## **Cryptography Over Sextic Extension with Cubic Subfield**

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**Abstract :** In this paper we will give a method for encoding the elements of the ring of integers of sextic extension, namely L = Q(a,b) which is a rational quadratic over cubic field K = Q(a) where  $a^{2}$  is a rational square free integer and b is a root of irreducible polynomiale of degree 3.

Keywords : coding, integral bases, sextic, quadratic

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020