**An analyze and prediction system the loss of material of forging tools using artificial neural networks**

**PhD. hab. eng. Marek HAWRYLUK**

Wroclaw University of Science and Technology,

Department of Metal Forming and Metrology,

Lukasiewicza Street 5, 50-370 Wrocław, Poland,

e-mail: [marek.hawryluk@pwr.edu.pl](mailto:marek.hawryluk@pwr.edu.pl)

tel. +48 71 320 2164

**PhD. eng. Barbara MRZYGŁÓD**

AGH University of Science and Technology,

Al. Mickiewicza 30, 30-059 Krakow,

e-mail: [mrzyglod@agh.edu.pl](mailto:mrzyglod@agh.edu.pl)

tel. +48 12 617 29 15