

CONVERSION OF DATA INTO INFORMATION IN TRIBOLOGY RESEARCH

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ABSTRACT

Relevant and timely information is of crucial importance in scientific investigations and understanding of the phenomena should be precise and explicit. Among others, phases of scientific investigations comprise data acquisition and their structuring into database and data warehouse, followed by their analysis in order to find laws and patterns and comparison with similar data. These activities are aimed at data to become information and for information to grow into knowledge and to further use of that knowledge to formulate decisions and to anticipate future events and possibilities. However, simple analysis of information obtained from conducted research is no longer sufficient, therefore, proactive approach is needed, that is technologies, skills and tools are needed that will assist in rapid decision-making and forecasting. The paper presents architectures for data acquisition, developed databases and reporting, as well as contemporary information technologies used for tribological investigations in area of Metal–Matrix Composites – MMCs, in the light of the above observations.

Keywords: information technologies, database, software tool, data conversion, tribological investigations, tribology.

AIMS AND BACKGROUND

We live in time of dynamic, dramatic, complex and unpredictable changes, in a period which is marked by different terms as: starting from digital revolution, information age, up to third wave. Information and knowledge growth are becoming more and more essential development and economy resources. We have been living in digital technologies era for three decades now and Internet and Intranet

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