

## FOUNDRY REVIEW 5-6'2019

### - SUMMARIES -



S. PUZIO, J. KAMIŃSKA, K. MAJOR-GABRYŚ, M. ANGRECKI, M. HOSADYNA-KONDRACKA  
**MICROWAVE HARDENED MOLDING SAND WITH INORGANIC BINDERS FOR ABLATION CASTING**

The aim of this work is to demonstrate the possibility of using environmentally friendly molding sands with hydrated sodium silicate for ablation casting molds. The ablation casting technology is intended primarily for making casts in sand molds with diversified wall thickness and complex shapes.

This paper presents the effect of binder content and curing time on the bending strength  $R_g$  of molding sands with binders based on hydrated sodium silicate hardened in microwave curing technology. The aim of the research is to develop an optimal molding sand composition that will provide the strength necessary to form a mold for carrying out the ablative casting process. The applied sands must simultaneously guarantee the susceptibility of the mold to the destructive action of the ablative medium, which is water.

The tests have shown that microwave curing provides satisfactory strengths with low binder content.

D. WILK-KOŁODZIEJCZYK  
**SUPPORTING THE MANUFACTURING PROCESS OF METAL PRODUCTS WITH THE METHODS OF ARTIFICIAL INTELLIGENCE**

M. SKOWRON  
**CAST IRON PAVEMENT PLATES IN WARSAW, IN THE SECOND HALF OF 19TH CENTURY**

**ZĘBIEC MINERALS – MINERALS FOR YOUR INDUSTRY**  
**XXV PLEBISCYTU GALY ENGINEER GALA**

**ITM POLAND 2019 GOLD MEDALS AWARDED!**

**T.FRANASZEK**

**XII INTERNATIONAL DIE CASTING SCIENTIFIC AND TECHNICAL  
CONFERENCE „INNOVATION IN DIE CASTING” MAY 13TH-15TH, 2019, NOWY  
ADAMÓW**

**A. GRABARACZYK**

**CONGRESS OF THE NORWEGIAN FOUNDRY ASSOCIATION 2019, KRAKOW,  
POLAND**