

# Leica DM4 P, DM2700 P, DM750 P

Breaking New Ground in Polarizing Microscopy





Leica Design by Christophe Apothélos und Werner Hölbl



# Polarizing microscopes for geosciences and industry

The Leica polarization microscope series is designed for all polarizing examinations: petrography, mineralogy, structure characterization, asbestos analysis, coal analysis (vitinite reflection), and examination of liquid crystals. Leica's polarizing microscopes are ideal for a wide range of applications.

With versatile instrument options, Leica polarizing microscopes are also an ideal match for industrial analysis and quality control, such as analyzing glass, plastics and polymers, textiles and fibers or testing displays in the semiconductor industry. Leica microscopes always provide the most accurate and reliable results.

Specifically designed for your application:

- › [Leica DM4 P for research and development](#)
- › [Leica DM2700 P for routine polarization applications](#)
- › [Leica DM750 P for university and other instructional use](#)

## ACCURATE RESULTS

The Leica polarizing microscopes will show you how easy and reliable microscopy can be. The convenient operating concept allows you to improve your workflow and concentrate entirely on the task at hand.

## ADVANTAGES THAT SPEAK FOR THEMSELVES

- › Ultra-bright LED illumination on all Leica polarization microscopes for constant color temperature at all illumination intensity levels
- › 4fold, 5fold or 6fold centerable nosepiece
- › Different conoscopic equipment that fits customer needs
- › Comprehensive polarization equipment to full fill special tasks
- › Improved polarization contrast to obtain more information from a sample
- › Easy operation for accurate sample evaluation in both orthoscopy and conoscopy
- › Ergonomic design for user comfort
- › Camera and software modules can be integrated for fast, easy, and reproducible documentation

# Leica DM4 P

The Microscope that Guides You

- › Coded 6 fold centerable Nosepiece for calibrated images
- › Coded coded centerable and focusable bertand lens module
- › Build in 1.6x mag changer
- › Automatic diaphragm setting and light intensity
- › Constant Color Intensity by advanced LED technology
- › Condenser lens swings in and out automatically

## THE RIGHT DIAPHRAGM – AUTOMATICALLY

The Leica DM4 P automatically detects which contrast method and objective are being used. This provides valuable consistency and reproducibility for your research. Manual diaphragm setting is no longer required, either in the transmitted light or incident light method. You can concentrate on your work – the Leica DM4 P takes care of the rest for you.

## ALWAYS IN THE RIGHT LIGHT

Light intensity automatically adjusts to the objective. Image brightness remains constant when switching objectives, which eliminates glare. You can always adjust the light intensity manually as well.

All condensers are designed with condenser heads that are perfectly matched optically and automatically swing in and out depending on the objective magnification. They are effective from 1.25x–100x magnification.

## CONSTANT COLOR TEMPERATURE

The Leica DM4 P transmitted and incident light axis are now equipped with state-of-the art high-power LED illumination, contrastable to 100 W halogen lamp. The long lifetime LED with at least 50.000 h is suitable for all incident and transmitted light contrasting methods. By the constant color temperature at all light intensity levels the object appears always at its real color. Permanent white balancing on camera is not longer required.

**1:** Oily strikes of a cholesteric liquid crystal mixture. Crossed polarizers, magnification 10x.  
**2:** Defective texture in planar aligned liquid crystal sample. Crossed polarizers, magnification 10x.  
**3:** Liquid crystal, defective texture in a hybrid aligned cell. Crossed polarizers, magnification 5x.  
 Images courtesy of Dr. Toralf Scharf, Institute of Microtechnology (IMT), University of Neuchâtel, Switzerland



### ALL SETTINGS AT A GLANCE

You can see all microscope settings at a glance on the easy-to-read, integrated display: information such as contrast method, orthoscopic or conoscopic mode, objective, diaphragm setting, and light intensity are clearly indicated. With this feedback, results can easily be reproduced.

### EASILY ASSIGN FUNCTION BUTTONS

You can assign the function buttons to any function you want – no programming skills are required. Six conveniently located buttons behind the focus knobs provide fast and easy access to the functions you use most.

### PERFECT INTERACTION OF ALL FUNCTIONS

The interaction between the display and coding of the individual modules allows the microscope to guide your work. With just one look at the display, all relevant information is at your fingertips. For example, the display indicates when to swing the conoscopy module into or out of the beam path. You have the ability to adjust the light and diaphragm values to obtain the best conoscopic image at any time.

