

(J. Oldroyd, Lead Development Assoc., 34 Berkeley Square, London, W.1)

8-13. Treatment and Storage of High-Level Radioactive Wastes, symp., Vienna, Austria. (Intern. Atomic Energy Agency, 11 Kärntner Ring, Vienna 1)

8-20. Statistical Forecasting, training seminar, Paris, France. (World Meteorological Organization, 41 Avenue Giuseppe Motta, Geneva, Switzerland)

9-11. Analytical Chemistry in Nuclear Reactor Technology, Gatlinburg, Tenn. (C. D. Susano, Oak Ridge Natl. Laboratory, P.O. Box X, Oak Ridge, Tenn.)

9-11. International Assoc. of Food Analysts, symp., Bordeaux, France. (L. de Saint Rat, 18 Avenue de Villars, Paris 7<sup>e</sup>, France)

9-11. Nuclear Reactor Chemistry, conf., Gatlinburg, Tenn. (W. R. Grimes, Oak Ridge Natl. Laboratory, P.O. Box X, Oak Ridge, Tenn.)

9-12. American Dietetic Assoc., annual, Miami Beach, Fla. (V. F. Harger, Dept. of Home Economics, Ohio State Univ., Columbus 10)

9-12. Scientific Soc. for Aviation, annual, Brunswick, Germany. (Wissenschaftliche Gesellschaft für Luftfahrt, Martinstr. 40-42, Cologne, Germany)

10-12. Comparative Medicine, intern. symp., New York, N.Y. (J. D. Bech, Animal Medical Center, 350 Lafayette St., New York 12)

12. Biochemical Aspects of Hormone Action, symp., St. Louis, Mo. (A. B. Eisenstein, Jewish Hospital of St. Louis, 216 S. Kingshighway Blvd., St. Louis 10)

12-13. American Medical Writers' Assoc., Washington, D.C. (S. O. Waife, P.O. Box 1796, Indianapolis 6, Ind.)

12-13. Photography of Electronic Display, symp., Washington, D.C. (Soc. of Photographic Scientists and Engineers, P.O. Box 1609, Washington, D.C.)

12-14. Phosphorylated Glucides, intern. symp., Milan, Italy. (Segreteria del Comitato Organizzatore del Symposium Internazionale sui Glucidi Fosforilati, Via Modica 6, Milano)

13. Metabolic and Structural Alterations in Pre-Diabetes, symp., New York, N.Y. (R. Levine, New York Diabetes Assoc., 104 E. 40 St., New York 16)

13-14. Fundamental Nature of Living Matter, symp., Cleveland, Ohio. (Dedication Committee Office, Allen Memorial Library, 11000 Euclid Ave., Cleveland 6, Ohio)

13-14. International Federation of Surgical Colleges, annual, Atlantic City, N.J. (I. S. Ravdin, American College of Surgeons, 3400 Spruce St., Philadelphia 4, Pa.)

13-14. Society for Psychophysiological Research, annual, Denver, Colo. (S. G. Margolin, Dept. of Psychophysiology, Univ. of Colorado, Denver 20)

13-14. Unfinished Tasks in the Behavioral Sciences, symp., Chicago, Ill. (A. Abrams, Div. of Behavioral Sciences, Chicago Medical School Research Institute, 2020 W. Ogden Ave., Chicago 12)

14-17. Electrical Insulation, conf., Hershey, Pa. (L. J. Frisco, Div. of Engineering and Industrial Research, Natl. Acad. of Sciences, 2101 Constitution Ave., Washington 25)

(See issue of 10 August for comprehensive list)



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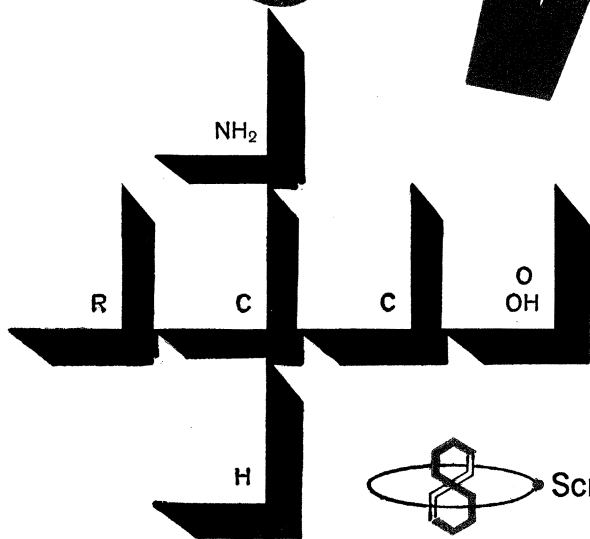
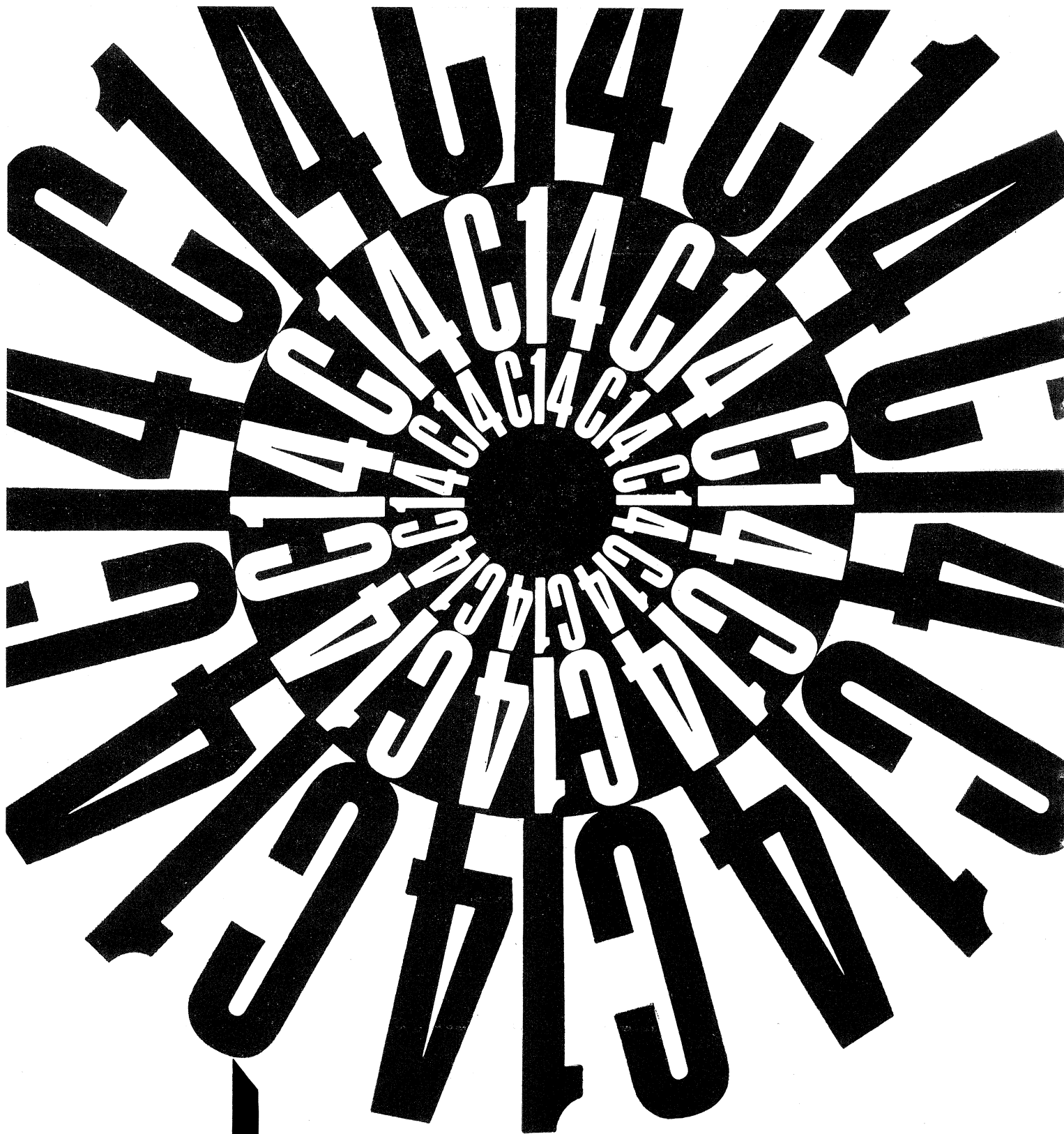
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**Anti-laser safety eyewear** is designed to protect the eyesight of researchers experimenting with lasers. The product is a combination of absorbing plastic and a dichroic mirror. It is said to have 97-db attenuation at a wavelength of 6943 Å, and yet to transmit enough visible light to allow the wearer more vision than a normal pair of sunglasses. The laser filter plates give a wide unobstructed visual field, and the holder fits easily over regular glasses. Plates can be removed and replaced quickly through a side slot. Air circulation is provided by six-plastic-plated vents on the top, bottom, and sides of the holder. An air space between the two plates combined with the low thermal con-

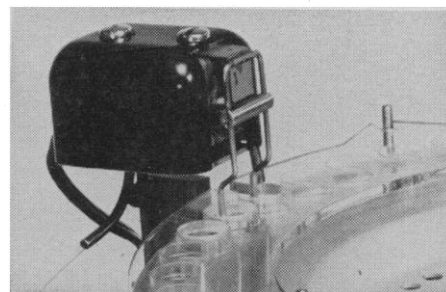
ductivity of the plastic prevents fogging. A clear cover plate protects the laminated laser filter.—J.S. (Bausch & Lomb Inc., Dept. S345, 635 St. Paul St., Rochester 2, N.Y.)

**Single-channel analyzer** (model 33-10) is a stable differential pulse-height analyzer with both base line and window being 0.1 to 10 volts. Either double delay line amplifiers or standard exponential amplifiers can be used with the analyzer which consists of a lower level discriminator whose outputs are in anticoincidence. Output pulse time stability is said to be better than 10 nsec shift for 1- to 10-volt double delay line input pulse with 0.25  $\mu$ sec or shorter rise time. Switch selected outputs are either 3 volts positive, 12 nsec rise time, 0.3  $\mu$ sec durations; or 10 volts positive, 50 nsec rise time, 0.5  $\mu$ sec duration. Input is either 0 to 10 volts positive, double delay-line shaped, or 0 to 10 volts positive single RC clipped.—J.S. (Radiation Instrument Development Laboratory, Inc., Dept. S353, 4501 West North Ave., Melrose Park, Ill.)

**Spectrum analyzer** provides standard frequency ranges from 0.01 to 10,000 cy/sec. Any three decades within this range are provided in a single instrument. Bandwidth can be adjusted between 0.01 and 1 cy/sec and remain constant throughout the spectrum. The analyzer uses analog techniques to calculate and plot frequency response. The instrument measures the spectral power density of any signal of 10-mv amplitude or greater. It is completely automatic in operation and a recycle feature permits repeated or continuous analysis of input data. Optional connections are available for power density or cross-spectral density studies. The records are presented on an x-y recorder with 100 points plotted for each run.—J.S. (Milletron, Inc., Dept. S305, 444 Lincoln Highway, East Irwin, Pa.)

**NMR spectra catalog** contains high-resolution proton spectra of 368 representative organic compounds. The spectra were obtained from charts of the A-60 NMR spectrometer, which provides reproducible spectra on pre-calibrated charts. Each spectrum is cross-indexed by name of compound, functional group, and chemical shift value. Organic chemists will find the new catalog a valuable aid in the comparative identification of unknown compounds. Many times an unknown compound may be identified simply by comparing its spectrum with spectra of similar known compounds. The comprehensive cross-index makes this data readily available for quick reference. Copies of the catalog cost \$5 in a spiral-bound edition; \$4 to students or on quantity orders of ten or more copies. A hard-bound edition is available for \$10.—R.L.B. (Instrument Division, Dept. 0701, Varian Associates, Dept. S308, 611 Hansen Way, Palo Alto, Calif.)

**Sample mixing device** for use with the Technicon AutoAnalyzer, a system of continuous automatic chemical analysis, permits continuous analysis of fluids containing suspended solids. The miniaturized mixer keeps nonsoluble matter in samples in complete suspension before and during sample pickup by the AutoAnalyzer's aspirator. It suspends particulate substances that would normally settle in the sample cup. Pow-



erful enough to keep nonsoluble matter in suspension, it is gentle enough to keep the sample in a homogenous state without aeration or foaming. Uniform pickup of minute granular matter is no problem since solids are kept from settling and a representative sample is obtained throughout the period of aspiration. The device consists of two stirrers working simultaneously off a vibration fork. One stirrer keeps the sample being aspirated in homogenous suspension by uniform agitation; the other mixes the sample before aspiration.—R.L.B. (Technicon Controls, Inc., Dept. S311, Chauncey, N.Y.)

The material in this section is prepared by the following contributing writers:

Robert L. Bowman (R.L.B.), Laboratory of Technical Development, National Heart Institute, Bethesda 14, Md. (medical electronics and biomedical laboratory equipment).

Joshua Stern (J.S.), Basic Instrumentation Section, National Bureau of Standards, Washington 25, D.C. (physics, computing, electronics, and nuclear equipment).

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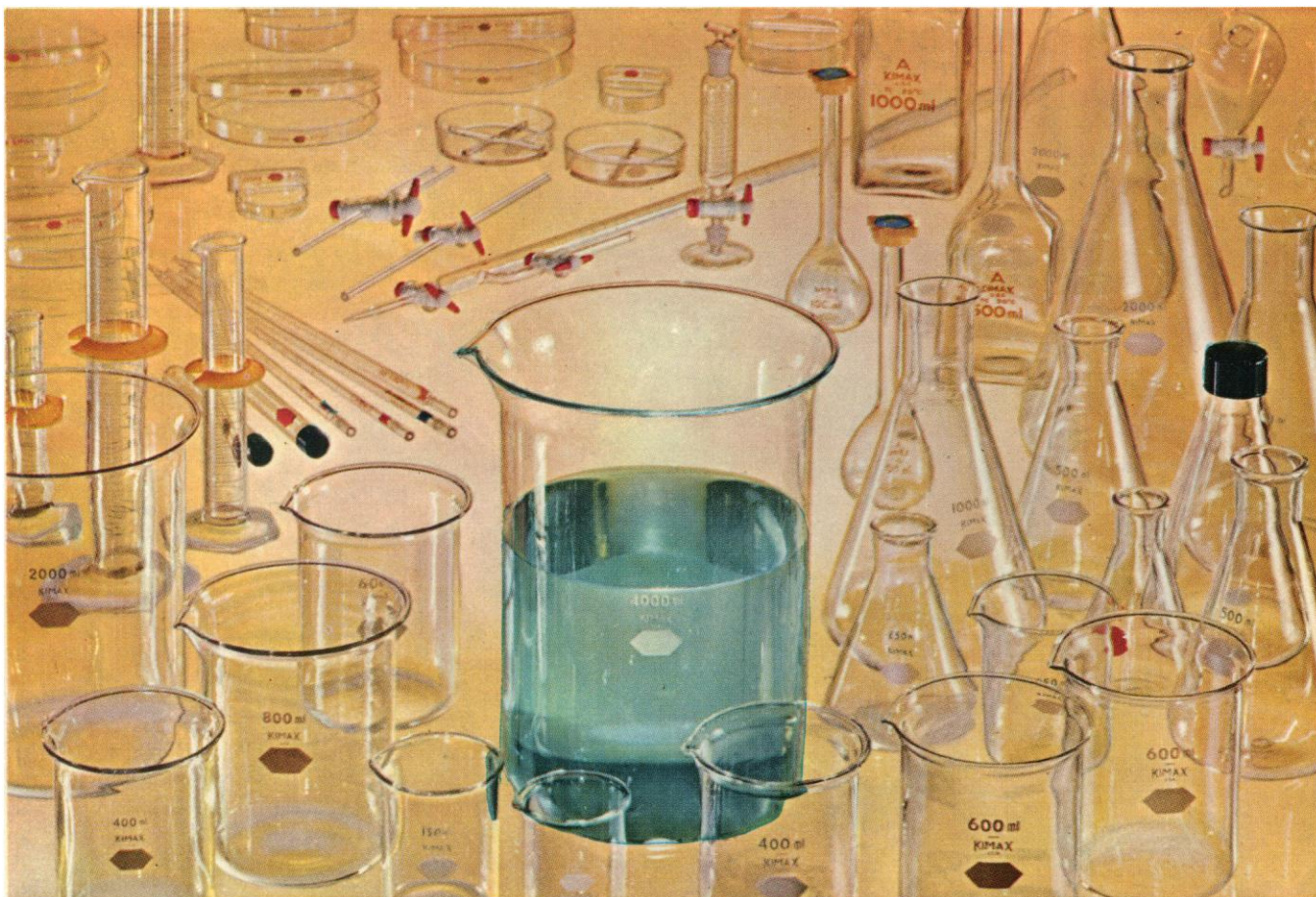
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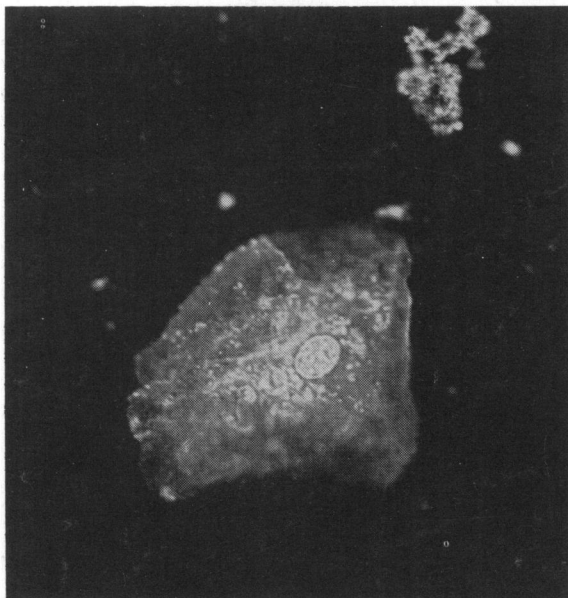
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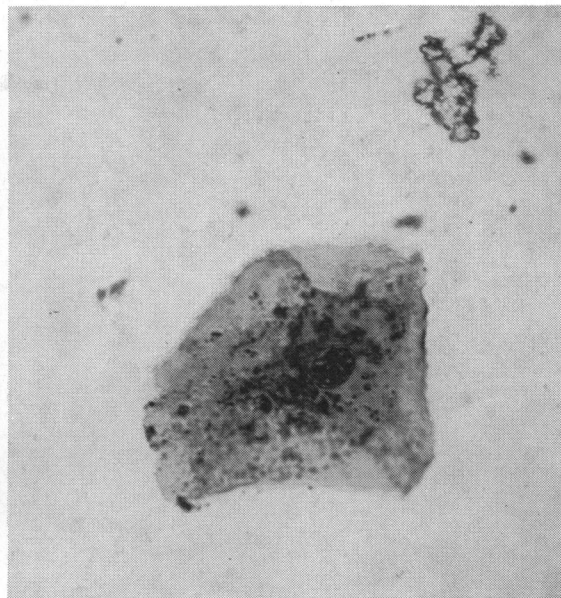
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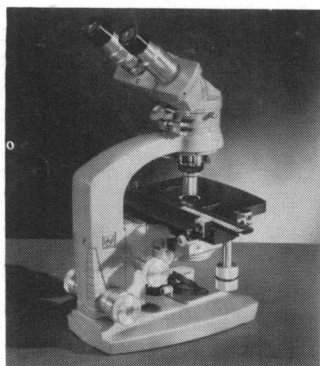
1. First, as shown in the photomicrograph\* above, the microscope analyzer was rotated until the background was brought to extinction. Readings were taken directly from the analyzer scale. Averaged settings resulted in reading of 70.4°.



2. Next, the analyzer was rotated until the nucleus of the cell was brought to extinction. Averaged settings resulted in reading of 138.2°.

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\*Photomicrographs taken by Mr. Lynn C. Wall, Medical Division, Eastman Kodak Co. Data: Epithelial Cell. AO-Baker Interference Microscope, 40X Shearing objective, 10X eyepieces. Corning filter CS4-120 with AO Model 630 Pulsarc Illuminator to transmit monochromatic light at .546 microns.

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