

# UA RUHR ANNUAL REVIEW 2025



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## DEAR MEMBERS OF THE UNIVERSITY ALLIANCE RUHR, DEAR READERS,

The year 2025 was strongly shaped by the Excellence Strategy. Following the submission of four full proposals for Clusters of Excellence within the framework of the UA Ruhr in August 2024, the German Research Foundation announced in May 2025 that the joint Cluster of Excellence of Ruhr University Bochum and TU Dortmund University, Ruhr Explores Solvation (RESOLV), would continue to receive funding. Funding approval from 2026 was also granted to the existing Cluster of Excellence CASA at Ruhr University Bochum, as well as to the new initiative “Color meets Flavor” led by TU Dortmund University in cooperation with the University of Bonn, the University of Siegen, and Forschungszentrum Jülich.

The successful acquisition of these three clusters formed the basis for the application submitted by Ruhr University Bochum and TU Dortmund University as the “Ruhr Innovation Lab” as a Consortium of Excellence. The proposal was submitted in November, and we are hopeful of a positive decision in early October 2026.

Another milestone of outstanding importance was the permanent establishment of the Research Alliance. From 2025 onwards, our three universities will receive permanent annual funding of €48 million from the Ministry of Culture and Science of the State of North Rhine-Westphalia.

Our three universities also achieved remarkable joint success in the area of start-up support. All improved their positions in the Start-up Radar—clear evidence that our measures are bearing fruit and that, together, we have succeeded in developing the Ruhr region into a visible hotspot for start-ups. In this context, the funding of the BRYCK Start-up Alliance by the Federal Ministry for Economic Affairs and Energy represents an important step along our shared path.

There were also new developments in the internationalisation of our universities. In June, we opened the Liaison Office for Lat-

in America in São Paulo. In addition, the Research Academy developed a new funding program for our postdoctoral researchers: the Mobility Grants enable them to undertake multi-week research stays abroad, establish international contacts, and initiate new collaborations.

In 2025, all of our existing, newly developed, and future projects and institutions were placed on a new foundation. The cooperation agreement in place since 2017 no longer adequately reflected our progress and our vision for the future. Consequently, a new and significantly expanded cooperation agreement was developed and entered into force in July. What remains unchanged is our motto: Three Universities, One Community, Endless Opportunities! New governance structures now form the basis for the continued strategic development of the University Alliance Ruhr. For the first time, the UA Ruhr is represented by a spokesperson: we are delighted that Barbara Albert has been appointed to this role from among our ranks.

After ten years of service to Ruhr University Bochum, Dr. Christina Reinhardt stepped down as Chancellor at the end of 2025. Her successor is Dr. Achim Dilling. We would like to take this opportunity to express our sincere gratitude to Dr. Christina Reinhardt for her outstanding contributions to the University Alliance Ruhr and wish her all the very best for the future. We look forward to working with Dr. Achim Dilling.

Finally, we would like to extend our heartfelt thanks to you, the members of the UA Ruhr—for your commitment and support across a wide range of areas, for your curiosity and creativity. Our academic community can grow only through your engagement—regionally, nationally, and internationally. We are proud to be part of this community and to shape the Ruhr region together with you.

Yours sincerely

**PROF. DR. BARBARA ALBERT**  
*Rector of the University Duisburg-Essen*



**PROF. DR. MANFRED BAYER**  
*Rector of the TU Dortmund University*



**PROF. DR. DR. H.C. MARTIN PAUL**  
*Rector of the Ruhr University Bochum*





THREE UNIVERSITIES, ONE COMMUNITY, ENDLESS OPPORTUNITIES

## NEW COOPERATION AGREEMENT PAVES THE WAY FOR THE FUTURE

The three partner universities of the University Alliance Ruhr are pooling their strengths and resources to establish the Ruhr region as an internationally visible hotspot for cutting-edge research. They have made immense progress in this regard over the past 18 years: the joint structures for research, teaching, and transfer demonstrate how intense the collaboration is. The previous cooperation agreement from 2017 no longer covered this, so TU Dortmund University, Ruhr University Bochum, and the University of Duisburg-Essen have cast their joint structures into a new framework cooperation agreement. This was sealed in mid-July by the university administrations:

“Our science location has been sustainably strengthened by the University Alliance Ruhr since 2007. With the new agreement, we are making it clear how far we have come in recent years through close cooperation and that we will continue to pursue the path we have chosen,” say Barbara Albert, Manfred Bayer, and Martin Paul. “Compared to the 2017 agreement, you can see the considerable progress we have made as the University Alliance Ruhr. Many new institutions and collaborations have been created, most notably the four research centers and the college, which are funded by the state of North Rhine-Westphalia.”

Examples of groundbreaking progress made in recent years include:

- > The **Research Alliance Ruhr**, which brings together cutting-edge research in four research centers and a college
- > The consolidation and expansion of career development opportunities in science under the umbrella of the **Research Academy**
- > The strengthening of transfer activities within the **BRYCK Startup Alliance** network through the establishment of **UA Ruhr Transfer Ltd.**
- > The **three joint Liaison Offices** for North America, Latin America, and Eastern Europe/Central Asia

In order to shape the further development of the UA Ruhr, the cooperation agreement provides for new committees. These include:

- > The **Executive Board**, which replaces the previous steering committees
- > The **International Advisory Board**, which supports the Executive Board in long-term strategic planning
- > The **Council for Ethics and Responsibility**, whose mission is to develop common guidelines for ethical conduct in challenging and complex times
- > The **UA Ruhr Assembly**, in which the Executive Board exchanges ideas with delegated senate members from the three universities in order to increase the cross-university participation of elected representatives

The rector of the University of Duisburg-Essen, Barbara Albert, was elected spokesperson for the UA Ruhr after the agreement came into force: “The University Alliance Ruhr is a unique innovation in the higher education landscape, enabling the three universities to achieve something very special as leading institutions for education and research. I am delighted that we are moving the world forward together through science.”





## EXCELLENCE STRATEGY

## THREE CLUSTERS OF EXCELLENCE AND ONE APPLICATION AS A CONSORTIUM OF EXCELLENCE

In May, the German Research Foundation announced that three clusters of excellence involving researchers from Ruhr University Bochum, TU Dortmund University, and the University of Duisburg-Essen will receive funding starting in 2026. In November, Ruhr University Bochum and TU Dortmund University submitted their joint application as a Consortium of Excellence under the title “Ruhr Innovation Lab.”

On November 12, 2025, Ruhr University Bochum and TU Dortmund University submitted their joint application for the title of Consortium of Excellence to the Science Council. The two universities are competing together in the second funding line of the Excellence Strategy as the “Ruhr Innovation Lab.” The concept describes an experimental space that creates freedom in research and develops solutions to pressing questions about the future. To this end, connections to business, politics, and society are also to be strengthened.

*“We are driven by the vision of shaping research in such a way that new ideas can grow that secure the values and prosperity of our society*

*even in times of global upheaval,”* ex-

plains Prof. Martin Paul, Rector of

Ruhr University Bochum. *“With*

*partners in the Ruhr region, in*

*Germany, and worldwide,*

*we want to create an eco-*

*system to make this vi-*

*sion a reality,”* says Prof.

Manfred Bayer, Rector of TU

Dortmund University. The two

neighboring universities are unit-

ed by their founding mission to

continue driving forward the struc-

tural change of the Ruhr region from the heart of the coal and steel industry to a knowledge metropolis. The joint application in the Excellence Strategy now takes this mission into the future and beyond the borders of the region.

Originally, the University Alliance Ruhr had intended to apply as a three-site consortium. Due to the decisions in the Clusters of Excellence funding line, however, the Alliance did not meet the requirements. Only Ruhr University and TU Dortmund University qualified for the next round of the Excellence Strategy in May 2025 by acquiring the three Clusters of Excellence “Ruhr Explores Solvation” (RESOLV), “CASA – Securing the Digital Society” and “Color meets Flavor.” Thanks to their long-standing cooperation in the University Alliance Ruhr, they can build on strong cross-university structures in research and transfer in their application as a consortium. These include, in particular, the four research centers and the college, which were founded in 2021 together with the University of Duisburg-Essen to strengthen international cutting-edge research in the Ruhr region with 50 new professorships. The closely integrated start-up support provided by the BRYCK Startup Alliance is among the best in Germany, as confirmed in July by its selection as one of Germany’s ten start-up factories.

The two universities have now signed a cooperation agreement for bilateral collaboration in the “Ruhr Innovation Lab,” which defines a new inter-university institution. By combining their strengths, the two partners are already particularly strong in areas such as sustainable chemistry, trustworthy IT systems, novel materials, and the nature of matter. Further fields are to be jointly developed and expanded. The interaction between ideas from research and societal challenges is guided by the motto “Think. Try. Transform.”



© RUB, Katja Marquard



### Cluster of Excellence „RESOLV“

Founded in 2012, the Cluster of Excellence RESOLV (Ruhr Explores SOLVation) has focused on solvents and established a new research discipline in chemistry. The consortium, based at Ruhr University Bochum and TU Dortmund University, will enter its third funding period in 2026. The goal is to gain an even better understanding and control of solvent-driven processes. This could enable the direct use of electricity from sustainable energy sources for the synthesis of chemicals and ultimately replace fossil carbon sources with renewable energies.

### Cluster of Excellence „CASA“

The Cluster of Excellence „CASA - Securing the Digital Society“ is the center for pioneering cybersecurity research at Ruhr University Bochum. CASA has a clear goal: to make the digital world more secure in the long term. Researchers work together to develop effective solutions against powerful cyber attackers. They are distinguished by international excellence, interdisciplinary research, and innovative approaches.

### Cluster of Excellence „Color meets Flavor“

In the new Cluster of Excellence „Color meets Flavor“, which will start in 2026, researchers from TU Dortmund University, the University of Bonn, the University of Siegen, and Forschungszentrum Jülich will jointly search for new phenomena in the interaction of elementary particles. The new cluster will focus on the physics of quarks and the question of how these fundamental building blocks of matter form complex binding states. In addition, the properties of the Higgs boson will be investigated and the search for the axion will continue.





## CLUSTER OF EXCELLENCE RESOLV

## RESOLV 3.0: THE SUCCESS STORY CONTINUES

For RESOLV, 2025 was in full swing applying for continued funding until 2032 under the Excellence Strategy. The team submitted the full proposal for this third funding period to the German Research Foundation (DFG) in August 2024 and presented and defended it successfully to a panel of experts in Bonn in February 2025. RESOLV will receive approximately 43 million Euro project funds for another seven years.

“We are delighted and very proud that we were able to prevail against strong competition from all over Germany for the third time and were the only Cluster of Excellence in the field of chemistry to be selected,” says RESOLV spokesperson Prof. Martina Havenith. “Our courage in introducing innovative research structures has paid off and made RESOLV a center for cutting-edge international research.”

The RESOLV team also welcomed the Minister for Culture and Science of North Rhine-Westphalia. At the invitation of Prof. Havenith, Ina Brandes visited the Cluster of Excellence in November.

### Turning research results into innovative solutions

In the next phase, RESOLV will break new ground. The shift away from fossil fuels to renewable energy sources is essential. Solvation Science will play a key role in developing innovative and unconventional solutions. Another focus for the coming years will be the search for new approaches to chemical production. A fundamental transformation of production processes is necessary to utilize sustainable energy sources and minimize environmental impacts. However, this can only succeed if research and industry collaborate closely and scientific findings are promptly incorporat-

ed into the development of innovative, environmentally friendly, and smart applications.

### New centers for research, development and transfer

Following ZEMOS in Bochum, a second RESOLV research building was opened this year: CALEDO, the “Center for Advanced Liquid-Phase Engineering Dortmund,” which will accommodate approximately 100 researchers.

Furthermore, an AI-controlled high-throughput laboratory for analytics and synthesis is being built in cooperation with Evonik at the company’s site on Goldschmidtstrasse in Essen – and a transfer center for innovation and sustainable chemistry in Herne is in the planning phase.





## INNOVATING TOGETHER

## SUCCESSSES IN START-UP SUPPORT

**The year 2025 was extremely successful for the University Alliance Ruhr in terms of start-up support: the establishment of the joint UA Ruhr Transfer Ltd. and the success of the BRYCK Startup Alliance were the highlights. The good ranking in the Start-up Radar confirms this impressive development.**

What began successfully last year has now borne fruit: after the BRYCK Startup Alliance was accepted into the concept phase of the German government's "Startup Factories" flagship competition in June 2024, the partners submitted their full application in April. In July, the decision was then announced at a ceremony at the Federal Ministry for Economic Affairs and Energy: the BRYCK Startup Alliance will receive 10 million euros in funding to establish a European deep tech hotspot in the Ruhr region.

Behind the BRYCK Startup Alliance is an consortium of the UA Ruhr together with BRYCK, the innovation and start-up center initiated by the RAG Foundation, the RAG Foundation itself, and the Initiativkreis Ruhr. The partners want to join forces to promote

knowledge- and technology-based startups and attract talent from across Europe. To this end, UA Ruhr Transfer Ltd. was founded in January: "The universities in the Ruhr region are generating ideas and innovations that are valuable for future markets. To enable this potential to be fully realized, we have founded UA Ruhr Transfer Ltd. and joined forces with experienced partners from the regional economy across multiple locations," say Barbara Albert, Manfred Bayer, and Martin Paul. And continuing on to success in July: "The funding decision of the federal ministry is a milestone for the BRYCK Startup Alliance and the University Alliance Ruhr. Together, we can demonstrate the potential that lies in close cooperation between science, industry, and startups—and how universities can actively contribute to industrial transformation in Germany."

In June, Minister President Hendrik Wüst visited the BRYCK Startup Alliance at the Colosseum Essen: "North Rhine-Westphalia has embarked on a journey from coal to AI. For this transformation to succeed, we need innovation, growth, and interdisciplinary coop-

eration. This is exactly what innovation hotspots such as the BRYCK Startup Alliance stand for: Here, excellent start-up potential from university research is combined with market-oriented, private start-up funding."

In spring, the Stifterverband published its 2025 Start-up Radar. According to this, TU Dortmund University and Ruhr University Bochum (RUB) are among the ten strongest large universities in Germany in the field of start-up support. Together, the three partners of the University Alliance Ruhr gained a total of 26 places compared to the 2022 Start-up Radar – and are thus very well placed: out of a total of 48 universities with more than 15,000 students, RUB improved from 9th to 6th place and TU Dortmund rose from 13th to 8th place. The UDE even improved by 18 places to 20th place.





## RESEARCH ALLIANCE RUHR

# RESEARCH ALLIANCE RUHR CONTINUES ON ITS PATH TO SUCCESS

Since its start in 2002, the Research Alliance Ruhr has proved to be a success.

By the end of 2025, 35 of the 50+ new professorships planned across the four UA Ruhr locations had already been filled. This success is based on facilitating interdisciplinary research across faculty boundaries and attracting internationally renowned and emerging scientists to the Ruhr area.

## Secured Funding

With its 2024 budget decision, the state of North Rhine-Westphalia secured long-term funding for cutting-edge research under the umbrella of the Research Alliance Ruhr. From 2025 onwards, the three universities in Bochum, Dortmund and Duisburg-Essen receive additional €48 million each year for the four Research Centers and the College that they jointly founded. The state government had already provided around €75 million for the development phase from 2022 to 2024.

## Networking in April

On 7 April 2025, professors and research staff from the Research Alliance gathered at the College in Essen for a networking event dedicated to exchange and networking. At the start each team presented their respective research focuses and ongoing projects, demonstrating the relevance of the topics and interdisciplinary cooperation. After the presentations, an informal gathering provided further opportunities to get to know each other and the chance to explore research ideas in greater depth.

The UA Ruhr pools its internationally renowned research on pressing future issues under the umbrella of the Research Alliance Ruhr, which was initiated in 2021 by the Ruhr Conference of the State Government of North Rhine-Westphalia. The four Research Centers with about a dozen newly founded professorships each focus on the topics of health, sustainability, digitalization and the energy transition, while the College with its International Senior Fellowship Programme promotes interdisciplinary collaboration and international networking in the humanities and social sciences and has established three new research professorships as well as three junior professorships.





## RESEARCH ALLIANCE RUHR

## RESEARCH CENTER ONE HEALTH RUHR

**In 2025, the development of the Research Center One Health Ruhr advanced markedly: ten of the fifteen planned professorships have now been successfully filled. Together with the three founding directors, Prof. Dirk Schadendorf, Prof. Bernd Sures, and Prof. Onur Güntürkün, and the administrative team, the Center now comprises an internationally recognized group of researchers that reflects the full disciplinary breadth of One Health research in the Ruhr region.**

In addition to the founding directors, the Center currently includes Prof. Ralf Schäfer, Prof. Alexander Probst, Prof. Kathrin Thedieck, Prof. Dirk Scheele, Prof. Helen Blank, Prof. Caspar Schwiedrzik, Prof. Lucia Melloni, Prof. Amelie Heuer-Jungemann, Prof. Dana Branzei, and Prof. Dominic Winter.

We are especially pleased to welcome Prof. Dana Branzei as a recipient of an Alexander von Humboldt Professorship, one of Germany's most prestigious distinctions for outstanding research. Her work on genome stability and DNA repair mechanisms has shaped international understanding of fundamental cellular processes central to cancer development and aging. Prof. Dominic Winter, awarded a Heisenberg Professorship in 2025, likewise enriches the Center in a distinctive way. This award recognizes exceptional scientists who combine research excellence with strong potential for a tenured professorship. His studies on lysosomal signaling open new perspectives on oncological diseases and further strengthen the Center's molecular and cellular research focus.

A scientific highlight of the year was the Research Center One Health Ruhr Symposium, which brought together researchers from water science, oncology, and neuroscience for an intensive and inspiring exchange. In an open, collaborative setting, participants discussed research ideas, deepened existing collaborations, and jointly shaped the Center's strategic direction. The symposium vividly showcased the dynamism and diversity of One Health research in the Ruhr region and fostered interdisciplinary dialogue as a foundation for new scientific impetus.

Looking ahead to 2026, additional appointments are planned to further advance the Center's structural development and strengthen interdisciplinary networks, with particular emphasis on supporting early-career researchers and maintaining the alliance's international visibility.





## RESEARCH ALLIANCE RUHR

# RESEARCH CENTER CHEMICAL SCIENCES AND SUSTAINABILITY

The past year has been an exciting and successful time for the Research Center Chemical Sciences and Sustainability. A major highlight of 2025 was the renewal of the Cluster of Excellence RESOLV (Ruhr Explores SOLVation) for a seven-year period. The consortium, which is based at Ruhr University Bochum and TU Dortmund University, will enter its third funding period in 2026 and incorporates all PIs from the Research Center, who will benefit greatly from the funding and the international infrastructure of the cluster.

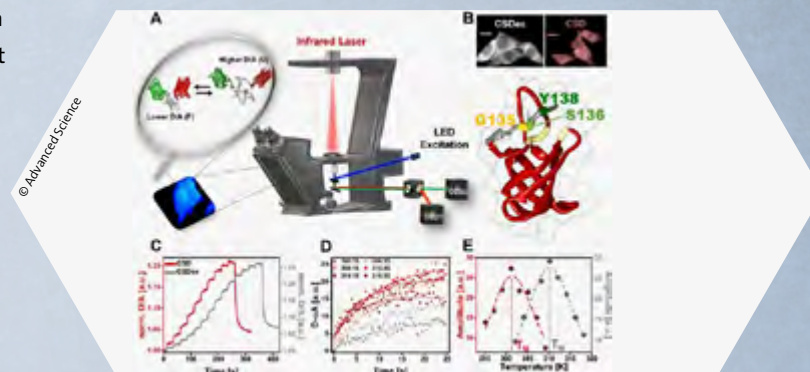
The focus this year lies without a doubt on the activities of our PIs. Several high-ranking publications plus the participation in successful research consortia mark some of the highlights, including an exciting new publication in the journal "Advanced Science" by Prof. Simon Ebbinghaus and his team, showing that intrinsically disordered proteins in neurodegenerative diseases can have some degree of stability, allowing them to be targeted as a potential starting point for novel therapeutic approaches. Prof. Martina Havenith's group presented their novel method "Terahertz-Calorimetry" in „Nature Reviews Chemistry“, which can spotlight the role of water in biological processes.

A group of international researchers including Prof. Xijie Wang had a publication accepted in the journal "Nature Communications", detailing a method to measure the electrical conductivity of warm dense matter using ultrafast terahertz pulses. Prof. Igor Schapiro also published an article in this renowned journal, help-

ing unravel the mechanism of light-activated channels that are important tools in researching nerve cell communication as well as being the recipient of a "NEXT – Quantum Biology" Grant awarded by the VolkswagenStiftung.

Prof. Clara Saraceno's research led to the founding of a spinoff company specializing in building high-power ultrafast laser systems "Rayven GmbH" in Bochum, which received many grants, including from the EU and the German Federal Ministry for Economic Affairs and Energy (EXIST).

Prof. Gabriele Sadowski, Director of the Research Center, was honoured to hold the plenary lecture at the World Congress on Chemical Engineering, in Beijing in July 2025. In addition, numerous experts were invited to give scientific lectures on the Center's main topics. The focus was particularly on the research field of "AI in Chemistry", which saw international pioneers visit to report on the latest developments.





## RESEARCH ALLIANCE RUHR

# RESEARCH CENTER TRUSTWORTHY DATA SCIENCE AND SECURITY

With three new professorships in 2025, high-impact research, and an interdisciplinary approach to AI, the Research Center Trustworthy Data Science and Security (RC Trust) continues on a successful path. At the festive opening on 3 November 2025 at the Dortmunder U, representatives from science and politics offered a positive interim assessment. About 120 guests celebrated achievements and discussed future perspectives. The event focused on the Center's human-centered research agenda: from trustworthy data analysis and explainable machine learning to cybersecurity and data governance.

It was the first official occasion for Nicole Krämer, the newly elected director, to represent the Center in public. The professor of social psychology at the University of Duisburg-Essen took over leadership at the end of October, succeeding founding director Emmanuel Müller.

Since 2025, three newly appointed professors have further sharpened the Center's profile: Giulia Barbareschi, Professor of Inclusive Technology and Collective Engagement (University of Duisburg-Essen); Sven Mayer, Professor of Human-AI Interaction (TU Dortmund University); and Rebekah Overdorf, Professor of Security and Trustworthiness of Online In-

formation (Ruhr University Bochum) and member of the Cluster of Excellence CASA. They joined RC Trust from renowned institutions including Keio Graduate School of Media Design in Yokohama, LMU Munich and University of Lausanne.

RC Trust also recorded international scientific successes in 2025. For example, Rebekah Overdorf presented at USENIX Security '25 the first detection mechanism for propaganda on Telegram, developed from more than 17 million messages, and received a Distinguished Paper Award. Nils Köbis published in Nature. In addition, for the third time a prestigious Best Paper Award went to researchers at TU Dortmund University: in the award-winning study, Carina Newen, Sofia Vergara Puccini, and Emmanuel Müller introduce innovative approaches to better understand and improve the trustworthiness of AI systems. Daniel Klippert also received the Bernd Streitberg Award.

The Center further strengthened its early-career researchers with four Young Investigator Groups and the appointment of Nils

Weitzel as Junior Professor in 2025, alongside new postdocs and PhD candidates across the alliance.

*"Here, in the heart of the Ruhr region, a place is emerging where the pressing questions of our digital society are explored with scientific excellence and curiosity. Artificial intelligence, big data or cybersecurity — the key issue is no longer whether but how these technologies become part of our everyday lives: responsibly, transparently and safely. That is what the Research Center Trustworthy Data Science and Security of the Research Alliance Ruhr stands for."*

NORTH RHINE-WESTPHALIA'S MINISTER OF CULTURE AND SCIENCE INA BRANDES IN HER VIDEO MESSAGE FOR THE GRAND OPENING OF THE RC TRUST





## RESEARCH ALLIANCE RUHR

## RESEARCH CENTER FUTURE ENERGY MATERIALS AND SYSTEMS

**For the Research Center Future Energy Materials and Systems (RC FEMS), 2025 was all about growth and raising its profile. The RC FEMS focuses on developing novel materials for future energy systems – from design at the atomic level to the control of quantum mechanical processes and the scaling of functional components. This holistic approach combines basic research and technological application, thus making a decisive contribution to a sustainable energy future.**

An important milestone in 2025 was the further development of the RC FEMS funding programs for young scientists and internationally renowned fellows. These initiatives strengthen scientific exchange within the UA Ruhr and build new bridges across disciplinary and national boundaries. The visit of the first international fellow was particularly gratifying: in September, RC FEMS welcomed Päivi Törmä, who enriched our research with new perspectives and ideas.

The scientific visibility of RC FEMS also continued to increase in 2025. Together with the Materials Chain, RC FEMS hosted the international conference MCIC 2025: Future Energy Materials and Systems, which brought experts from all over the world to Bochum. The focus here was on exchanging ideas on the RC FEMS's current research topics. A new series of seminars was also established, in which the RC FEMS research groups regularly provide insights into their work. In addition, the RC FEMS's young scientists organized their own retreat, which specifically strengthened scientific exchange, networking and team spirit.

The RC FEMS has also taken important structural steps: with the establishment of an advisory board consisting of five national and international researchers, the RC FEMS now has a strong strategic support committee. In addition, Junior Professor Andrea Kirsch and Prof. Dennis Meier have joined the team as new appointments, bringing valuable expertise to the RC FEMS research landscape.





## RESEARCH ALLIANCE RUHR

## COLLEGE FOR SOCIAL SCIENCES AND HUMANITIES

The College's ceremonial opening in December marked a highlight in 2025. This year, the College was able to fill three more professorships with excellent researchers and attract 18 international visiting scholars. Numerous events reflected the broad range of research topics.

With filling the junior professorships in the summer semester of 2025, the College was able to establish three research groups. Elena Beregow investigates the socio-cultural dimension of sweating, particularly in the context of climate change. Matthias Kranke's research focuses on the political governance of sustainability at the international level. Florian Fastenrath analyses how socio-economic inequality is perceived by politics and society. The research professorship 'Public Social Sciences and Humanities' is expected to be filled in early 2026.

The research groups and the research professorship 'Curating Digital Objects of Cultural Knowledge and Memory' completed their teams with seven doctoral researchers and one postdoctoral researcher. In the autumn, they organised various workshops that facilitated academic exchange with members of the UA Ruhr and external parties.

Through its international Senior Fellowship Programme, the College has already attracted 36 distinguished researchers from 23 countries for research stays since 2024, 18 of them in 2025. The tandem partnerships with members of the UA Ruhr, which are in-

herent in the programme, have so far resulted in 33 events and 29 publications, primarily in high-ranking refereed journals. In this way, the College is continuously promoting global research cooperation in the humanities and social sciences of the UA Ruhr and strengthening international partnerships.

At the ceremonial opening event on 1 December, the members of the College presented their diverse research focuses – around 100 guests from Germany and abroad attended, including the Minister of Culture and Science of the German state of North Rhine-Westphalia, Ina Brandes. The event also provided an opportunity to discuss the role of academic institutions in the face of technological and political transformations.

As part of its PostdocLab programme, the College has been supporting three cross-university working groups since October 2024, which are conducting research on the effects of AI on science communication, on conflicts over the use of urban space, and on civic education in the digital age. From April 2026, three newly selected groups will receive funding.



*"The Ruhr area demonstrates how the transformation from a centre of coal mining to a knowledge region can be successfully achieved. Today, research and science are the resources that ensure good jobs, prosperity and social security. I am therefore delighted to open the College for Social Sciences and Humanities of the Research Alliance Ruhr. Enormous strength is generated when the three major universities in the Ruhr region pool their expertise in the humanities and social sciences. Especially in uncertain times, we need such strong alliances that expertly analyse and explain social developments."*

THE MINISTER OF CULTURE AND SCIENCE OF THE GERMAN STATE OF NORTH RHINE-WESTPHALIA, INA BRANDES



## JUBILEE

## 20TH ANNIVERSARY OF MENTORING<sup>3</sup>

**For 20 years, mentoring<sup>3</sup> has been supporting female scientists on their career paths. This is cause for celebration and recognition at a festive event entitled ‘Connecting women – shaping science’.**

What began in 2005 as one of the first inter-university programs of the University Alliance Ruhr, even before the UA Ruhr was actually founded, has developed into an established and effective instrument for promoting equal opportunities in careers: with individual mentoring, peer groups and workshops, the mentoring<sup>3</sup> program specifically supports women in science. From the outset, the idea was to set up the programme jointly for the three universities. The division into three subject areas was also part of the concept from the beginning: one for the humanities and social sci-

ences, one for the natural sciences and one for engineering, each coordinated at one of the three universities – then as now. Almost 1,000 female scientists have participated in mentoring<sup>3</sup> since its launch two decades ago.

The ceremony on July 15, 2025, provided an opportunity to look back and celebrate together, to reflect, to meet (again), and to network (anew). The current program coordinators Anke Kujawski, Julia Leising, and Theresa Witt welcomed nearly 150 guests. The rector of the UDE, Barbara Albert, opened the event on behalf of the three universities with a welcoming address. The event program provided a detailed review of the origins and successes of mentoring<sup>3</sup> and a look at current plans and possible future developments in mentoring.

This was followed by a keynote speech entitled ‘Mentoring as a success factor’ by Prof. Ute Klammer; in a moderated discussion, she then looked back on their time together as mentor with her former mentee, Dr. Birgit Zeyer-Glozzo. As a token of gratitude, the current coordinators presented flowers to the former coordinators who were present and who had been involved in founding the programme: Helga Rudack (RUB), Dr. Renate Petersen (UDE) and Dr. Ute Zimmermann (TU Dortmund).

The event concluded with an open exchange over snacks and drinks. The celebration offered former and active mentees, mentors, coordinators and numerous other people associated with the program the opportunity to meet (again) and engage in conversation with one another.





## RHINE-RUHR FISU WORLD UNIVERSITY GAMES

# TOP-CLASS SPORT AND TOP-CLASS RESEARCH IN THE RUHR REGION

In July, the FISU World University Games, the world's second-largest multi-sport event after the Olympic Games, took place in the Ruhr region. For twelve days, students from all over the world competed for medals in 18 sports. The venues were Duisburg, Essen, Bochum, Mülheim an der Ruhr, Hagen, and Berlin.

## The German "Team Studi"

A total of 305 athletes competed in the German "Team Studi," more than ever before at the World University Games. The fact that many of them were Olympic participants underscored the high athletic level of the competitions. Seventeen students of the University Alliance Ruhr competed in six sports. Ines Lenze, head of the German team delegation and director of university sports in Bochum, summed it up: „*The FISU Games fulfilled everything*

*we dreamed of. The athletic performances exceeded our expectations, and it was a great pleasure to see so many happy faces on Team Studi. But for us, it was never just about the glory of the medals, but above all about the sparkle in the eyes of the 9,000 participants, around 10,000 volunteers, and countless other people involved – out of joy that exactly what we had all dreamed of had come true. They were colorful, cheerful, and peaceful games!*“

The highlight for the UA Ruhr students was the success of Jana Stüwe from TU Dortmund University: she and her team won gold in water polo.

## Cutting-edge sports science research in the Ruhr region

The FISU World Conference was held under the motto “Com-

peting for Change: Exploring sustainability and (mental) health through sports.” *“The FISU World University Games are, of course, primarily a sporting competition between students from all over the world – but they are also a great opportunity for scientific exchange,”* said NRW Science Minister Ina Brandes at the opening of the conference. The three sports science institutions of the University Alliance Ruhr were academic partners for the scientific conference under the umbrella of the “Ruhr Alliance of Sport Science.” *“We contributed our scientific expertise to the program design and represented sports science in the Ruhr region worldwide,”* said Petra Platen, Professor of Sports Medicine and Sports Nutrition at the Ruhr University Bochum. *“The FISU World Conference is thus another milestone on the path to internationalization and global visibility for cutting-edge sports science research in the Ruhr region.”*





## RESEARCH ACADEMY

## QUALIFICATION, CAREER ORIENTATION, AND INCREASED MOBILITY FOR POSTDOCS

**In 2025, the Research Academy focused on profiling established formats and intensifying collaboration with partners within the UA Ruhr and the regional economy. A highlight was the awarding of Mobility Grants for stays abroad.**

Mobility of UA Ruhr postdocs played a special role in the Research Academy in 2025: In a pilot project, Mobility Grants were awarded. With this funding, 15 individuals embarked on multi-week stays abroad to establish and expand international research networks, as well as to initiate or further develop independent research projects with international partners.

A notable step in 2025 was the establishment of the Early Career Researchers Board, or ECR-Board, of the UA Ruhr. It was created to strengthen the perspective of researchers in early career phases in the structural development of the alliance. The Board is composed of three members from each university, representing different career stages and disciplines, and already played a central role in the awarding of the Mobility Grants.

As part of the Summer School Research Explorer Ruhr, 28 (upcoming) postdocs from 14 countries were guests at the UA Ruhr to explore opportunities for joint third-party funding applications and longer research stays. They also participated in the Global Young Faculty Event, which focused on international visibility and took

place at the College for Social Sciences and Humanities in Essen.

The program of the Research Academy in 2025 again included formats for doctoral researchers (to be) such as the Frühjahrs- resp. Herbstakademie, as well as a broad workshop program for postdocs and various offers for the Junior Faculty, including coaching, short workshops, and for the first time, a web-cast. Events such as the Dialogue, where RWE AG was a guest, the Research Career Day, and the Karriereforums provided support for career orientation. One of these Karriereforums in the spring focused on career paths in research and science-related institutions, while another in the fall, with representatives from business and society, highlighted career options outside university (formerly Wirtschaftskolleg). connecting.ruhr, an event on career prospects for postdocs in the Ruhr region, took place for the second time in collaboration with the Junge Initiativkreis Ruhr, this time at the Deutsche Bank in Essen. Additionally, the mentoring<sup>3</sup> program not only celebrated its 20th anniversary but also launched a new line for female postdocs.





## TEACHING AND LEARNING TOGETHER

## NEW DEVELOPMENTS AND PROJECTS IN TEACHING

## New certificate in “Diversity and Gender”

The University Alliance Ruhr is expanding its joint teaching program to include a certificate course in “Diversity and Gender.” The program offers students from all disciplines the opportunity to engage in in-depth, interdisciplinary, and practical study of topics related to diversity and gender research. This includes issues such as diversity, social justice, and power relations. Participants will be empowered to critically examine discrimination and power in order to take a stand against inhumanity and anti-democratic attitudes. *“The idea for a certificate program focusing on gender studies and diversity issues was discussed repeatedly at all three universities independently of each other. The fact that we are now able to launch it as a joint venture is thanks to many committed individuals and is also a sign of the times,”* said Elisabeth Brenker, Central Equal Opportunities Officer at TU Dortmund University, at the start of the winter semester.

## Joint support for prospective teachers

The Ruhr metropolitan area is multilingual – for schools, this is both a challenge and an opportunity. The three partners of the University Alliance Ruhr are responding to this with the new joint project “Flexible DaZ Professionalization in Teaching (DazFlex-Pro)”. The project, led by the Center for Teacher Education at the

University of Duisburg-Essen, has been funded by the Foundation for Innovation in Higher Education since October for an initial period of four years with around four million euros.

The project addresses two challenges: On the one hand, modern teacher training should enable a course of study that takes individual study biographies into account, as many students have other commitments alongside their studies or are already gaining practical experience through part-time work in schools. *“Secondly, prospective teachers in our multilingual region are confronted with special requirements for the language education of their students. Together with our colleagues from Bochum and Dortmund, we want to prepare our students for a resource-oriented approach to multilingualism,”* said project spokesperson Tobias Schroedler from the University of Duisburg-Essen.

The second cohort of the “Lehramtsstipendium Ruhr” scholarship program started in the summer. The program aims to attract young people to work in schools in socially challenging areas in the Ruhr region at an early stage. It accompanies them during their studies and supports them on their way into the

profession. Minister of Education Dorothee Feller welcomed the second cohort at the Ruhr University Bochum: *“We need highly motivated teachers, especially in schools facing challenging circumstances. From the very beginning of their studies, scholarship recipients demonstrate outstanding commitment and a strong sense of responsibility. This makes them an asset to our schools in the Ruhr region and role models for our students.”*



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## LIAISON OFFICE NORTH AMERICA

## STRENGTHENING TRANSATLANTIC RELATIONS REMAINS A FOCUS

**2025 was a dynamic year for the UA Ruhr Liaison Office North America, defined by vibrant transatlantic engagement, new institutional collaborations, and the continued growth of our flagship fellowship programs.**

In June, the Ruhr Fellowship Program welcomed outstanding students from Lehigh University, the University of Cincinnati, and UC Berkeley to the Ruhr region for an intensive eight-week experience in innovation, culture, and research. Meanwhile, the Transatlantic Ruhr Fellowship brought a new cohort of fellows from the UA Ruhr universities to New York, Washington D.C., and Bethlehem, fostering strong partnerships with academic and industry hosts across the east coast.

Our Futures Fellowship Program continued to deepen research exchange between Ruhr-area scholars and leading North American universities including Rutgers, the University of Virginia, and UCLA. These collaborations explored pressing global themes such as artificial intelligence, sustainability, and education technology; notably through workshops like SCALEability and Artificial Intelligence and the Perception of Reality.

UA Ruhr also played a visible role in major internationalization platforms including APAIE in New Delhi, NAFSA in San Diego, GAIN in Boston, and the DWIH Future Forum in Cambridge as well as German universities fairs that highlighted opportunities at our universities for undergrads, grads, PhDs, and postdocs. Our participation highlighted the alliance's ongoing commitment to academic freedom, entrepreneurship, and science diplomacy.

Throughout the year, the Liaison Office North America worked closely with network partners to advance strategic outreach through alumni events, graduate fairs, and thematic discussions on transatlantic collaboration. These efforts continue to position our universities as key contributors to the global dialogue on research, innovation, and societal transformation.

As 2025 draws to a close, Liaison Office UA Ruhr North America reaffirms its commitment to strengthening academic bridges between Germany and North America, building partnerships that inspire learning, spark innovation, and promote a shared vision for the future.





## COLLABORATIVE RESEARCH CENTER EXTENDED

# JOINT COLLABORATIVE RESEARCH CENTER “EXTINCTION LEARNING” ENTERS ITS THIRD PHASE

In November, the German Research Foundation announced which Collaborative Research Centers (CRC) would receive new or renewed funding. For CRC 1280 “Extinction Learning” funding was extended for the second time.

How does the brain learn to forget? Can we “unlearn” fear – and what does that mean for the treatment of anxiety or pain disorders? Researchers at the CRC “Extinction Learning” led by spokesperson Prof. Onur Güntürkün from Ruhr University Bochum have been addressing these questions since 2017. Prof. Dagmar Timmann from the University of Duisburg-Essen is the co-spokesperson.

The process of initial learning is well understood – but extinction learning is much more complex. This is because extinction learning is not simply erasure, but a new learning process: a fresh memory trace overlays an old one without completely erasing it. Under certain circumstances, what was supposedly forgotten can return – for example, as part of a fear response. “In the past funding period, we were able to identify the neural network of extinction learning and clarify the reasons for context dependence in the memory of past events,” explains the spokesperson for the CRC, Prof. Onur Güntürkün from Ruhr University Bochum. “In addition, disease-, stimulus-, stress-, and cognition-related factors that influence therapy outcomes were discovered.”

## Goal for the third funding phase

In the coming years, the team wants to delve even deeper into the mechanisms of forgetting. “We want to understand how the neural extinction network changes during learning and memory and why contextual stimuli play such a strong role,” summarizes co-spokesperson Prof. Dagmar Timmann from the University of Duisburg-Essen. “Our goal is to translate this basic research into clinical practice – so that therapeutic processes become more targeted and effective.”

## Expanded collaboration

The successes of the first two funding periods are based on close collaboration between experts from psychology, neurology, biology, and theoretical neuroscience from Ruhr University Bochum and the University of Duisburg-Essen. New research locations have also been added for the upcoming funding period: the University of Luxembourg, the Hamburg Medical School, and the Georg August University of Göttingen are joining the proven team.

## Further funding for Ruhr University Bochum

Ruhr University Bochum was delighted not only about the extension of the CRC “Extinction Learning,” but also about the continuation of CRC 1316 “Transient Atmospheric Pressure Plasmas – From Plasma to Liquids to Solids.” The spokesperson is Prof. Achim von Keudell. This Collaborative Research Center brings together expertise from various research areas, including plasma physics, surface physics, chemistry, biotechnology, and engineering.





## COMPETENCE FIELD MATERIALS CHAIN

On September 22, 2025, the 7th Materials Chain International Conference took place at Ruhr University Bochum. The main focus of the conference was research on innovative and sustainable materials for future energy systems. At the same time, the event marked the official opening of the newly established Research Center Future Energy Materials and Systems.

Around 130 participants from Germany and abroad discussed new research approaches and ideas for future collaborations during the conference. In four thematic sessions, international experts presented current work on materials and electrochemistry, theory and machine learning, quantum materials, as well as material design and characterization.

A poster session offered early career researchers the opportunity to present their own work and exchange ideas with peers. Additionally, partner institutions such as the Center for Fuel Cell Technology (ZBT), the Interdisciplinary Center for Analytics on the Nanoscale (ICAN), and Mat4Hy presented themselves with information booths.



## COMPETENCE FIELD METROPOLITAN RESEARCH (KOMET)

The year 2025 for KoMet was all about green transformation. Building on the Memorandum of Understanding signed with the Regionalverband Ruhr in 2024, new formats of collaboration were developed that place ecological and social sustainability at their core. Highlights included Transformation Talks 3.0: "Mindshift Ruhr – How Can We Shape the Green Transformation of the Ruhr Region Together and Fairly?" held on September 5 in Mülheim/Ruhr, as well as the 7th KoMet Day "Green Transformation Ruhr" on December 5 in Essen, where the KoMet Awards for Outstanding Doctoral Dissertations were presented.

In parallel, work is underway on the English-language volume The Ruhr Region – Industrial Legacy and Lasting Change: A Transformation Story. Twenty researchers from the competence field explore various facets of structural change for an international audience; publication by Routledge is planned for the second half of 2026.

KoMet also continued its successful cooperation with EmscherGenossenschaft: a new study documents international best practices in river restoration and develops ideas for future strategies for transforming the Emscher River.





## LIAISON OFFICE EASTERN EUROPE/CENTRAL ASIA

# STRATEGIC COOPERATION WITH CENTRAL ASIA, UKRAINE SUPPORT, AND STRONG MOMENTUM IN INTERNATIONAL RECRUITMENT

In 2025, the UA Ruhr Liaison Office for Eastern Europe and Central Asia set important impulses for international cooperation, strengthened strategic partnerships in Eastern Europe and Central Asia, and expanded its engagement in science diplomacy and Ukraine's recovery.

During visits to Uzbekistan and Kazakhstan, key partnerships were further developed and new areas of cooperation opened. In Almaty, a high-level UA Ruhr delegation participated in a Forum on Sustainable Development at the Academy of Sciences. In Öskemen, a German-Kazakh university consortium was established, with UA Ruhr as a central partner. Cooperation with Kazakhstan now includes student and researcher mobility, joint programs, and additional formats further expanded in 2025.

Within the excellence program Studienbrücke, two new regional tracks were created – one for India and one for Türkiye – complemented by additional formats such as the Career Day Study Bridge. In 2025, 37 Studienbrücke graduates began their studies at one of the UA Ruhr universities. Through further information events, webinars, and fairs, more than 4,000 prospective students across our broader university marketing activities were reached.

As part of the MKW NRW-funded project DniPRONrw, the UA Ruhr EECA Liaison Office, led by Elena Resch in cooperation with

Prof. Björn Rothstein (RUB), coordinated activities with the Ukrainian partner region Dnipropetrovsk. A key outcome was the signing of a joint Memorandum of Understanding between UA Ruhr and the Oles Honchar State University as well as the Ukrainian State University of Science and Technologies. The signing took place during the German-Ukrainian Summer School with over 50 participants. DniPRONrw enables Ukrainian lecturers to access digital UA Ruhr courses and allows students to take digital modules that may be recognized at their home institutions.

In June 2025, the UA Ruhr EECA Liaison Office organized the three-day EU- and ZEIT Foundation-funded conference “An Attempt at Democracy: Russia from 1989 to 1999.” It brought leading international scholars and two Nobel Peace Prize laureates – Dmitry Muratov and Irina Scherbakova – to Ruhr University Bochum, sending a strong signal for academic dialogue in times of authoritarian regression.

Additionally, UA Ruhr once again secured funding for the Fedor Stepun Fellowship, enabling eight at-risk postdoctoral researchers to continue their academic work at the three UA Ruhr universities.





## NEW HPC LOCATION

# STATE CONCEPT FOR SCIENTIFIC HIGH-PERFORMANCE COMPUTING IS BEING IMPLEMENTED

As part of the fourth HPC state concept, the Ministry of Culture and Science and the Digital University NRW have designated the University Alliance Ruhr, with the University of Duisburg-Essen as consortium leader, as the fourth NRW-wide location for high-performance computing (HPC) – after Cologne, Aachen, and Paderborn. The aim is to provide modern high-performance computing systems throughout the state.

The NRW HPC state concept provides for four locations for high-performance computing (HPC clusters) at level 3 (Tier 3: specialist clusters). The basic service for HPC services is provided in Cologne. Paderborn has a specialist cluster for physics and chemistry. The RWTH Aachen cluster focuses primarily on engineering sciences. The University of Duisburg-Essen will offer scientific high-performance computing, particularly for the fields of biology, biochemistry, and applied mathematics.

*“With the state concept for scientific high-performance computing, the Ministry of Culture and Science is pursuing a smart strategy with DH.NRW to bundle and strengthen HPC resources and have them operated by universities. This makes us more powerful, efficient, and sustainable together.”*

PROF. DR. BARBARA ALBERT, SPOKESPERSON FOR THE UNIVERSITY ALLIANCE RUHR, RECTOR OF THE UNIVERSITY OF DUISBURG-ESSEN, AND MEMBER OF THE EXTENDED BOARD OF THE DIGITAL UNIVERSITY NRW (DH.NRW) WELCOMES THE MINISTRY'S DECISION.

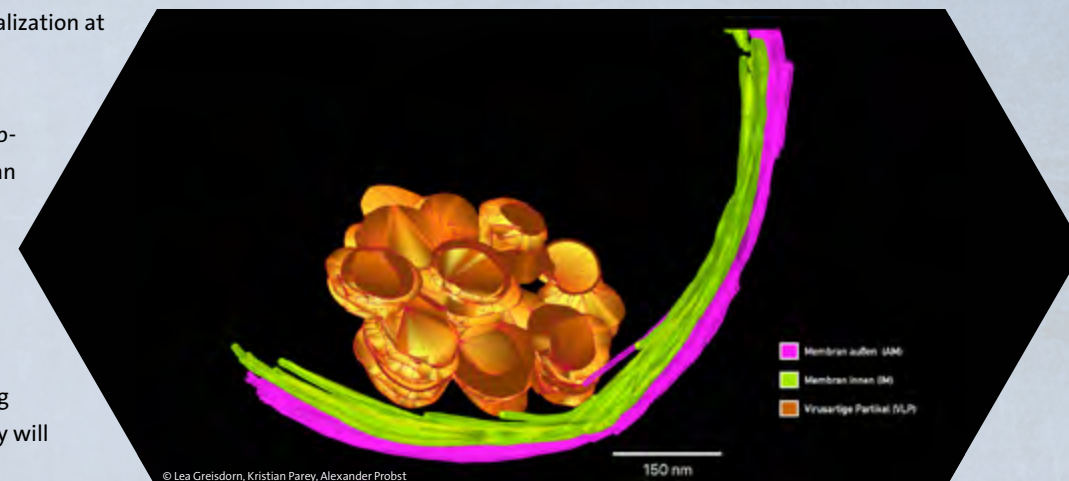
Machine learning will also be supported as a basic technology at the three specialist cluster locations. All universities in North Rhine-Westphalia can secure a proportionate share of computing time via a distribution system. The new operating site will be located in the future Wedau Technology Quarter in the current data center of the Center for Information and Media Services at the University of Duisburg-Essen. The new HPC location in Duisburg-Essen, part of the Ruhr University Alliance, also impresses with its innovative sustainability concept: *„Since the use of computer-aided methods has become indispensable in all areas of science, the central and sustainable provision of computing resources is becoming increasingly important. The possibility of using the waste heat from the high-performance computers for local and district heating in the region makes a decisive contribution to this,”* says Prof. Dr. Pedro Marron, Vice Rector for Transfer, Innovation, and Digitalization at the University of Duisburg-Essen.

A broad-based operational and support staff is necessary to operate an efficient HPC ecosystem. To this end, 19 employees from the central IT operators ZIM, IT.Services, and ITMC from the three universities in Duisburg-Essen, Bochum, and Dortmund are already working closely together. In the future, they will

*„Computing power is the crucial raw material in the digital age. In addition to our outstanding supercomputer in Jülich, we are continuing to drive forward the provision of computing capacity to our universities. Research and industry in North Rhine-Westphalia will thus be able to perform more computer-aided simulations and evaluate huge amounts of data in less time. This will make science more precise and accelerate the transfer of findings into practical applications. Broad access to high-performance computers gives the science location a real competitive advantage.“*

MINISTER OF SCIENCE INA BRANDEN

jointly implement the processes related to hpcFachCluster.nrw in the University Alliance Ruhr. Commissioning is expected to take place in early 2028.



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## COMPETENCE FIELD “ENERGY-SYSTEM-TRANSFORMATION (EST)”

# ENERGY TRANSITION AS AN ECOLOGICAL AND SOCIO-ECONOMIC TRANSFORMATION

**The political challenge surrounding the ecological as well as socio-economic transformation must be grounded in knowledge-oriented and evidence-based research. We are committed to this high standard within the Competence Field EST.**

Outstanding projects demonstrate this commitment, such as the DFG Transregio TRR 391 “Spatio-temporal Statistics for the Transition of Energy and Transport”, which includes members of EST from all three universities of the UA Ruhr. The DFG Priority Programme 2403 “Carnot Batteries: Inverse Design from Markets to Molecules” published its call for the second funding phase in 2025.

In August 2025, the International Ruhr Energy Conference (INREC) took place in Essen for the 14th time. In November, the first NRW Future Conference was held, where researchers from the Competence Field EST made major contributions to several workshops. We also actively participated in the Westphalian Hydrogen Conference in Dortmund.

Especially in these challenging times, it becomes evident how vital and urgent solutions for energy systems are, as they form one of the foundations of our economy and society. This is what drives us, and we at EST contribute to it with all our efforts.



## COMPETENCE FIELD EMPIRICAL ECONOMIC RESEARCH

# SUCCESS IN RESEARCH, TEACHING AND NETWORKING

**The past year, 2025, marked important milestones in the development of projects and actors within the Competence Field Empirical Economic Research.**

The new Collaborative Research Center/Transregio (TRR) 391 “Spatio-temporal Statistics for the Transition of Energy and Transport” has been successfully launched. Across 15 projects in three research areas, methods are being developed for processing spatio-temporal data from energy and transport.

The joint master’s program “Econometrics” celebrated its fifth anniversary with an engaging two-day workshop in April. The program has been running very successfully and has firmly established itself over the past years. In 2025, for the first time, students were able to begin their studies also in the summer term.

The DFG-funded Research Training Group “Regional Disparities and Economic Policy” has so far seen 15 doctoral graduates who published in leading academic journals. Six are now working as postdocs at renowned research institutions, other graduates are employed at central banks, the KfW, or in the private sector. The RTG “Cross-border Labor Markets”, consisting of three postdocs and 13 doctoral researchers, has also continued its successful trajectory.

The Ruhr Graduate School (RGS) hosted the 18th RGS Doctoral Conference on “Family Economics” in February, featuring keynote lectures by Prof. Michèle Tertilt (University of Mannheim) and Aslı Sevinçdim (Head of the Department for Integration, MKJFGFI NRW).

The competence field is further very pleased to announce the nomination of Prof. Dr. Dr. h.c. Schmidt as president of the Leibniz Association.





## RUHR ASTROPARTICLE AND PLASMA PHYSICS CENTER

## ANNIVERSARY AND FURTHER DEVELOPMENT OF THE RAPP CENTER

**The Ruhr Astroparticle and Plasma Physics Center (RAPP Center) celebrated its 10th anniversary this year.**

The RAPP Center was founded in 2015 by the UA Ruhr universities to combine their complementary strengths in different areas of physics. This quickly linked the internationally leading astrophysics department at Ruhr University Bochum with the renowned particle and astroparticle physics department in Dortmund. Both research areas are connected by major scientific questions, such as the origin of cosmic rays and the nature of neutrinos, which can only be answered by combining the two fields of physics, which otherwise often operate separately. This process

of linking the research priorities of both universities, which was systematically initiated by the RAPP Center, resulted in the successful establishment of SFB 1491 “The Interplay of Cosmic Matter – From Source to Signal” in 2022.

In recent years, the development of research activities at RAPP has made it clear that the center is expanding its portfolio to include aspects of astro-related laboratory physics and machine learning. This systematically strengthened cooperation between the three UA Ruhr universities will enable the critical mass for an internationally unique research profile to be achieved. The central goal of expanding the RAPP Center is to increase the thematic breadth of research and

teaching in order to enable further coordinated programs and make education at the highest level attractive to regional, national, and international students. This will make it possible to offer all students at the UA Ruhr a comprehensive range of astronomy-related lectures that is worthy of an elite American university. This project is funded as part of the MERCUR structural funding program.

To mark the 10th anniversary, RAPP researchers have developed and implemented a visually stunning show in collaboration with the Bochum Planetarium and the University of Wuppertal. It has been showing at the Bochum Planetarium since October and is currently being

translated into English for worldwide distribution from 2026. “This unique way allows us to make our research accessible to an incredibly wide audience,” says Prof. Julia Tjus from Ruhr University Bochum, head of the RAPP Center.

Following the premiere of the show, RAPP’s 10th anniversary was celebrated with a conference at the German Mining Museum Bochum, where approximately 100 researchers from the RAPP Center were able to exchange ideas with selected international experts and further concretize the research priorities for the future.





## LIAISON OFFICE LATIN AMERICA

# SUCCESSFUL START OF THE NEW LIAISON OFFICE FOR LATIN AMERICA

At the beginning of the year, the UA Ruhr universities opened their third Latin America Liaison Office, which is located in the German Centre for Research and Innovation (DWIH) São Paulo.

The official opening ceremony of the office took place in June in São Paulo with more than 100 participants, including the rectors Prof. Barbara Albert (UDE), Prof. Martin Paul (RUB), and Prof. Sandra Almeida (Federal University of Minas Gerais). TU Dortmund was represented by Vice President Prof. Gerhard Schembecker.

*“With the new Liaison Office in São Paulo, we are strengthening the scientific bridge between the University Alliance Ruhr and Latin America – for joint research and the exchange of students and researchers,”* the university leadership stated.

The office is headed by Prof. Matthias Epple (University of Duisburg-Essen) as Scientific Director and Marcio Weichert as Executive Director. They emphasize: *“The Liaison Office for Latin America and the Caribbean opens up a diverse region with great cooperation potential – from rainforest ecology and particle accelerators to medical research. It is an ideal complement to the internationally networked University Alliance Ruhr.”*

Located within the DWIH, the office has already proven to be an excellent meeting place for personal contacts with representatives from across Latin America during its first year. Visitors from Argentina, Colombia, and Mexico, as well as delegations from

UA Ruhr, came to the DWIH to learn about the higher education, funding, and innovation landscape in Germany and Brazil. The Liaison Office supported these activities on site.

In Brazil a Memorandum of Understanding was signed with the Federal University of Minas Gerais, and an Institutional Collaboration Agreement with the University of São Paulo (USP). An application submitted to the DWIH for support of a conference related to the COP30 World Climate Conference was successful.

The Liaison Office actively participated in more than 30 events held in Brazil, Germany, Mexico, Colombia, and Argentina. These included visits at universities, German international schools, and presentations at major events such as the FAUBAI Conference, the SBPC Annual Meeting, the EuroPosgrados fairs in Mexico, and the FAPESP Week in Berlin. In addition to presenting the UA Ruhr, particular emphasis was placed on recruiting students, doctoral candidates, and postdoctoral researchers.





## NEW FUNDING FORMAT

## INTER-UNIVERSITY RESEARCH FUNDING SUCCESSFULLY LAUNCHED BY MERCUR

Charles Darwin once said, “Nothing in the history of life is more constant than change.” After the Mercator Foundation withdrew from the Mercator Research Center Ruhr (MERCUR), which it ran jointly with the UA Ruhr, at the end of 2024, the university administrations decided to continue MERCUR on their own. The reasons for this were its extremely successful track record and the many positive effects it has had on inter-university cooperation. The response from the universities was overwhelming.

The governance and decision-making structures have changed, but the intention behind the new MERCUR remains the same: as a cross-university research funding institution, it promotes cooperative projects in the areas of project and structural funding with the aim of further strengthening cooperation between scientists. The three UA Ruhr universities provide up to €1.5 million per year for this purpose.

In May, 65 project outlines were submitted for project funding – more than ever before in a single round. This record impressively demonstrates the need for and usefulness of MERCUR. Of the 65 outlines, 13 projects were invited to submit full applications in

June. Most of the projects were conceived by researchers from all three UA Ruhr universities. In December, the Executive Board decided to fund eight of these projects. The topics are diverse, ranging from the use of AI in biomedical research to the impact of climate change on groundwater and research into digital media cultures.

In terms of structural funding, the expansion of the RAPP Center was approved. The researchers from the RAPP Center, led by Prof. Julia Tjus (RUB), Prof. Wolfgang Rhode (TU Dortmund), and Prof. Gerhard Wurm (UDE), have worked intensively to develop perspectives and ideas for the future in order to further expand the RAPP Center in terms of content and develop it structurally. The central goal of the expansion of the RAPP Center is to increase the thematic breadth of research and teaching in order to enable further coordinated programs and make education at the highest level attractive to regional, national, and international students.

At the end of the first year in which MERCUR has been in the hands of the UA Ruhr universities, the rectors expressed their delight: *“We are proud of how many interesting and innovative collaborative projects have been developed by our researchers. This shows that the decision to continue MERCUR and integrate it into our own structures was absolutely the right one. We are excited to see the results of these projects and look forward to many more new ideas in the next round of calls for proposals.”*





INSTITUTE FOR ADVANCED STUDY (KWI ESSEN)

## NEW PODCAST COLLABORATION, A FULL EVENTS PROGRAMME, AND INNOVATIVE TEACHING FORMATS

In 2025, the KWI was able to build on the successful project funding of previous years and further expand its research activities. The project “Krise der Kritik? Kapitalismus, Neoliberalismus und Demokratie ‘nach dem Boom’,” funded by the DFG as part of the Heisenberg Programme, was extended for two more years. The DFG project on the digital edition of the letters of Ferdinand Tönnies also received follow-up funding to process and make accessible previously unexplored materials of this key figure in sociology.

The model project “Visual Literacies,” funded by the Kulturstadt Düsseldorf and the Deutscher Forschungsrat, develops teaching materials to strengthen students’ visual literacy skills. Within a teaching and research project led by Tim Schanetzky at the University of Duisburg-Essen, an online glossary on critiques of capitalism was created together with students. The contributions were published in 2025, and the project was nominated for the university’s Teaching and Research Award.

In autumn, the podcast *Krumme Straße* was launched — a cooperation between the KWI and the journal *Merkur*. In autumn, the podcast *Krumme Straße* was launched as a joint initiative of the KWI and the journal *Merkur*. It is co-hosted by Hanna Engelmeier, representing the KWI, alongside a partner from *Merkur*. Together, they engage monthly with guests from academia and culture. The first episode featured sociologist Andreas Reckwitz, who discussed inheritance in late modernity.

As part of the International Fellowships, six researchers and two *Thyssen@KWI Fellows* funded by the Fritz Thyssen Foundation were guests at the KWI in 2025. The cooperation with the *Academy in Exile* (TU Dortmund) led to the arrival of the first fellow at the KWI; an expansion of this collaboration to include one or two additional fellows is planned for the coming year.

The year’s event programme was equally diverse: The ERC project “The Cultures of the Cryosphere” opened with an international workshop. The conference “Das war’s” explored practices and aesthetics of ending. Within the annual theme Guilty Pleasures, shame, horror, and pleasure were examined as cultural and aesthetic phenomena. Two events during the Essen Science Summer focused on the political right as a narrative community and on the notion of “Gewaltlust” (the “desire for violence”) discussed around 1900. The series’ event posters were added to the collection of the Deutsches Plakatmuseum at Museum Folkwang.

The film series CineScience took up the annual theme under the title “Schund und Vergnügen” (“Trash and Pleasure”), presenting numerous film examples over four evenings at Kino Glückauf. In cooperation with Museum Folkwang, two discussion evenings were also held on films by Gerd Schindler and Marie-Claude Deffarge.





## JOINED THE NETWORK

## FAIRLY EVALUATING RESEARCH ACHIEVEMENTS TOGETHER



The University Alliance Ruhr has been a member of the international Coalition for Advancing Research Assessment (CoARA) since February. Together, the partner universities are campaigning for a reform of the evaluation of research achievements.

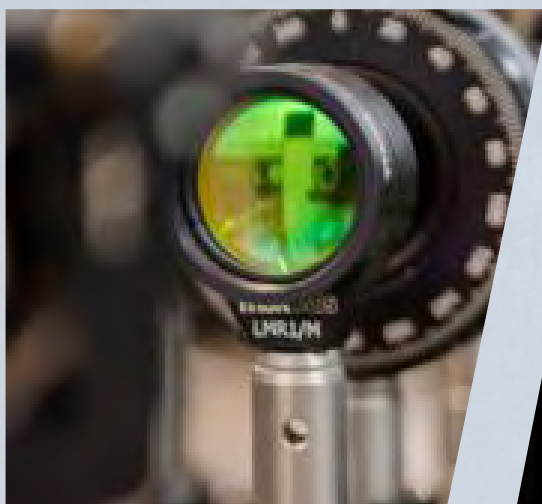
CoARA aims to reform the standards used to evaluate research performance. Rather than quantitative factors, qualitative factors should play a greater role than they have done to date. As part of this process, the UA Ruhr has also joined CoARA's National Chapter Germany. The National Chapter serves as a forum for discussing and coordinating CoARA matters that are specific to the German research landscape.

### Much more precise differentiation

The UA Ruhr is represented in the CoARA network by Bochum Rector Martin Paul as Legal Representative. Together with his colleagues Barbara Albert and Manfred Bayer, he emphasizes the importance of the network: „*Together, we are campaigning for the modernization of research evaluation. When assessing scientific achievements, much more precise differentiation is needed, especially with regard to different disciplinary cultures. Therefore, we as the University Alliance Ruhr will participate in a thorough review of the procedures used to date.*“

### Establishing new principles

The institutions that have joined CoARA are committed to evaluating research performance within their own institutions in a much more nuanced way in the future. This includes, for example, recognizing that there is a diversity of research contributions and scientific careers that depend on the conditions of the respective research environment. The inappropriate use of publication metrics such as the Journal Impact Factor and the so-called h-index should be avoided. Overall, the changes aim at a responsible use of quantitative measures, while the focus shifts to a qualitative assessment based on peer review.





## INTERNATIONAL ACADEMY FOR GERMAN ENGINEERING AND SCIENCE

# UA RUHR AND UNIVERSITY OF APPLIED SCIENCES DÜSSELDORF CREATE COURSES ON THE ENERGY TRANSITION

Under the name “International Academy for German Engineering and Science,” the UA Ruhr and the University of Applied Sciences Düsseldorf offer English-language continuing education courses on the energy transition. Two of the courses have been accredited for the 2025/2026 winter semester. The program aims to train specialists from Germany and abroad who are urgently needed by local businesses to meet the challenges of a climate-neutral future.

The courses are designed to teach the skills needed for a sustainable future. These include technological and economic knowledge of green energy systems with a focus on hydrogen. Expertise in sustainable building design and low-emission solutions for logistics are also in demand. The four university partners signed a ten-year cooperation agreement in June, and the cooperation agreement with EUREF (European Energy Forum) was signed in October.

This winter semester, the first students are already benefiting from corporate scholarships provided by EUREF partners Schneider Electric and SPIE. A modern didactic concept based on problem-based learning is being used. Students develop interdisciplinary solutions to real challenges and specific issues in the fields of energy and mobility transition, as well as environmental and climate protection.

These also come from partner companies, including companies based in North Rhine-Westphalia such as Schneider Electric SE, E.ON SE, SPIE Deutschland GmbH, Arcadis Deutschland GmbH, Convex Energy GmbH, KONE GmbH, and WILLO SE.

To create synergies, these seven companies have moved into premises on the EUREF Campus Düsseldorf, where the new degree programs are also based. “By moving into the EUREF Campus, we are creating a new center for innovative, sustainable, and practical continuing education in the heart of North Rhine-Westphalia,” says Dr. Yves Gensterblum, managing director of the RUB Academy, which is responsible for organizing the four degree programs. The new premises cover around 900 square meters and are equipped with state-of-the-art seminar and media technology. In the future, they will be used for study programs, part-time certificate programs, and practice-oriented transfer formats.





**WE  
WISH  
YOU A  
HAPPY  
AND  
PROSPEROUS  
2026!**

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