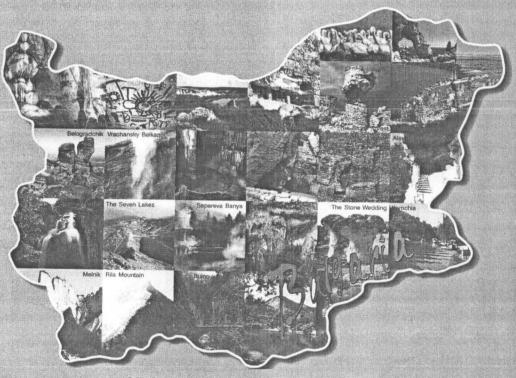
## FOURTH BALKAN CONFERENCE ON GLASS SCIENCE AND TECHNOLOGY



16th CONFERENCE ON GLASS AND CERAMICS



## **ABSTRACTS**



27 September – 1 October 2008 International House of Scientists VARNA, BULGARIA

## ENTISTS

## THE INFLUENCE OF FIRING REGIME ON QUALITY OF MASONRY PRODUCTS

M. Vasić, Z. Radojević, M. Maričić

Institute for Testing of Materials AD, 43 Vojvode Mišića Blvd., 11000 Belgrade, Serbia e-mail: milosvasic1980@yahoo.com

peration among first and widest tionally funded n scientific and poperation and ember countries tivities grouped tions from nonecessful tool for

rch networking lude support of Mediterrancan a, Azerbaijan, banon, Lybin, leration, Syrin,

Improvement of firing process, especially its duration as well as determination of optimum firing regime is significant not only from the point of view of energetically efficiency but also from the standpoint of final masonry products quality. In this paper the analysis of products quality from one factory will be presented before and after firing curves were recorded as well as proposed measures applied aiming to approach to optimal firing regime processed. Monitoring of temperature regime was achieved by penetration of measuring equipment, from position under kiln firing canal, through tunnel kiln car into firing canal. The position of measuring check points of thermocouples was placed on altitude 0.3 m (3 thermocouples) and on altitude 1.4 m (3 thermocouples). These six thermocouples show the temperature the material has reached, while other two thermocouples positioned above masonry loading rows show temperature reached in firing canal. Based on the analyses of firing regime, some suggestions were set out in order to solve production problems and implementation of the optimum firing regime. When new firing regime was applied, another recording of firing regime was made and quality tests of produced masonry products. When new firing regime was applied, another recording of firing regime was made and quality tests of produced masonry products satisfied all quality standards prescribed with EN 771-1+A1:2005 standard.