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A number of items will become obsolete in the very near future and there will also be a few price increases as from the lst April.

Obsolete Items: -

Microprojector, code 800 - there are 3 left unsold at the moment.

Model 826 Metallurgical Microscope - again there are 3 left unsold and it is suggested that where customers in the future require an instrument for use with 8 and 16mm. interference objectives, the Service 68 should be recommended. There is insufficient room on Microsystem 70 to accommodate these particular objectives.

Standard Metallurgical Microscope - 11 unsold as indicated in a recent circular.

Price Increases are as follows:-

The Howells Ventilator increased to £110 as from March 1st. and the Howells Ventilator without storage compartment increased to £105 as from March 1st.

Bactilite lamp, code 28 - the price will be increased to £43 complete with light control unit as from 1st April.

Objectives and Eyepieces for Watson Stereoscopic microscopes - these will be listed at £10 per pair as from 1st April and this increase is to cover the cost of supplying all stands in Microsystem 70 enamel finish instead of the present arrangement of part enamel and part hammer finish.

All transmitted light bases will be of the new type with rotating twin mirrors and built-in mains bulb and these will have a black enamel finish. The only hammer finish will be on the feet of '850' and '1050' microscopes and all components on simple and rackwork long arm stands. The existing grey hammer finish on these parts blends attratively with Microsystem 70 enamel finish. It is hoped to be able to supply you during the next two months with at least three new Stereoscopic microscopes in the new finish and with the black transmitted light bases.

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"MICROSCOPY FOR STUDENTS"
by
J.D. Casartelli

Published by, McGraw-Hill Publishing Company Limited, London, - price 18/-

Below is the Forword to this book by Professor N.F. Robertson of the Department of Botany, University of Hull.

#### Foreword

Teaching students how to use the microscope is one of the primary duties of a University teacher of biology; finding time to reinforce and extend this teaching is one of his difficulties. This book is a source to which technicians, undergraduates and research students and their teachers can refer for practical instruction and simple theoretical treatment. In my experience exponents of microscope technique fall into two categories, the direct and the esoteric. first allow no frills, they have a routine which they demand should be followed like an army drill. The second, from their deeper knowledge have reservations about methods and a critical appreciation of performance, but they can be frightening to the beginner. There are great microscopists like Dr. John Baker and Professor Robert Barer, who have expounded their expertise without instilling fear or confusion. It is none the less refreshing to have this handbook, from an author who knows microscopes and microscopists in a way that is peculiarly his own. He has used the instruments and supplied them, repaired them, demonstrated them, taught about them and enjoyed them. He has seen the ignorance of many biologists and known the expertise of others. All this is clear from the pages of this book where one can almost see the instruments he describes and feel the shame of the poor performance and one can feel too the satisfaction of the best. The author's practical understanding of the problems of the manufacturer and user is abundantly clear and he continues to expound these against a background of simplified theory which is sufficient yet satisfactory.

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Mr. Casartelli's many friends will welcome this book as they welcomed him on his visits to them, because they liked him and profited from him. I commend this book to all beginners in microscopy and to all those, not beginners, who feel some insecurity about their comprehension of the potentialities of the instrument they use.

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#### EXTRACT FROM THE TIMES EDUCATIONAL SUPPLEMENT

MICROSCOPY FOR STUDENTS. By J.D. CASARTELLI.

Published by McGraw-Hill at 18/-

James Thurber, in one of his books, tells an amusing story of how, as a student in a biology class, he unwittingly adjusted his microscope to reflect, and as a result drew on his sketch pad, not a picture of the specimen on the slide but of his own eye, to the stupefaction of his laboratory demonstrator.

No doubt one needs to be particularly stupid (or clever) to make such a mistake. Students using advanced modern microscopes for the first time, however, could be forgiven for finding them somewhat bewildering. For such people, and indeed for all who are likely to make extensive use of microscopes, Mr. Casartelli's book should prove invaluable. It is essentially a practical work, giving details of the principles of operation and the procedure for the use, care and maintenance of microscopes, rather than a theoretical account of microscopy. In addition to a full obverage of the simple microscope, chapters are also devoted to more advanced instruments such as the phase contrast microscope, the dark-ground microscope, the stereoscopic microscope and fluorescence microscopy. Useful chapters on photomicrography, micrometry, and the use of polarised light are included.

This is a book which can be recommended to all microscope users, though some laboratory demonstrators may give a wry smile on reading the author's plea that "the use of the tail end of a laboratory coat as a cleaning implement must be prohibited".

Comment: Praise indeed for Mr. Casartelli's book.

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### MICROSYSTEM 70 JOTTINGS

### UNIVERSAL NO. 1 CONDENSER

The performance of the Universal  $\underline{\text{No. 1}}$  Condenser with the Microsystem 70 Kohler base should be noted as follows :-

All objectives x 10 to x 40 satisfactory.

Oil Immersion Objectives - some restriction of aperture by field iris e.g. when the field iris is set to the field of the x 10 eyepiece the aperture will be limited to  $\frac{2}{3}$  to  $\frac{3}{4}$  of the whole.

With low power objectives the condenser will not cover fields satisfactorily under the following circumstances:

- x 3/Mono/ all eyepieces.
- x 3/Bino/ eyepieces less than x 14.
- x 4/Mono/ eyepieces less than x 14.
- x 4/Bino/ eyepieces less than x 7.
- x 5/Mono/ eyepieces less than x 14.

The Holoscopic oil immersion condenser is  $\underline{\text{NOT}}$  suitable for use with Microsystem 70.

A new plastic oil dispenser will become available in April or May for supply with Microsystem 70 and the present  $\frac{1}{2}$ -oz. bottle will be discontinued. The new bottle, which holds 1-oz of oil, will replace the existing 1-oz glass bottles as soon as practicable.

The plastic dust cover for Microsystem 70 has now been approved and this takes the shape of a fitted case cover and will be presented in an attractive dark grey finish with the words "Microsystem 70". Available - approximately April, price 6/-, code 706/41.

The new 16mm. Parachromatic objective with flatter field than existing type will be available in limited quantities in approximately 10 - 12 weeks time. This objective is essentially for the Phase Contrast with Microsystem 70 but the changeover to the supply of this objective as standard on all instruments is unlikely to take place before mid-summer. The new objective will retain the existing code 1205 and 1205P for Phase version.

You will have seen from the recent products list circulars that the special condenser mount for student Phase Contrast with Microsystem 70 has been priced at £3.10. Od. and will be listed with either Universal No. 3 or Abbe condenser at £12. 8. Od. and £ 6. O. Od. respectively. The plug-in annuli will be priced at £3. O. Od. each, irrespective of the magnification of the objective with which they are designed to be used. A production target of approximately four months has been requested for all student Phase Contrast equipment but it is hoped to have available a number of demonstration sets in about two months time.

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### ZOOM STEREO PHOTOGRAPHIC EQUIPMENT

Development of this equipment has now been completed and will shortly be circularised in the products list under two items,

- 1) the connecting unit, which incorporates a corrector lens which avoids refocusing and lack of zoom effect with the attachment, at £10.10. Od. (code 550). This connecting unit incorporates a bayonet ring to accept either Exa la 35mm. camera or the Exacta 35mm. camera.
- 2) The complete Exa la camera with connecting unit. The price of the complete outfit is expected to be in the region of £37 to £40 (code 551). The production date of this equipment has been scheduled at 14 16 weeks but we are hopeful of reducing this by having a small number made outside.