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author(s): **Arif Khan**

K.D.K. College of Engineering, Nagpur, India, arif3456@hotmail.com

Parikshit Verma

National Environmental Engineering and Research Institute, Nagpur, India,
p_verma@neeri.res.in

K. V. George

National Environmental Engineering and Research Institute, Nagpur, India,
kv_george@neeri.res.in

Sunita Shastri

National Environmental Engineering and Research Institute, Nagpur, India,
s_shastri@neeri.res.in

S. L. Atmapoojya

S.B. Jain College of Engineering, Nagpur, India, arif3456@gmail.com

A. M. Badar

K.D.K. College of Engineering, Nagpur, India, arif_khan99@yahoo.com

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In recent years fuzzy set theory has emerged as a transcendental tool to deal with environmental engineering application having uncertainty, ambiguity and subjectivity. Analysis of ground water quality plays significant role in environmental impact assessment studies. For qualitative description of ground water quality, number of physical, chemical and biological parameters are taken into consideration, allotted a weightage factor and calculated into an index called water quality index (WQI). Water quality index uses crisp set to analyze water contaminants and hence deals with standing boundary conditions. This paper illustrates use of fuzzy inference system for analyzing physical and chemical parameters to assess ground water pollution. A ground water pollution index calculated with fuzzy inference system has been developed and discussed. Various physical, chemical parameters of ground water are divided into three groups and are finally clubbed with to get a single index of ground water pollution by using fuzzy set theory.



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