New Products

Further information concerning the material described below can be obtained by writing direct to the manufacturers. As in the case of technical papers, publication of these news items does not constitute endorsement of the manufacturer's statements nor of his products.

The new Huggins Ames Type A Mercury Arc Lamp has been designed to produce light intensities of 90,000 candles/sq cm. It is made by Huggins Laboratories, 778 Hamilton Ave., Menlo Park, Calif. Shown in the illustration are the lamp-holder with lamp extracted and, in the background, the a-c power supply. Light output is 65 lumens/watt; power consumption of the lamp is 2 kw (1.2 amp at 1750 v).

Arc dimensions are 2.85 cm (1.125 in.) by 1 mm (0.039 in.). Cooling is accomplished with ordinary tap water, $2^1/_2$ gpm being required. Alternatively, a closed-circuit distilled-water system can be used. Average life at rated maximum brilliance is 5 hr, and appreciably more at reduced voltages. In the standard model, 100 per cent intensity is reached at 4358 A, with an 80% peak at 5461 A, and a 73% peak at 4047 A, with a maximum radiation of 0.08 w per steradian per Angstrom. Intermediate areas average approximately 35%. Quartz accessories can be supplied for operation in the ultraviolet region. Direct-current, flash, and stroboscopic power supplies are reported as under development for special applications.

Uses reported are in interferometers, Schlieren optical systems, shadowgraphs, monochromators, in high-speed photography, and high-powered ultraviolet sources in the production of chemical, biochemical, and ionization changes in substances under study or processing.