our university, TU Berlin, celebrates its 75th anniversary this year. We are planning a conference to mark this occasion dedicated to the topic: “The role of universities in shaping the new normal.” Like all other institutions, universities will not be able to fully return after the coronavirus pandemic to their old lives where everything took place on campus in offices and lecture halls and where documents and teaching materials were distributed as hard copies. We will have to find an alternative that is more modern and that takes better account of our needs as humans - something

better in other words. This conference will be organized by Angela Ittel and I would like to invite all of you to take part and help shape and define the “new normal”.

On behalf of the Executive Board and the University, I would like to send you our very best wishes, wherever you are working. I wish you good health and every happiness and success in your personal and professional lives in the coming year. Stay healthy and keep in touch with your university!