World Academy of Science, Engineering and Technology International Journal of Computer and Information Engineering Vol:9, No:01, 2015

## Multi Criteria Authentication Method in Cognitive Radio Networks

Authors: Shokoufeh Monjezi Kouchak

**Abstract :** Cognitive radio network (CRN) is future network .Without this network wireless devices can't work appropriately in the next decades. Today, wireless devices use static spectrum access methods and these methods don't use spectrums optimum so we need use dynamic spectrum access methods to solve shortage spectrum challenge and CR is a great device for DSA but first of all its challenges should be solved .security is one of these challenges .In this paper we provided a survey about CR security. You can see this survey in tables 1 to 7 .After that we proposed a multi criteria authentication method in CRN. Our criteria in this method are: sensing results, following sending data rules, position of secondary users and no talk zone. Finally we compared our method with other authentication methods.

**Keywords:** authentication, cognitive radio, security, radio networks

Conference Title: ICCWNC 2015: International Conference on Cognitive Wireless Networks and Communications

Conference Location: Paris, France Conference Dates: January 23-24, 2015