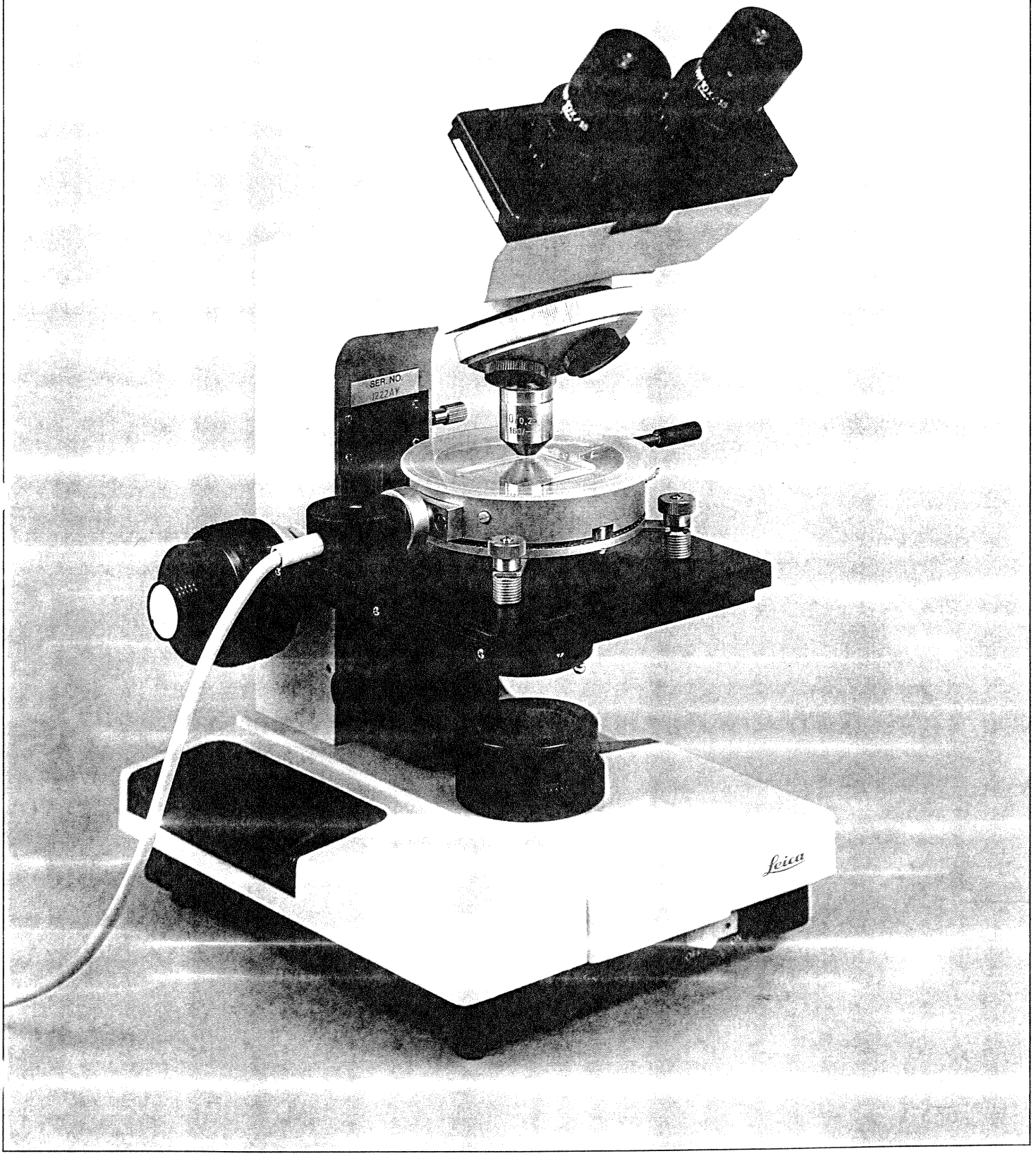
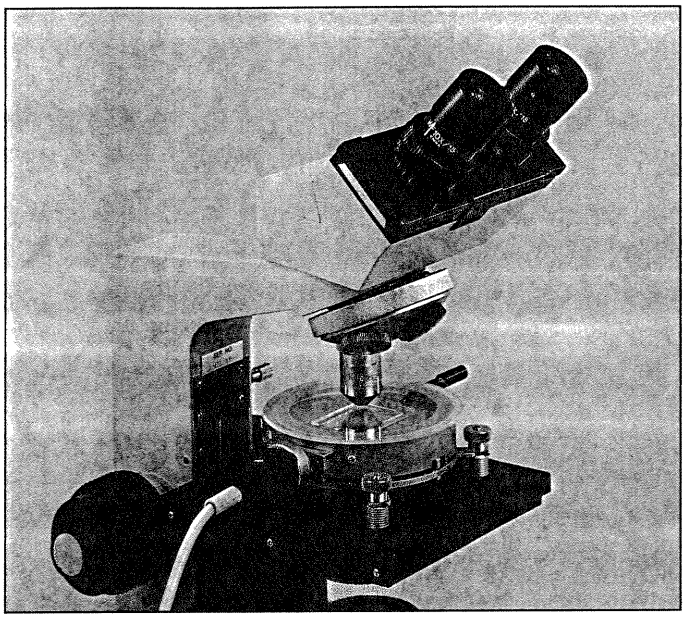
REICHERT THERMOGALEN



Hot Stage Microscope

Leica

REICHERT THERMOGALEN
Hot Stage Microscope



The Application

Micro thermal methods, based largely on the research of L. and A. Kofler, are used for determining

- **Melting point,**
- **Eutectic temperatures,**
- **Purity,**
- **Identity**

of organic substances. By microscopic investigation of the melting process a number of characteristic properties of a substance, such as sublimation, loss of water of crystallisation, polymorphic transformations etc. may be established.

The ThermoGalen

is specifically adapted to the requirements of thermal microscopy and provides optimum conditions to achieve fast and reliable results.

The optical outfit

is selected for use with the Kofler methods. The 10x/0.25 objective and the 10x eyepieces produce the standard magnification of 100x.
A precentered condensor with aperture iris diaphragm serves for homogeneous illumination and good image contrast.

The mechanical arrangement

simplifies thermal analysis and renders it more efficient. The coaxial coarse and fine focusing controls are low positioned and convenient to operate. An adjustable stop limits the upward stage motion, preventing the objective from being damaged.

The illumination system

uses a 20 W tungsten halogen lamp incorporated in the base plate of the microscope stand. A control lamp indicates the operation of the halogen lamp. The separate On/Off switch and the intensity control slider are conveniently accessible.

Polarization equipment

is included as standard since thermal microscopy is often used to examine optically anisotropic substances.

Test substances

for determination of the eutectic temperatures are included in the standard outfit.

The micro hot stage

essentially consists of two chambers arranged above each other. The lower chamber contains the adjustable heater, the upper chamber takes the specimen and is closed by a glass cover plate. A specimen guide permits shifting of the specimen inside the closed chamber even at high temperatures.
The specimen is illuminated from below through a small hole in the centre of the stage and is examined from above through the glass cover.

Temperature control

is accomplished by means of a regulating transformer allowing adjustment of the temperature setting within the range of 50–350° C. The temperature rise rate can be chosen with 0° C, 2° C or 4° C/minute according to the method being used. For the Kofler method, the temperature rise rate is preferrably 2° C/minute.

Mercury thermometers

for measurement and display of the actual temperature are available as an alternative to the digital temperature measuring unit. Two thermometers are provided for the hot stage, covering the ranges 20 to 230° C and 120 to 350° C.

The digital temperature measuring unit

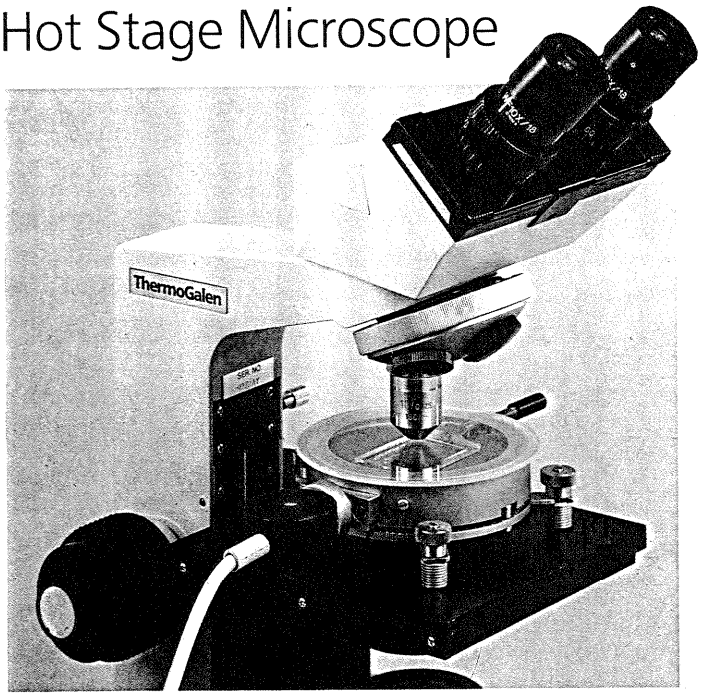
permits more accurate, convenient and reliable operation. It consists of the measuring instrument with LCD-display and a PT 100 temperature sensor. The measuring instrument works with a 9 V battery or a 9 V storage battery. The temperature sensor is inserted in the hot stage close to the specimen; standardization ensures full interchangeability without any loss of accuracy. The digital temperature measuring unit can be supplied for use with an existing hot stage without special adjustment.

Leica

REICHERT THERMOGALEN – E – 6/94
Printed in Austria

Printed on chlorine-free bleached paper

Hot Stage Microscope



ThermoGalen

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LIST PRICE

HOT STAGE 13K26360 4,083.00

4410.00

13K30000 K3000 GALEN III 2538 317504-08 W/K2636 $6,318.00

The digital temperature measuring unit 651403 $2,402.00

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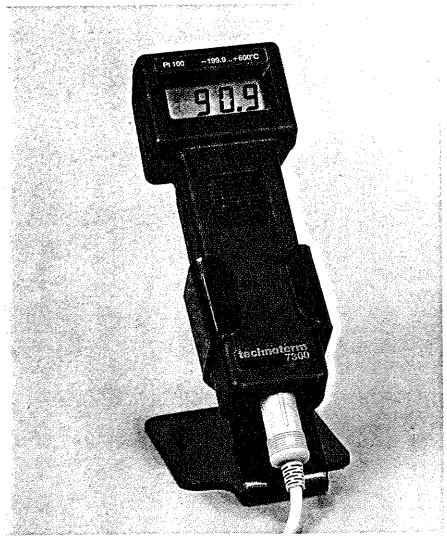

Reichert-Jung

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