World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:9, No:12, 2015

## **Membership Surface and Arithmetic Operations of Imprecise Matrix**

Authors: Dhruba Das

**Abstract :** In this paper, a method has been developed to construct the membership surfaces of row and column vectors and arithmetic operations of imprecise matrix. A matrix with imprecise elements would be called an imprecise matrix. The membership surface of imprecise vector has been already shown based on Randomness-Impreciseness Consistency Principle. The Randomness-Impreciseness Consistency Principle leads to defining a normal law of impreciseness using two different laws of randomness. In this paper, the author has shown row and column membership surfaces and arithmetic operations of imprecise matrix and demonstrated with the help of numerical example.

Keywords: imprecise number, imprecise vector, membership surface, imprecise matrix

Conference Title: ICMCMSE 2015: International Conference on Mathematical and Computational Methods in Science and

ngineering

**Conference Location :** Bangkok, Thailand **Conference Dates :** December 17-18, 2015