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CONTENTS
CHEMISTRY

High purity hydrogen generating plant . . .	2
A semi-conductor electric heater for extruders and injection moulding machines . . .	4
Anti-corrosive agent	5
Magnesium fertilizer from serpentinite . . .	6
Vacuum crystallizer (patent)	7
Furfural production technology	8
A petroleum demulsifying agent (patent)	9
Aqueous precipitation of fluorine and sulphur compounds in granulated form (patent) . .	9
Dinitrotoluene production technology . . .	10
Determination of aerosol particles for acidic liquids in a gas (patent)	11

PROTECTION OF THE ENVIRONMENT

Improvement of water and liquid wastes disposal systems in paint shops	12
A gas-pressure-type atomizer	14
Impingement-type dust catcher	16
Conditioning of cooling water	17
A probe for determining the direction of flow of underground waters	17

METALLURGY

An electric furnace for melting and holding liquid metal MoHF-IDHEAL	18
Reciprocating and rotary motions spindle (patent)	21
Temperature separation of metal oxides from ferruginous deposits (patent)	21

SURFACE MACHINING

Equipment for abrasive-blast treatment . . .	22
--	----

ELECTRONICS

Abrupt silicon epitaxial junctions	26
A welder for fibre bundles	29

MEASUREMENT EQUIPMENT

Pneumatic measuring instruments	30
LSI circuit boards automatic control and sorting device	33
Equipment for the selective suppression of interference in automatic control systems (patent)	34
Testing of machine tool positioning	35
Measurement of velocity and velocity non-uniformities	36
Eddy-current flow detectors	36
Weak nanosecond signals analyser	37

PRINTING

Technology of manufacturing photo-relief forms	38
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IN BRIEF

Economic survey	40
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New chemical technologies

New technologies which can be used also outside Poland have been developed in numerous research centres of the chemical industry. Several such technologies are discussed in the current issue e.g. the industrial process of producing high purity hydrogen basing on natural gas reforming, carbon oxide conversion and purification of hydrogen on molecular sieves; the production of magnesium fertilizers from serpentinite which is easily available and mined by the open cast method; the technology of furfural production on the basis of furfural obtained from post-cellulose pulp production wastes or plant wastes; the economic process of a continuous production of dinitrotoluene (p. 2-11).

Electric furnace for melting and holding liquid metal

The very high thermal efficiency, exceptionally low metal melting loss, high reliability, simple operation and very low investment costs are the characteristics of the MoHF-IDHEAL furnace for melting and holding liquid metal whose design has been patented in many countries. The furnace is provided with a new system of electric heating which, after adaptation, may be used also in already existing furnaces. For details see article by Mr. Biolik who cooperates with the BIPROMET Design Office for the Non-ferrous Metals Industry in Katowice, page 18.

Equipment for abrasive-blast treatment

High purity, low surface roughness and its advantageous profile are the characteristics of abrasive-blast treatment which is now the most efficient mechanical method of preparing surfaces under protective coatings. The method can be used utilizing the numerous installations for pneumatic treatment (with a closed or open cycle of abradant circulation) and centrifugal treatment of Polish make. The above installations produced by several Polish factories are described on page 22.

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