

Nikon

ABOUT

Since its establishment in 1917, Nikon has been focusing on developing optical technologies to harness the power of light.

With over 100 years expertise in the field, Nikon has always been at the forefront of optical and technological innovation, promoting creativity and trustworthiness as part of the company's global mission statement. The Nikon story began back in 1917 when three Japanese optical manufacturers merged to form a company known as Nippon Kogaku KK ('Japan Optics'), producing precision optical glass. In 1925 the brand expanded to produce the first microscope with a revolving nosepiece and interchangeable objectives - the Joico microscope.

Today Nikon is a world-renowned brand, firmly established as a market leader in optical instrumentation and the only microscope company to manufacture its own glass, ensuring the very finest quality assurance throughout production. Nikon's broad portfolio of microscope systems includes products for the educational, clinical, materials science, and research market as well as the biotech/pharma industry.

Shedding New Light on Healthcare:

The Nikon Microscope Solutions unit belongs to the Nikon Corporation Healthcare Business Unit whose mission is to advance healthcare and provide a better quality of life, through a century of expertise in optical technology. The Healthcare Business Division encompasses microscope systems, ophthalmic, and regenerative medicine solutions.

Ophthalmic solutions include Optos Plc retinal imaging devices and strategic alliances with entities such as Verily Life Science LLC with whom Nikon is developing machine learning-enabled solutions for retinal diagnosis. Following a collaboration agreement with Lonza, Nikon has begun contract cell-manufacturing and development for regenerative medicine with a wholly-owned subsidiary, Nikon CeLL innovation Co., Ltd. To help accelerate development of cell-based therapies, Nikon has also partnered with Yumanity Therapeutics, Inc. to develop high throughput and high content image analysis assays. In addition, Nikon has developed a line of microscope products and customized workflow and software solutions for cell manufacturing.

As a keystone of Nikon's Healthcare Business Division, the Microscope Solutions unit continues to grow and expand. Nikon is focused on developing cutting edge imaging

technologies for the academic research lab and the biotech and pharma industry, as well as providing the clinical and educational communities with leading imaging solutions.

As we embark on the next 100 years, Nikon is committed to accelerating clinical and diagnostic imaging innovation to improve healthcare and provide a better quality of life.

INDUSTRY TALK



Arne Giebeler – Bioscience Sales, Nikon Instruments

Eclipse Ji – The smart high-content Microscope is moving towards confocality

With the Eclipse Ji a research grade microscope becomes an easy-to-operate laboratory instrument. Building on the expertise from market leading Ti2, the concept of the Eclipse Ji is following the needs of customers for more approachable hardware. Novice and sample-centric users will immediately be able to conduct an experiment. The inbuilt camera and neural networks make an autonomous microscope possible: one that self-aligns, adjusts acquisition conditions and performs the analysis on behalf of the researcher. Eliminating the error-prone adjustments of a regular microscope and ensuring consistent data generation. Additionally, the system seamlessly transforms into a research grade inverted microscope for various imaging requirements with a simple click. The JOBS and GA3 modules provide a nocode environment, facilitating the development of custom workflows effortlessly. Furthermore, the Eclipse Ji offers flexibility by supporting the entire range of Nikon Objectives and additional cameras. The latest developments expand the Eclipse Ji now to the world of confocal imaging enabling users to benefit from an easy-access to confocal microscopy. Embedding the AX Pointscanning confocal and the V3-Spinning Disc System to the Eclipse Ji Plattform, confocal high content imaging becomes easy to use and beginner friendly.