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# POLISH TECHNICAL REVIEW



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#### Editor's note

In article "A complex technology of the pipeline transport of power station boiler furnace wastes" by Jerzy Rokita and Slawomir Tomaszewski published in no 1/87 of our magazine we have omitted to mention the Southern Power District which together with the Technical University of Gliwice is the co-author of the method discussed. The Power District in Katowice is the owner of the patents mentioned (no 134265, 134274 and 128713).

We kindly apologize to the authors and to our readers.

# Application of metallurgical liquid slag for the manufacture of insulating and other building materials

The new complex methods developed by a team directed by Professor Jerzy Grzymek make it possible to use metallurgical liquid slag for the production of a wide range of building materials including high quality light aggregates, top grade plasters, wall elements and insulating materials of mineral origin. For details see article on p. 2.

The section Building Industry brings also an interesting article on the construction of underground passages, information on an equipment for obtaining a self-curing foam and on mineral wool boards with an altered orientation of fibres.

#### Multifunctional RETURN pumping stations for sewerage systems

The Technical University of Cracow has developed a multifunctional, new type of pumping station designed for use in combined sewerage systems. The main task of that novel solution consists in balancing the amounts of sewage being pumped, enhancing the extent of purification of rain effluents and optimization of the cooperation between pumps and suction chambers in order to attain the best possible utilization of their retention capacity. The new solution also ensures a decrease of the sewage delivery height, which has a direct relation with lower power consumption. Article on p. 10

#### The RT-4 radiotelescope

The RT-4 radiotelescope being currently built for the Mikolaj Kopernik University of Toruń according to the design developed by the Export Centre of the Association of Polish Mechanical Engineers and Technicians SIMPEX has a mirror diameter of 32 m. The commissioning for service of this radiotelescope will extend considerably the research possibilities of Polish radio-astronomy. The excellent operating characteristics will certainly make it possible to export the RT-4 radiotelescope. See article on p. 18

#### Pre-sensitized, negative aluminium offset plates

Negative plates are used mainly for printing newspapers. In order to make the work of printers easier these plates are pre-sensitized i.e. coated with a light-sensitive durable layer. The currently manufactured pre-sensitized, negative plates are developed mainly by solutions containing toxic substances. The Technical University of Warsaw has developed a special IPF resin which can be developed using non-toxic aqueous solutions. See article on p. 27

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Cover photo: Modular-design precision-type spark erosion machine

Photo: A. Piąstka