

ARTIFICIAL VISION 2026

THE INTERNATIONAL
SYMPOSIUM
ON VISUAL
PROSTHETICS

Friday, 11th – Saturday, 12th December, 2026
Aachen, Germany

INVITATION AND CALL FOR ABSTRACTS

Deadline for the receipt of abstracts
Monday, 16th September, 2026

RWTHAACHEN
UNIVERSITY

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 **JÜLICH**
FORSCHUNGSZENTRUM

RWTH Aachen University,
Medical Faculty
www.artificial-vision.org

Dear Colleagues and Friends,

it is my great honor to cordially invite you to the 2026 Artificial Vision Conference in Aachen, Germany. My colleagues from RWTH Aachen University, from the Research Center in Jülich, and from the University Duisburg-Essen and I are looking forward to a very interesting event, bringing together researchers, scientists, and clinicians dedicated to restore vision in blind patients from many disciplines and many countries around the world.

The development, the fabrication, the marketing, and the survival of a functioning visual neuroprosthesis providing useful vision for a blind subject is still a challenge. It is absolutely amazing, that despite all the drawbacks and difficulties, many groups worldwide are still working very hard on smart solutions. In the last years significant progress has been made in understanding the difficulties of earlier implants and improving the concepts. New materials are evaluated and tested, concepts for the integration of a large number of electrodes emerged and were tested, bi-directional systems which can not only stimulate but also record from the target tissue to modulate stimulus paradigms have been designed and are under evaluation. In the same time our understanding of the biological processes underlying degeneration and how they affect electrical stimulation improved. The clinical trial of the PRIMA implant carried out in patients with age-related macular degeneration enlarged the field of indications for neuroprosthetic devices with a lot of chances for the whole field. Machine learning, artificial intelligence, and a further miniaturization of electronic hardware is already influencing the Artificial Vision concepts.

Interdisciplinarity is the basis of successful research and development in our field. The Artificial Vision conference is a truly interdisciplinary conference and it is also a chance for young researchers to connect to others in this community.

What's new in this year: A poster session will be held on Saturday morning, together with a strong coffee. Gislin Dagnelie will give a keynote lecture on Vision Restauration for the blind. The Artificial Vision meeting will be held simultaneously with the Aachen Cornea Conference. That will give us the opportunity to share resources. And, the conference will take place within the iconic hospital building of the University Clinic in Aachen. Be surprised!

I am very much looking forward seeing you in Aachen.



On behalf of the organizing committee,
Cordially yours,

A stylized, handwritten signature in blue ink, consisting of a large 'P' and a cursive 'W'.

Dr. Peter Walter
Professor of Ophthalmology
RWTH Aachen University

The goal of the International Symposium on Visual Prosthetics - Artificial Vision 2026 - is to provide a platform for researchers and clinicians to meet, to present, and to discuss the latest advances and achievements in the field of providing vision with electronic implants to the blind. The symposium will cover all aspects of Artificial Vision such as

- mechanisms of degeneration in the visual system
- principles of electrical stimulation in the visual system
- interfaces to the visual system: electrodes
- stimulation and recording devices: complex implants, systems, algorithms
- preclinical tests: biocompatibility and proof of concept studies
- clinical experiences: patient selection, surgery, and functional outcomes
- patients expectations, rehabilitation aspects
- new ideas and visions

TRAVEL GRANTS FOR YOUNG RESEARCHERS

We especially encourage young researchers to come to the Aachen Meeting and to present your own work and to discuss all aspects of visual prosthetics with colleagues from many different disciplines and countries. To make things easier we will provide travel grants of up to 2,000 EUR for young researchers. Although it is difficult or in other words impossible to define a threshold for being young, a poorly artificial definition and limit has to be set. We feel that usually researchers younger than 40 years of age need more financial support than the older ones. We may be wrong but somehow we need a definition.

To apply for a travel grant please send a CV and a motivation letter to:

pwalter@ukaachen.de

- Date** Friday, December 11th, 2026, 10:30h - 18:30h
Saturday, December 12th, 2026, 09:30h - 16:00h
- Venue** **Department of Ophthalmology, University Hospital Aachen
RWTH Aachen University, Medical Faculty**
Peterstraße. 66, 52062 Aachen, Germany
- Homepage and
Online Registration** www.artificial-vision.org
- Scientific
programme
and further
information** **Prof. Dr. Peter Walter**
Department of Ophthalmology, University Hospital Aachen
RWTH Aachen University, Medical Faculty
Pauwelsstraße 30, 52074 Aachen, Germany
Phone: +49 (0) 2 41 / 8 08-81 91, Fax: +49 (0) 2 41 / 8 08-24 08
E-Mail: pwalter@ukaachen.de
- Organization** **Congress-Organisation Gerling GmbH**
Werftstraße 23, 40549 Düsseldorf, Germany
Phone: +49 (0) 2 11 / 59 22 44, Fax: +49 (0) 2 11 / 59 35 60
E-Mail: info@congresse.de, Homepage: www.congresse.de
- Official Language** English
- Hotel Booking** See hotel on the online registration
(www.artificial-vision.org)

ATTENDANCE FEE

Registration	Until 1 st November	From 2 nd November	On site
International symposium attendance fee	EUR 100,–	EUR 120,–	EUR 140,–
Reduced rate for PhD students and resident doctors*	EUR 80,–	EUR 100,–	EUR 120,–
Reduced rate for Technical Assistants, students and unemployed	EUR 70,–	EUR 90,–	EUR 100,–
conference dinner	EUR 60,–	EUR 60,–	EUR 60,–

*PhD Students and residents must supply a letter of verification as proof of training. The letter has to be sent to the congress organization prior to the meeting.

The attendance fee covers the costs for coffee breaks and lunch,
Incl. VAT and excl. foreign transfer fees

- Payment** by bank transfer (bank details are quoted on your confirmation and invoice. Please do not transfer money without noting your invoice number!), PayPal or by credit card: VISA, AMERICAN EXPRESS, MASTERCARD

Important notes for participants

The attendance fee covers the costs for coffee breaks, lunch, and the conference dinner. If you register late or on-site we cannot guarantee for lunch and participation in the social program.

You are encouraged to apply for the meeting either online, by mail or by fax.

Cancellation for the symposium has to be made via e-mail or via fax (+49 (0) 2 11 / 59 35 60) by December 1st, 2026. In any case an administration fee of EUR 25,- has to be paid. After this date no refunds can be made.

Changes, errors and misprints excepted.

CME-POINTS

For the german participants: Bitte geben Sie ihre EF-Nummer bei der Onlineanmeldung an, damit wir die Punkte an die Ärztekammer melden können.

An equivalent Certificate of Attendance will be given to you upon on-site registration.

The CME credits for the symposium have been applied by Ärztekammer Nordrhein

Hotel Recommendations**Parkhotel Quellenhof**

Monheimsallee 52, 52062 Aachen | www.parkhotel-quellenhof.de

Hotel Novotel Aachen City

Peterstraße 66, 52062 Aachen | <https://all.accor.com/a/de.html>

Innside by Melia

Sandkaulstraße 20, 52062 Aachen | <https://www.melia.com/de/hotels/deutschland/aachen>

Hampton by Hilton Aachen Tivoli

Merowingerstraße 2, 52070 Aachen

<https://www.hilton.com/de/hotels/aahhxxh-hampton-aachen-tivoli/>

Best Western Plus Hotel Regence

Peterstraße 71, 52062 Aachen | www.bestwestern.de

Aquis Grana City Hotel

Büchel 32, 52062 Aachen | <https://www.hotel-aquis-grana.de/de/>

Hotel am Marschiertor

Wallstraße 1-7, 52064 Aachen | <https://hotelammarschierlor.de/>

Special Notice: Aachener Hornhauttag

Please note that the Aachener Hornhauttag will take place simultaneously with the Artificial Vision. The sessions of the Aachener Hornhauttag will be held in German with English slides. Participation in these lectures is included in the registration fee for the Artificial Vision.

Abstract submission

Please submit your abstract online:
www.artificial-vision.org

Deadline for abstract submission:
Monday, 16th September, 2026

Layout

Your abstract must not exceed 2000 letters in total (including blanks). Start with the title, authors, and affiliation(s) followed by a blank line followed by a standard abstract structure (Objective, Materials & Methods, Results, Discussion). In case of external or institutional funding please acknowledge the sponsor.

Example**The thresholds for retinal stimulation in blind RP subjects.**

Franz Reuter, Julia Sachtweh, Reinhard Meier

Department of Ophthalmology, Island City, Elsewhere

Objective. To describe the stimulation thresholds for subretinal stimulation using platinum red electrodes embedded into new insulation materials.

Materials and Methods. In six blind RP patients a new subretinal device was implanted and cortical potentials were recorded upon electrical retinal stimulation. Cortical potentials were determined using a new response isolation algorithm developed by Meier et al. The cortical responses were correlated with stimulus parameters.

Results. In all six patients the implantation was done successfully. All patients had visual percepts. In all patients cortical potentials can be recorded and the stimulus duration necessary to obtain a response was 67 ms cathodic first with a mean amplitude of 435 μ V.

Discussion. The stimulation at threshold was well within the non-toxic range for tissue stimulation and no patient had any adverse events.

Acknowledgment. This work was supported by ABC grant 874987.

INFORMATION FOR SPEAKERS**Presentations**

15 min presentation + 5 min discussion

Projection

Microsoft PowerPoint presentation on CD-R/DVD/flash drive or own notebook.

Video codec: Quicktime 7.7.9®, Windows Media Player 12.0®

International Airports. High Speed Train System

From Frankfurt: Take the ICE High Speed train from Frankfurt Airport Station to Cologne Main Station (approx. 1h) and continue to Aachen Main Station (approx. 45-60 min).

From Düsseldorf: Take the train from Düsseldorf Airport Station to Düsseldorf Main Station (approx. 10 min) and then continue to Aachen Main Station (approx. 1.5 h).

From Cologne. Take the train from Cologne Airport Station to Cologne Main Station (approx. 15 min) and then continue to Aachen Main Station (approx. 45 - 60 min).

Several bus lines are connecting Aachen Main Station with the University Hospital.

By car.

From Frankfurt Airport you can drive highway A3 to Cologne and then change to A4 direction to Aachen. At AK Aachen please change to A544 direction Aachen Europaplatz (approx. 3 h).

From Düsseldorf Airport. A52 → A61 → A44. Then A544 direction Europaplatz. (approx. 95 km, 1 h)

From Cologne Airport. Take the A59, then change to A599 followed by A4 towards Aachen. Then A544 direction Europaplatz. (approx. 82 km, 1 h)



Meeting address

**Department of
Ophthalmology, University
Hospital Aachen
RWTH Aachen University,
Medical Faculty**
Peterstraße. 66, 52062
Aachen, Germany

Aachen and the EUREGIO area

The city of Aachen is the most western city in Germany close to the borders of The Netherlands and Belgium. Aachen has approx. 250,000 inhabitants and the University and the University Hospital are the largest employer here in Aachen. Aachen has a long history and you can still see significant witnesses of a time long ago, such as the cathedral with its beautiful and mystic octagon and the astonishing gothic city hall. But Aachen with its important historic phase of Charlemagne today is a young and vivid town with its university and the many students from various countries in the world. RWTH Aachen University is one of the leading technical universities in Europe with a strong focus on mechanical and electrical engineering but also on information technology and natural sciences. Aachen forms a cultural, industrial and also scientific cross border triangle together with Liege in Belgium and Maastricht in The Netherlands forming the EUREGIO area. Many cooperations exist between the institutions within this area.

The Artificial Vision Meeting is set to the mid of December. Although the weather might not be perfect – in fact it could be cold and maybe rainy – it is worth to visit the cosy Christmas Market in the city. You should try “Printen”, a local biscuit speciality with a high “addiction” potential.

Aachen is also not far away from Cologne with its huge cathedral and its several concert halls and the province capital Düsseldorf with its important art and fashion scene. You can also reach the European capitals Paris and Brussels by high speed train within a few hours.

There are also many more reasons to come and visit Aachen and we are looking forward to see you.