

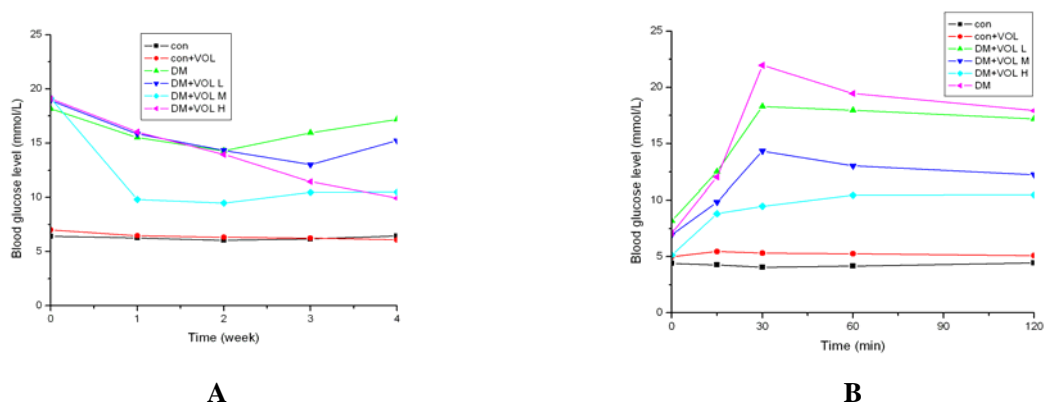
## A Novel Antidiabetic Agent:

### [*N,N'*-bis(4-hydroxysalicylidene)-*o*-phenylene-diamine]oxovanadium(IV)

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The procedure of the synthesis is described for a novel antidiabetic agent [*N,N'*-bis(4-hydroxysalicylidene)-*o*-phenylene-diamine]oxovanadium(IV) (VOL). The x-ray diffraction analysis shows that the vanadium(IV) ion is pentacoordinated and situated in a distorted square-pyramidal environment. The complex was administered intragastrically to both normal and STZ-diabetic rats for 4 weeks. The results show that the complex at a dose of 10.0 and 20.0 mg V.kg<sup>-1</sup>, could significantly lower the blood glucose level and ameliorated impaired glucose tolerance in STZ-diabetic rats, but not in normal rats (Fig.1). It was suggested that the complex exerted an antidiabetic effect in STZ-diabetic rats, which maybe was related to increasing the sensitivity to insulin.



**Fig. 1.** Effects of intragastric VOL on blood glucose levels in normal and STZ-diabetic rats (A); Effect of VOL on glucose tolerance in normal and STZ-induced diabetic rats (B)