

**Slovak University of Technology in Bratislava
Institute of Information Engineering, Automation, and Mathematics**

PROCEEDINGS
of the 18th International Conference on Process Control
Hotel Titriss, Tatranská Lomnica, Slovakia, June 14 – 17, 2011
ISBN 978-80-227-3517-9
<http://www.kirp.ctf.stuba.sk/pc11>

Editors: M. Fikar and M. Kvasnica

Čižniar, M., Puna, D.: Advanced Process Control of the BGHT7 Desulphurization Unit, Editors: Fikar, M., Kvasnica, M., In *Proceedings of the 18th International Conference on Process Control*, Tatranská Lomnica, Slovakia, 469–469, 2011.

Full paper online: <http://www.kirp.ctf.stuba.sk/pc11/data/abstracts/105.html>

Advanced Process Control BGHT7 Desulphurization Unit

M. Čižniar* D. Puna**

** Honeywell Process Solutions, Honeywell s.r.o., Mlynské nivy 71, P.O.BOX 75, 820 07 Bratislava 27, Slovakia
(Tel: +421 2 322 622 70; e-mail:michal.cizniar@honeywell.com)*

*** Automation and Control Solutions, Honeywell s.r.o., V Parku 2326/18, 148 00 Praha 4, Czech Republic
(Tel: +420 242 442 305; e-mail:dalibor.puna@honeywell.com)*

The contribution deals with the design and practical implementation of an advanced process control (APC) on the BGHT7 Desulphurization Unit at Slovnaft, Bratislava Refinery.

First, the process and operation of the BGHT7 Desulfurization Unit is briefly described, then the control objectives are introduced, and finally, design and implementation of multivariable predictive control solution is presented.