

ALPAO announces a major industrial order in ophthalmology, confirming its position as world leader in Adaptive Optics

Grenoble (France) – October 5, 2023 – ALPAO confirms its position as world leader in the design and manufacture of Adaptive Optics components and systems with the announcement of a significant order for the supply of deformable mirrors to be used in retinal imaging systems.



ALPAO, world leader in Adaptive Optics, has signed a contract to supply a European customer with more than a dozen deformable mirrors, which will then be integrated into advanced ophthalmic imaging systems.

One of the main problems of retinal imaging is the numerous optical aberrations introduced by the passage of light through the eye. To overcome this challenge, the MCAO (Multi Conjugate Adaptive Optics) system was developed from the first experimental evaluation of retinal imaging, using a series of cascading deformable mirrors to expand the corrected field of view. Thanks to the use of adaptive optics, and in particular high amplitude deformable mirrors, the system shall be able to obtain images with a resolution of the order of a few micrometers, i.e. around 8 to 10 times greater than with conventional instruments. These devices offer highly promising results, such as early diagnosis of symptoms of diseases like diabetic retinopathy or glaucoma, or end-of-treatment monitoring of medical treatments.

“By removing aberrations, Adaptive Optics makes the invisible visible, thus preventing rather than curing. This technology is revolutionizing research in the field of vision science. We are delighted to be able to contribute to this paradigm shift by providing high-performance, easy-to-use and innovative products.” said Piero BRUNO, Sales & Marketing Director at ALPAO. *“Thanks to the performance of our deformable mirrors, our client's retinal imaging systems will be able to visualize the smallest details with unrivaled precision to deliver a better diagnosis to the patient as quickly as possible.”*

About ALPAO

The aim of ALPAO, leader in optical wavefront control, is to revolutionize optics by removing aberrations. ALPAO has been designing and marketing a full range of adaptive optical products for research and industry since 2008. ALPAO markets deformable mirrors, wavefront sensors and software. ALPAO products are tailor-made for various applications such as astronomy, ophthalmology, microscopy, wireless optical communications and laser technologies.

With over 10 years of experience in adaptive optics, ALPAO deformable mirrors offer large strokes, high dynamic motion, high resolution images and very good optical quality. ALPAO is an international company with customers over 4 continents in more than 20 countries. Over 90% of its turnover comes from export. ALPAO is also involved in a specific French program to build with other companies, from various economic fields, a business climate convention.

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