

Dear members and friends of the CRC 1461,

welcome to the last edition of the CRC newsletter 2024 and thank you for your contributions! Please continue to keep us updated with news you would like to see published on the [news-section](#) of the home-page or in the quarterly newsletter.

CRC 1461 Fall Retreat and PI General Assembly

The CRC 1461 had their Fall Retreat 2024 in presence on November 14 -15, 2023 for the second time at the Seeburg in Kiel. This time the doctoral researchers and postdocs presented the research of their subproject by themselves or in a team. Most of the very interesting and conclusive talks are available in OLAT. A special online-talk was given by Vincent Herr (from [HERR & SPEER](#)) on the topic of male allyship. In between talks

there was plenty of time for the CRC members to mingle and discuss and to visit the SOP-exhibition.

The retreat was followed by a General Assembly of the PIs of the CRC on November 16 at the Faculty of Engineering. The fruitful meeting resulted in the almost finalized project configuration for the proposal for the second funding period.

Honors, Awards and Publication Highlights

Rainer Adelung, PI of projects C2 and C6, received the DGM Prize 2023 of the German Materials Society. [Read more here.](#)

After months (honestly, years) of hard work the Springer-book “Bio-inspired Information Pathways - From Neuroscience to Neurotronics” was finally published. Thanks goes to all 50+ authors for their contributions. [You can download the book here](#) (or purchase a hardcopy).

The deadline for submissions to our [special issue with EPJB](#) has been extended to **February 28, 2024**. We are looking forward to submissions from all projects and corners of the CRC. Please contact [Philipp Hövel](#) if you plan to submit a manuscript. As a reminder, the aim of the topical issue is to summarize and showcase the latest developments and discussing aspects of

- Neuronal architecture and information processing
- Bio-inspired system technology
- Physical substrates for neuromorphic engineering

Contributions can address the full range of modelling, experiment, and application efforts that advance our understanding of biological signal processing and their relevance for future electronics.

[Here](#) you can find an up-to-date list of the virtual collection.

Since we invite submission from areas such as neuroscience, biology, psychology, physics, electrical engineering, material science, networks science and nonlinear dynamics, but also other disciplines addressing the above-mentioned aspects, please help spreading the word to colleagues around the world!



Participants of the CRC 1461 Fall Retreat 2024

CRC 1461 - Publication Performance	
Journal papers (peer-reviewed)	63
Conference papers (peer-reviewed)	18
Conference contributions	57
Books 😊	1
Total	139

News from the iRTG

The IPN-branch of the Science Outreach Project (SOP) offered their first **ATM** on Sep 14. The participants gained insights in the laboratory program for school students and had the opportunity to offer their own suggestions to optimize the planned experiments.

This year the first **International Research Stays** took place: four doctoral researchers of the CRC travelled to three different countries for a duration of 1 - 3 months to spend their time with international experts of their field, learn new methods, establish collaborations and experience life in another country.

You can read about Pia Pooker's IRS at the Trinity College in Ireland in newsletter # 15.

Blessing Adejube and Niklas Lundt both travelled to New Zealand: Blessing to University of Canterbury to work with Simon Brown and Niklas to Victoria University in Wellington to work with Petro Feketa.

Christopher Noack spent one month in Austria at Medical University of Vienna.

Members of the CRC

The CRC welcomes Tobias Gergs as a new postdoc with Jan Trieschmann in project C5.

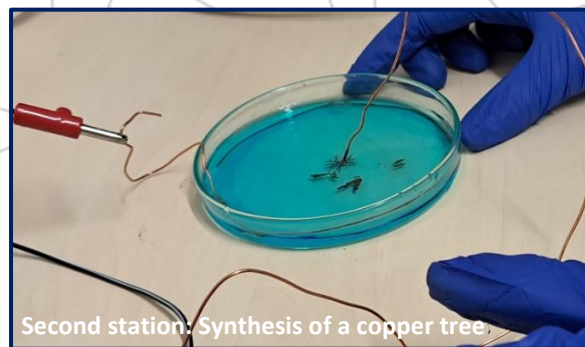
On September 5, 2023 Finn Zahari, associated member of the CRC, successfully defended his PhD-thesis entitled "Analog and Digital Memristive Devices Based on Hafnium Oxide for Neuromorphic Applications" at the Faculty of Engineering of Kiel University. PhD-supervisor Hermann Kohlstedt and the other members of the examination board, Franz Faupel, Lorenz Kienle und Jan Trieschmann, awarded the highest distinction "summa sum laude" to the dissertation.

Doctoral researcher Rohit Gupta left the CRC to start a job in the real world 😊 He is the first member of the iRTG to complete the graduate training program.

More News ...

The Big Move - The chairs of Nanoelectronics (Hermann's group), Integrated Systems and Photonics (Martina's group), Theoretical Electrical Engineering (Jan T.'s group) and Bio-inspired Computation (Jan S.'s group) moved to a brand-new building at the Faculty of Engineering in Kiel.

Neuro Lab - On September 28 the first school class visited the student lab, neuro:click! Twenty-three students (grade 12) from the Käthe-Kollwitz-Gymnasium in Zwickau spent one day experimenting in the "Kieler Forschungswerkstatt". After an introduction talk and a safety briefing, three experimental stations were provided for the students. The first station included experiments, simulations, AR-posters and information on *Hydra*; the second station contained the syntheses of a copper tree (Fig. below) and the third station included a simplified reproduction of the information pathway in a nervous system using an UV-sensor and a circuit board.



Second station: Synthesis of a copper tree.

The "**Writing Group**" formed on November 28, 2023 to work on the pre-proposal and the proposal for the second funding period of CRC 1461. More information will follow.

Upcoming Events

Dec. 12, 2023 iRTG General Assembly (online)

Christmas holidays - The CRC office is closed from Dec. 21, 2023 - Jan 7, 2024!

Feb 02, 2024 Panel discussion: Beyond the Glass Ceiling: Breaking Barriers and Building Equality (Seeburg Kiel, more information will follow)

Feb 24, 2023 Submission deadline special issue with EPJB

Mar 17-22, 2024 Annual Conference of the DPG and DPG Spring Meeting (Berlin)

Sep. 4-5, 2024 EVALUATION OF THE CRC 1461 (CAU Kiel)



We wish you Merry Christmas and a Happy New Year 2024!
Enjoy your holidays!

Cheers, Sonja, Leonie and Hermann

1461