## ABSTRACTS

doi:10.22306/asim.v7i2.60
Received: 12 Apr. 2021
Revised: 03 May 2021
Accepted: 18 May 2021

## DATA PROCESSING FOR CREATING SIMULATION MODELS <br> (pages 7-11)

## Michal Dic

Department of industrial and digital engineering, Technical University of Košice, Park Komenského 9, 042 00, Košice, Slovak Republic, EU, michal.dic@tuke.sk

## Miriam Pekarčíková

Department of industrial and digital engineering, Technical University of Košice, Park Komenského 9, 042 00, Košice, Slovak Republic, EU, miriam.pekarcikova@tuke.sk (corresponding author)

## Jozef Trojan

Department of industrial and digital engineering, Technical University of Košice, Park Komenského 9, 042 00, Košice, Slovak Republic, EU, jozef.trojan@tuke.sk

## Ján Kopec

Department of industrial and digital engineering, Technical University of Košice, Park Komenského 9, 042 00, Košice, Slovak Republic, EU, jan.kopec@tuke.sk

Keywords: Industry 4.0, manufacturing, vertical integration
Abstract: This article is devoted to the main element of the Industry 4.0 concept, which is vertical integration software that connects the necessary parts of manufacturing companies. Software that meets these criteria is required to ensure error-free bi-directional communication and data transfer between IT and OT networks. Better competitiveness, technological progress is pushing the possibilities of MES. As a result, MES is becoming an integral element that takes businesses to the next level. If we imagine all activities as operations, connected by computer networks and analytical tools, the result is even greater efficiency in the industry and business. Analytical tools provide useful support for customer service.

