XRD AND EXAFS STUDY OF NITRATO AMMINE COMPLEXES OF NITROSYL RUTHENIUM

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The structure of *trans*-$[RuNO(NH_3)_4(H_2O)](NO_3)_3$ (**I**) and *trans*-$[RuNO(NH_3)_4(NO_3)](NO_3)_2$ (**II**) was determined by XRD. Crystallographic data are as follows: space group $I4_1/a$; $a = b = 18.280(1)$ Å, $c = 15.129(1)$ Å, $R = 0.0244$ (**I**), and space group Cm, $a = 11.5620(3)$ Å, $b = 7.9934(2)$ Å, $c = 7.7864(2)$ Å, $\beta = 127.124(1)°$, $R = 0.0139$ (**II**). Interatomic distances for complex particles of *fac*- and *mer*-$[RuNO(NH_3)_2(NO_3)_3]$ (**III** and **IV**, respectively) were determined by EXAFS.

Keywords: ruthenium, nitrosyl complexes, ammine complexes, nitrato complexes, X-ray diffraction analysis, EXAFS.