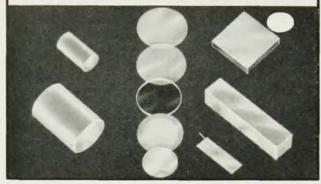
## NEED A SINGLE-SOURCE FOR PIEZOELECTRIC TRANSDUCER CRYSTALS



MATERIALS? Natural quartz, Cultured quartz, Ceramics, Tourmaline . . . or we'll fabricate your material. We supply associated buffer rods, too.

FREQUENCIES? In low frequencies from 50KC to 150MC fundamental. Overtone harmonics to 3000MC. With Ceramics including barium titanates and lead zirconates from 0.5MC to 40MC.

**TOLERANCES?** Diameter or length tolerances up to  $\pm 0.001''$ . Flatness to within 0.000020'' and parallelism to within 0.000050''. Optical flatness to  $\frac{1}{4}$  wave for polished overtone crystals.

SIZES? Discs up to 5", flat or contoured. Special configurations, such as square, rectangular or Strauble, also, as you need them.

**PLATING?** We're able and willing to plate Solid or Coaxial to your specifications, whatever they might be . . . in chrome and silver, chrome and gold, chrome, aluminum, fired silver or fired platinum.

ACCESSORIES? If you need accessory holders, jigs or fixtures, we have the metal fabricating facilities and know-how to do the job. We'll design them for you, too.

QUANTITIES? 1 or 1,000 . . . it doesn't make any difference. We are specialists in the business, geared to meet everyone's needs — economically and with fast delivery.

Only Volpey is staffed, equipped and experienced to handle every aspect of your piezo-electric transducer crystal problem. Write for further technical data and a copy of our paper "Introduction To Piezoelectric Transducers."



1025 Highland St. / 300 N. Newport Blvd. Holliston, Mass. / Newport Beach, Calif. dred high-school teachers. Both groups will meet in schools in São Paulo to watch the TV lessons and, with the project participants acting as instructors, experiments will be performed using the equipment and instructional materials produced during the year by the project. At the conclusion of the program, the project participants will return to their home countries with film loops and enough experimental kits to repeat the six-week course. They will have access to the longer films for TV projection on a loan basis, with the option of buying additional prints, kits, and other instructional material at cost from IBECC for more extensive trial.

Correspondence concerning the program should be sent to Dr. Pär Bergvall, Project Director, UNESCO Pilot Project, c/o IBECC-UNESCO, Caixa Postal 2921, São Paulo, Brazil.

The Midwest Electronics Research Center of the University of Illinois will offer a four-day course, beginning on January 27, described as an applications forum on antenna research. Topics to be stressed include frequency-independent antennas, antennas in anisotropic and conducting media, aperiodic antenna arrays, and data-processing antenna systems and partial coherence.

Requests for additional information should be addressed to the Midwest Electronics Research Center, Electrical Engineering Building, University of Illinois, Urbana, Ill.

## Haverford's Science Building

A new \$2 million science building, designed to house the Chemistry, Mathematics, and Physics Departments of Haverford College, was dedicated on November 16.

The two- and four-story ell-shaped building, containing 66 900 square feet of floor space, is the first major academic construction on Haverford's Main Line campus since 1929. In addition to laboratories, classrooms, and offices for the three departments, the building contains a lecture hall seating 205 and a library with space for 25 000 volumes.

## Support for Mathematics Research

Fellowships, grants, and other forms of support for basic research in mathematics at both the predoctoral and postdoctoral levels are listed in a brochure issued by the Division of Mathematics, National Academy of Sciences—National Research Council, 2101 Constitution Avenue, Washington 25, D. C. The brochure includes information on support programs currently offered by the National Science Foundation, the Office of Naval Research, the Air Force Office of Scientific Research, the Army Research Office, the Atomic Energy Commission, the National Aeronautics and Space Administration, the Institute for Defense Analyses, etc. Entitled Fellowship and Research Opportunities in Mathematics, the booklet is available on request from the Division.