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### **The Ontology based Water Resources Monitoring System for Sustainable Regional Development**

Most geographic documents on the Web contain key decision-making information in the form of text tables. The crux of the problem is that text-based web tables are valuable sources of knowledge and can be easily accessed like databases, even though they are not by nature. Proposed ontology based water resources monitoring system provides the new knowledge about the level, discharge, and quality of water resources, which significantly impact the socio-economic indicators of each region where these water bodies are located.

Madina Mansurova was born in Almaty, Kazakhstan. After successfully graduated from the Republican Physics and Mathematics School in 1989, she entered the Faculty of Mechanics and Applied Mathematics of the al-Farabi Kazakh National University (KazNU). Since 2001, she worked at the Department of Computer Science of the Faculty of Mechanics and Mathematics, then the Faculty of Information Technology of the al-Farabi KazNU. From September 2019 to the present, she is the Head of the Department of Artificial Intelligence and Big Data.

Research interests: Computational Linguistics, High Performance Computing, Artificial Intelligence in Medicine. Since 2012 till now Madina Mansurova is the scientific supervisor of the grant projects of the Committee of Science of the Ministry of Science and Higher Education of the Republic of Kazakhstan. She is a member of the IEEE.