Topics

HORIBA Scientific Launches HORIBA Jobin Yvon Bicentenary Marking 200 Years of Optical Innovation and Excellence (1819-2019) Sharing Passion and Light I 200 Years of Optical Innovation

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Auguste-Jean Fresnel 1788-1827



Jean-Baptiste Francois Soleil 1798-1878



Cordouan lighthouse tenth-tallest "traditional lighthouse" in the world: 1611

HORIBA Scientific, is celebrating a unique milestone this year marking the 200th anniversary of Jobin Yvon, the legendary optics firm founded in 1819 by Jean-Baptiste Francois Soleil, today HORIBA France. The bicentenary of Jobin Yvon is a time to reflect on its rich scientific heritage, and also the opportunity to tell the story behind some of the most achievements of a fantastic technological, scientific, industrial and human odyssey that has made a singular contribution to scientific progress around the world.

1819 - 1892 Period: The famous Fresnel lens

During the course of the 18th century, European nations built up vast colonial empires trading, different product from America and manufactured products from Europe. This trade fueled the development of Europe's Atlantic seaboard, making the effectiveness of lighthouses a matter of some importance to safety at sea. In June 1819, François Arago, an astronomer, physicist and man of state, put forward the name of Augustin Fresnel, the great discoverer of the wave theory of light, to France's Lighthouse Commission. Fresnel was subsequently tasked with improving lighthouses in the English Channel and Atlantic. Some months later, he came up with a design for a stepped lens able to produce a much more powerful beam to light the seas. He asked Jean-Baptiste François Soleil, an optical engineer to fabricate this lens. So began an industrial and human adventure. During the 1819-1892 period, the company grow steadily and became very famous in the design of Optical Instruments and the design of optical components dedicated to the evaluation of the light polarization.

1892 - 1996 Period: Jobin Yvon

In 1892, Amédée Jobin, an alumnus of France's Ecole Polytechnique engineering school (1881) and an artillery officer, took over the workshop of Léon Laurent, on the advice of Alfred Cornu, the great physicist famous for his

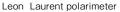


Fresnel lens

work on the diffraction of light. Like his predecessor, Jobin modernized production tooling and worked very closely with the most eminent scientists of his time, such as Alfred Pérot, Charles Fabry and Henri Chrétien. This led to the exhibition at the Universal Exhibition held in Paris in 1900, to the 1st Fabry-Perot Interferometer.

Another alumnus of the Ecole Polytechnique (1903), Amédée Jobin's son-in-law Gustave Yvon, joined the company in 1911. Gustave Yvon focused







Babinet compensator



Soleil-Babinet saccharimeter dedicated to the measurement of

especially on achieving the quality required to transform an artisan workshop into a modern production facility. As result of his efforts, the name Jobin Yvon is still synonymous in the world of optics today with excellence and quality.

In 1923, the company change name and became Jobin Yvon. During this period, the company had a lot of interaction with the most famous physist and opticians of the scientific community. As a results, several instruments have been designed and contributed to the development of science. The most famous instruments are the Absorption and diffusion spectrometer designed by Vernes, Bricq and Gustave Yvon, the Tensiometer of Lecomte de Noüy and the Paul Meunier electrophotometer.

In 1942, Amedee Jobin, 82 years old decided to retire and to stop his collaboration with Gustave YVON. Rene Lacoste, the world famous professionnel tennis player, fascinated by the science decided to join the company as a strong investor. Following this impulse, the company continue to strength its position as a leader in optical instrumentation by designing the first automated instruments including electronic and analog data acquisition, and by starting the production of the 1st European ruled diffraction gratings.

The fast development of the replica process of the ruled diffraction gratings changed completely the world of optical instrumentation. Combined, with the appearance of high sensitivity detectors, a new era for spectroscopy started and led to the design of many instruments used worldwide by the most famous scientists.

In 1969, by developing the first holographic grating which allows to minimize the stray light level and the design of gratings with different size and shape, Jobin Yvon pushed the limit of spectroscopy from Vacuum UV to Infrared. The combination of this development with the appearance of lasers and Multichannel detectors, led Jobin Yvon to the number position in high End spectroscopy by leading the Raman Microscopy and the Fluorescence.

During this period several acquisitions (SPEX, Dilor, SOFIE, Genoptics..), strength the company in its position of a leader in Spectroscopy.

1996: Jobin Yvon becomes part of the HORIBA group

In 1997, The HORIBA Group, a company with a strong technology background in electrochemistry, Infrared and XRay spectroscopy, acquired Jobin Yvon. With this acquisition HORIBA rounded out its range of scientific



Amedee JOBIN



Gustave YVON



Jobin Yvon logo mark



Replica of ruled diffraction gratings

instruments, and become a key player in the continuation of the Jobin Yvon

From Augustin Fresnel to Gérard Mourou, Nobel Prize for Physics in 2018, and many more scientists along the way, HORIBA France has constantly accompanied pioneering scientists to understand and meet their needs, working with them to conceive new optical components and measuring methods for the future.

*: This content is based on our investigation at this publish unless otherwise





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