

WE MAKE MATERIALS FIT FOR THE FUTURE!

Fraunhofer Institute for Applied Polymer Research IAP

Potsdam Science Park

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Fraunhofer IAP - News

We make materials fit for the future!



Dear reader,

For us, "we make materials fit for the future" means: At Fraunhofer IAP, we develop **practical solutions for your success**. Especially for small and medium-sized enterprises. With our innovations, you can optimize your manufacturing and processing procedures, become more efficient or obtain tailor-made materials for your product idea. Together with you, we enrich the economy through diversity and competition or we contribute to the development of regions. For example, through local value creation and investment. Research and development are a particularly great success for us when they reach market maturity.

The most recent example of this are our new **lubricants for wire drawing**. Together with four industrial partners, we have developed a new class of polymer lubricants that make the process of cold forming metals into wires significantly more environmentally friendly and economical. The lubricant class called HPPL (High Performance Polymer Lubricant) reduces friction, energy loss and tool wear. At the same time, it minimizes the effort required for pre-treatment and can be easily removed afterwards. The first wires have already been sold and are being used successfully. Find out more <u>here</u>.

Fraunhofer IAP stands both for successful applied research and for an open-minded Brandenburg for diversity, tolerance and democracy. "We are convinced that science and research can only thrive in a diverse democratic society and in international exchange. Both hold enormous innovative and creative potential", emphasizes Institute Director **Professor Alexander Böker** in his statement on the **Brandenburg takes a stand** initiative. <u>Continue reading</u>.

Discover more exciting news from research and development and media tips in this newsletter.

You can also find out which **trade fairs and events** our team will be welcoming you to. We wish you many insights. Enjoy reading this newsletter.

Your team at Fraunhofer IAP

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NEWS FROM RESEARCH AND DEVELOPMENT

Industry and Technology Innovative lubricants revolutionize the cold forming of metals



A new class of polymer-based lubricants makes the cold forming of metals into wires significantly more environmentally friendly and economical. The innovative lubricants are already being used successfully by industry. The Federal Ministry of Education and Research (BMBF) funded the development with around 680 thousand euros.

MORE INFO

Health and Quality of Life Inspired by mussels: printable adhesives for tissues and bones



Researchers from the Fraunhofer Institutes IAP and IGB, together with the Fraunhofer USA CMI, have developed a tissue adhesive that adheres to bone or tissue. The biomimetic antimicrobial material is printable – even on curved and uneven surfaces.

MORE INFO

Energy Transition and Mobility Green hydrogen as a sustainable energy source in Chile



From sunlight to green fuel. The Power-to-MEDME project in Chile is setting new standards for the energy transition. We are part of it. In order to provide green hydrogen for the synthesis of methanol and dimethyl ether, our research group Nanoscale energy and structure materials is developing iridium-reduced catalysts for cost-effective water electrolysis.

MORE INFO

ON OUR OWN ACCOUNT

Prof. Alexander Böker on the initiative "Brandenburg takes a stand!" For diversity, tolerance and democracy!



"The Fraunhofer IAP stands for an open-minded Brandenburg – for diversity, tolerance and democracy! We send a clear signal for an open, inclusive and fair society in which there is room for all people – regardless of their origin, skin color or beliefs."

READ MORE

MEDIA TIPS

Fraunhofer magazine

The future of biomedicine is sweet!



Sugar is more than just a sweet treat. "Life would not exist without sugar", explains Prof. Ruben R. Rosencrantz. He uses glycans – complex sugar molecules that are found on almost every cell. The potential applications are endless: especially in the diagnosis and treatment of diseases.

MORE INFO

Fraunhofer magazine

Energy transition: PFAS-free membranes for electrolyzers



Dr. Taybet Bilkay-Troni and her team have developed a novel PFAS-free polymer for anion-conducting membranes. This means that hydrogen can be produced in a more environmentally friendly way in the future. In this way, we are making an important contribution to the success of the energy transition and greater sustainability.

MORE INFO

YOUR TEAM AT FRAUNHOFER IAP

Ralf Peter Jakisch is the new Head of Administration

On February 1, 2024, we welcomed Ralf Peter Jakisch to the Fraunhofer IAP. As Head of Administration, he complements the management team of the institute. Previously, Sylvana Blaschej headed the administration on an acting basis.



Dipl.-Ing. Ralf Peter Jakisch

Head of Administration

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New heads of working groups at the research division PYCO

Dr. Mathias Köhler and Dr.-Ing. Dustin Nielow take on new tasks at the Polymeric Materials and Composites PYCO research division. Mathias Köhler heads the Semi-finished Components working group. The team develops new and customized semi-finished products for polymer-based lightweight construction systems. The focus is on the production of prepregs on scalable production systems as well as the development and process-related evaluation of core materials and compression molding compounds. Mathias Köhler was previously head of the Structural Testing and Analytics working group. Dustin Nielow is now taking over this position. His team analyzes the thermal and mechanical properties of polymer materials, semi-finished products and components. They also carry out investigations into operational capability.

TO THE WEBSITE



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Events

Berlin, Germany | April 16 - 17, 2024 German Biotech Days 2024

> "Innovations for a sustainable future" is the motto, experts from industry, research, politics and society will discuss the latest developments and challenges in biotechnology.



Fraunhofer IAP presents its services for scale-up at booth no. 15 in the bcc Berlin Congress Center.

MORE ABOUT BIOTECHNOLOGY AT FRAUNHOFER IAP

Hannover, Germany | April 22 - 26, 2024 Hannover Messe



Fraunhofer IAP will be presenting its lightweight construction expertise at the Hannover Messe. Visit the Fraunhofer MATERIALS Group at stand B24 in hall 2.

MORE INFO

Potsdam, Germany | May 4, 2024 Potsdam Science Day



The Potsdam Science Day will take place this year on May 4 on the Telegrafenberg. Visit us at the research camp! From 1 p.m. to 7 p.m., we will be presenting the world of polymer science. There will be exciting hands-on experiments for children. Admission is free.

Berlin, Germany | June 5 - 9, 2024 ILA Berlin 2024



The research division Polymeric Materials and Composites PYCO will be showcasing its latest developments at the Fraunhofer joint Aviation stand at ILA Berlin. We look forward to your visit.

MORE ABOUT THE PYCO RESEARCH DIVISION

We make materials fit for the future!

Creative solutions are the key to overcoming the challenges of the present and the future - whether they be climate change, pandemics, the energy transition, structural change or new mobility concepts. Fraunhofer IAP tackles these challenges through innovative materials, processes and technologies, targeting the entire value chain - from the idea to the customized prototype.

Our subject areas:

- BIOECONOMY and SUSTAINABILITY
- ENERGY TRANSITION and MOBILITY
- HEALTH and QUALITY of LIFE
- INDUSTRY and TECHNOLOGY

TO THE HOMEPAGE



Potsdam Sciene Park

Fraunhofer IAP is part of the largest science location in the state of Brandenburg: the Potsdam Science Park. Just 30 minutes from the center of Berlin, more than 12,500 people research, work and study in the fields of biotechnology, medical technology, optics, geosciences, astrophysics and gravitational physics. On an area of more than 50 hectares, the innovation- and founder-friendly park continues to offer office and laboratory space for startups and ready-to-build plots for small and medium-sized companies. We live science!

TO THE HOMEPAGE OF THE POTSDAM SCIENCE PARK

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Fraunhofer is Europe's largest application-oriented research organization. Our research efforts are geared

entirely to people's needs: health, security, communication, energy and the environment. As a result, the work undertaken by our researchers and developers has a significant impact on people's lives. We are creative. We shape technology. We design products. We improve methods and techniques. We open up new vistas. In short, we forge the future.

Fraunhofer Institute for Applied Polymer Research IAP

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VAT Identification Number in accordance with §27 a VAT Tax Act: DE 129515865

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