

# **POLISH** TECHNICAL REVIEW

### KOMBINAT GÓRNICZO-HUTNICZY MIEDZI The Copper Mining and Smelting Industrial Group

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The Group is represented on foreign markets by

The IMPEXMETAL Import-Export Company



## **5-6**



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### **X** SIGMA

PUBLISHERS OF TECHNICAL PERIODICALS AND BOOKS SIGMA - AN ENTERPRISE OF THE CENTRAL TECHNICAL ORGANIZATION ul. Biała 4, 00-950 Warsaw, P.O.B.1004, Tel.; 39 11 99, Tix: 814 877 WCT WA PL. Issued in English, French, German and Russian

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#### From the editors

The shortage of paper in Poland compels once again the NOT-SIGMA Publishers to publish two issues of Polish Technical Review in one and to reduce the number of pages. We firmly believe that our magazine will appear regularly and will have a larger edition. We sincerely apologize to our Readers for this year's irregular and reduced publication.

#### Mining industry

The growing exploitation depth of useful minerals makes that the work of the miners would be impossible without a lowering of air temperature in mining workings. This problem has been solved in Poland by providing mines with air-conditioning equipment. Details on p.2. Another hazard to human life is constituted by rock bursts. The methods of preventing rock bursts in copper ore mines are discussed in article on p.5. The same section includes a number of information on electric and auxiliary control-measuring mining equipment (page 7) and a Polish export offer of a plant for the production of mining equipment and tools (page 18).

#### Metallurov

In this section we have included an article on selected Polish-made metallurgical machines and installations among which there are interesting new solutions. The article discusses machinery and equipment for coke oven batteries, lines for the backward extrusion of copper, scrap processing works, equipment for the continuous casting of metals. The author also presents equipment for the shaping of steel such as welded shapes plants, metal sheet roll forming lines. Pneumatic cell/impeller type flotation machines are also discussed (page 10)

#### A laser acoustooptics laboratory

The science of acoustooptics has an interdisciplinary character as it combines ideas stemming from a number of fundamental fields of study. The set of instrumentation for the Laser Acoustooptics Laboratory is intended for teaching and research purposes. The 12 possible teaching experiments have been arranged in three subject groups: visualization of ultrasonic disturbances, fundamental research and materials testing and laser acoustooptical instruments. Details on p. 16.

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Printing office: SIGMA - Warsaw

Index No 36915