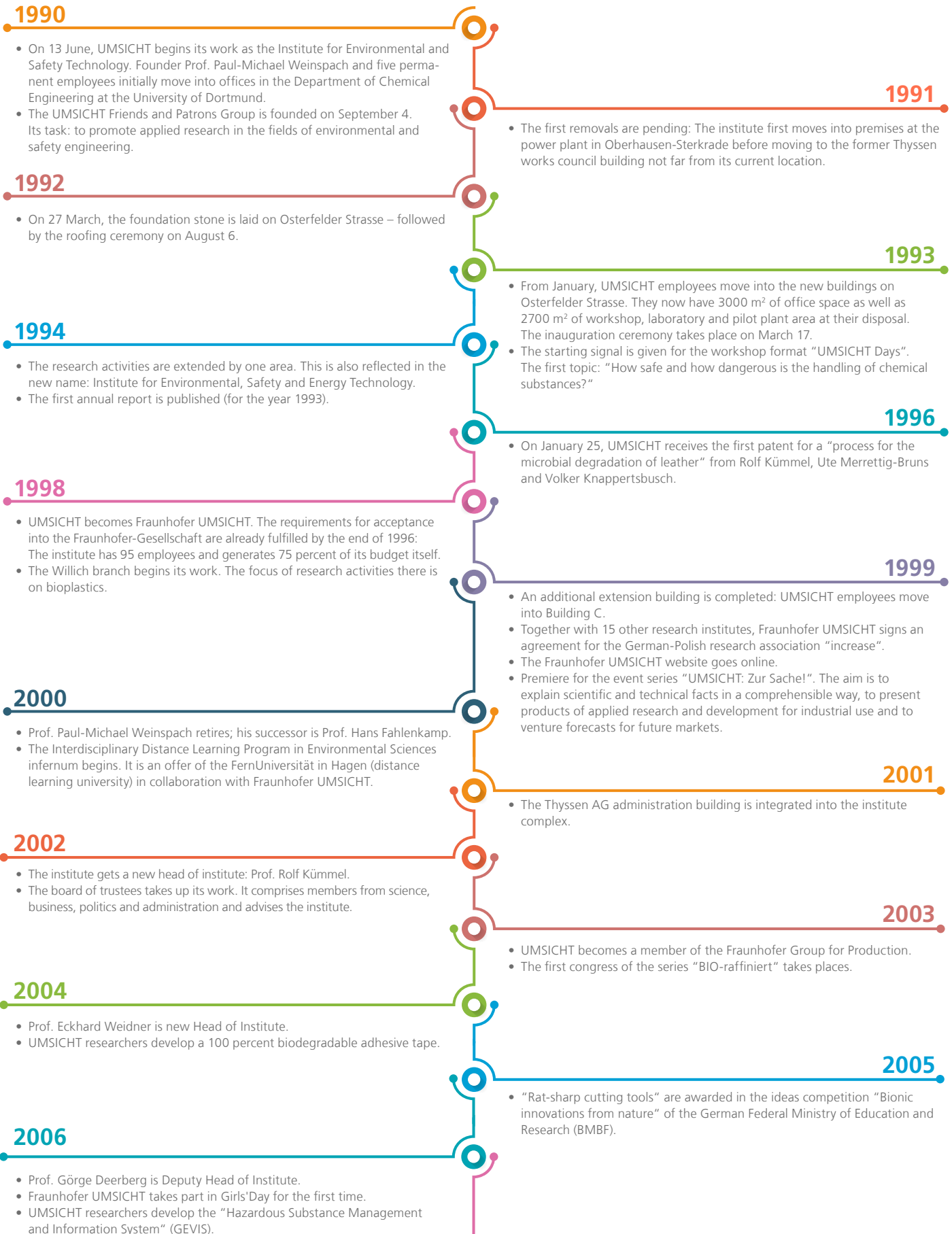


35 YEARS OF FRAUNHOFER UMSICHT – MILESTONES

From a think tank to a pioneer on the road to sustainability

A lot can happen in 35 years. A look at the history of Fraunhofer UMSICHT shows this. An example: At the time of its founding, five permanent employees worked for the institute; currently, more than 600 people work in Oberhausen, Sulzbach-Rosenberg and Willich. We take a look at some of the milestones in our history.



2007

- On behalf of the Federal Environment Agency, Fraunhofer UMSICHT develops an evaluation scheme that makes cost-benefit analyses in waste management comparable.
- The first "UMSICHT debate" takes place. The idea behind the event: Citizens are invited to short lectures and discussions on current topics.
- The city of Oberhausen awards Fraunhofer UMSICHT the title "Exemplary family-friendly company". Awards in 2012 and 2014 followed.
- The first sustainability report for 2008 is published.

2009

- The fourth building in the institute complex is inaugurated on April 30. The former steelworks building becomes building D.
- At UMSICHT, the first co-child office of the Fraunhofer-Gesellschaft is inaugurated.
- The institute receives the "E.ON Research Award" and takes third place in the "BEST EXCELLENCE Business Plan Competition".

2011

- In cooperation with the Theater Oberhausen, Fraunhofer UMSICHT organizes an evening program on the topics "Knives" and "Carbon Dioxide".
- The first issue of the employee magazine for:um is published.
- Helmut Geihlsler, Manfred Renner and Eckhard Weidner are awarded the "Nicolaus Augustus Otto Prize" for their developments for environmentally friendly tanning.
- The institute is named an excellent location in the "365 Landmarks in the Land of Ideas" competition for "Odor-induced recognition of critical cracks".
- The "Biogas Innovation Prize" of German agriculture is awarded to Fraunhofer UMSICHT.
- The Interdisciplinary Distance Learning Program in Environmental Sciences infernum is awarded as a UN Decade Project by the UNESCO Commission.

2013

- The concept for energy generation from residual materials is awarded the British "Climate Week Award" in the category "Best Breakthrough Technology".
- The UMSICHT team wins the "Ferchau-Innovationspreis" for the development of an innovative tanning process.
- Fraunhofer UMSICHT is awarded the "Communication Prize of the Fraunhofer-Gesellschaft" for the "Annual report for readers in a hurry".

2015

- Fraunhofer UMSICHT has its own photonics laboratory.
- The lead project "Electricity as raw material" is launched.
- The institute becomes "National information center on sustainable plastics".
- The research association "Sustainable recycling strategies for products and waste from biobased plastics" starts its work.
- With Maps4Use, a map atlas on topics related to the energy and raw material transition is created.

2017

- The University of Birmingham and Fraunhofer UMSICHT are launching a joint research platform.
- Researchers from Fraunhofer UMSICHT develop a 3,2 m² bipolar plate. It enables the construction of large-scale redox flow batteries.
- The first UMSICHT electromobile is a BMW i3.
- Fraunhofer UMSICHT is included in the statewide exhibition by KlimaExpo.NRW as a pioneer in climate protection.
- The first issue of the series "UMSICHT discourse" is published. Title: "Carbon Dioxide, Biomass and Renewable Power – Resources of a New Carbon Economy".
- Manfred Renner receives the European Innovation Award EARTO for a new leather tanning process.
- Leandra Hamann is awarded the Kärcher sponsorship prize for her thesis "Bionic filters for the separation of microplastics".

2019

- The Carbon2Chem[®] laboratory is inaugurated. In addition, a pilot plant for the production of methanol from steel mill gases goes into operation.
- The starting signal is given for the "Industrial Innovation Excellence Cluster" (SPIN).
- Prof. Ulf-Peter Apfel is awarded the Lecturer Award of the Chemical Industry Funds.
- The AltmarktGARTEN on the roof of the Oberhausen job center is opened.
- A worldwide unique plant for the investigation of biogenic sulphuric acid corrosion goes into operation.

2008

- As part of the exhibition series "46D Art and Culture at Fraunhofer UMSICHT", the institute offers artists the opportunity to exhibit their works for the first time.

2010

- The UMSICHT Friends and Patrons Group awards the UMSICHT Science Award for the first time. It goes to Joachim Mahrholdt (category journalism), Dr. Jan Lublinski (category journalism) and Dr. Claudio Cinquemani (category science).

2012

- NRW Science Minister Svenja Schulze honors Fraunhofer UMSICHT as a "Place of Progress".
- The biomass pilot plant in Building G is inaugurated – parallel to the launch of the Fraunhofer Bioenergy Innovation Cluster.
- The former ATZ research institute in the Upper Palatinate becomes the institute branch Sulzbach-Rosenberg.

2014

- The first participatory citizens' festival "Innovative Citizen" takes place.
- The institute receives the VDI prize for securing raw materials for domestic industry.
- The distance learning course "infernum" is awarded the title of "Place of Progress" by the Ministry of Innovation, Science and Research of North Rhine-Westphalia.
- With the demonstration plant for the combustion and fermentation of spent grains, Fraunhofer UMSICHT and its project partners are among the prize winners of the competition "Excellent Places in the Land of Ideas".

2016

- North Rhine-Westphalia receives three new Fraunhofer Performance Centers. One of them is DYNAFLEX[®].
- Work begins on the joint research project Carbon2Chem[®].

2018

- Fraunhofer UMSICHT and Turbonik GmbH receive the steel innovation prize for their micro steam turbine.
- The "UMSICHT eye" is removed from the roof of building A.
- The Fraunhofer Cluster of Excellence Circular Plastics Economy CCPE starts its works.

2020

- The updated vision presents the institute as "pioneering the way to a sustainable world" for the coming years. Fraunhofer UMSICHT develops climate-neutral energy systems, resource-efficient processes and circular products. In doing so, the institute stands for research and development with responsibility.
- Since March 17, employees have been working mainly at home due to the corona pandemic.

- UMSICHT researchers have completely redesigned the "heart" of a redox flow battery – the stack – and were thus able to massively reduce the use of materials and the costs of production. They received the Joseph von Fraunhofer Prize for this achievement.
- The "HydroB" hydrogen campus has been launched in Oberhausen. The aim is that green hydrogen is to be used in industry, trade and households as quickly as possible.
- Launch of DYNERGY – a part-time certificate course that provides interdisciplinary expertise in renewable energies, energy systems integration and system dynamics.

- Fraunhofer UMSICHT and PROCERAM are awarded the Joseph von Fraunhofer Prize for the development of a sustainable and cost-effective mineral insulation material.
- In the joint research project Carbon2Chem®, steel mill gases are processed into methanol, among other things. The corresponding pilot plant is moving directly to the steelworks in Duisburg.
- Kick-off for CIRCONOMY® Hubs: The Germany-wide networks are working on systemic and technical solutions to put circular economy into practice.
- Fraunhofer UMSICHT has revolutionized the production process of the high-performance insulating material aerogel and received the Innovation Award of the European Association for Research and Technology Organization EARTO.

- Prof. Manfred Renner and Prof. Christian Doetsch take over the management of Fraunhofer UMSICHT in August 2022. They succeed Prof. Eckhard Weidner, who retires.
- In the joint research project Carbon2Chem®, researchers have succeeded in demonstrating the production of methanol based on hydrogen and gases that are similar in composition to steel mill gases from steel production.
- Researchers from Fraunhofer UMSICHT and Volterion GmbH & Co. KG receive the Innovation Award for Climate and Environment (IKU) for their project "Cost-effective stationary, scalable redox flow batteries and their production process".
- A demonstration plant is inaugurated on the site of a wastewater treatment plant in Dinslaken as part of the joint research project SUSKULT: Wastewater is converted into liquid fertilizer, which is used to cultivate vegetables and lettuce, for example.
- The ground-breaking ceremony marks the start of the construction of Europe's first climate-neutral hinterland terminal in the Port of Duisburg. To ensure a sustainable supply, the "enerPort II" project creates an energy system that combines renewable energies, energy storage and consumers.

- Our Head of Institute Prof. Manfred Renner receives the North Rhine-Westphalia Innovation Award for a new production process for aerogels that is suitable for the mass market.
- At the end of the 2nd funding phase of the joint research project Carbon2Chem®, results from eight years of research work are presented at the 7th Conference on Sustainable Chemical Conversion in Industry – including methods and tools for the development and evaluation of CCU process concepts.
- Start for AmmonVektor: The Fraunhofer flagship project focuses on ammonia as an energy vector that can be transported in its liquid form easily and without great energy input.
- Our Head of Institute Prof. Christian Doetsch and Prof. Andreas Bett (Director of the Fraunhofer Institute for Solar Energy Systems ISE) take office as spokespersons of the Fraunhofer Energy Alliance.
- The Duisburg Gateway Terminal is opened in the presence of NRW minister-president Hendrik Wüst. Its climate-neutral operation is being tested in the "enerPort II" research project.
- The ALTMARKTgarten on the roof of the Oberhausen Jobcenter celebrates its fifth anniversary.