Laboratori Nazionali di Frascati

F. Garagiola, P.L. Villa, S. Mobilio and G. Vlaic:

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F.Garagiola, P.L.Villa

Dip. di Chimica, Politecnico di Milano, 20133 Milano, Italy

S.Mobilio

INFN, Laboratori Nazionali di Frascati, 00044 Frascati, Italy

G.Vlaic

Istituto G.Donegani, 28100 Novara, Italy

Multicomponent molibdate systems are widely used as catalists in the oxidation and ammoniaoxidation of olefins. For this reason a lot of scientific work has been done on such systems. In this chemical composition Te and Bi atoms are generally present[1,2], which enhance the activity and selectivity in the catalitic process[3-5]. Different explanation have been proposed in spite of the fact that no direct evidence has been found regarding either the occupied site (substitutional or interstitial) or the oxidation state, or the local environment around the doping atoms.

EXAFS measurement and results are reported on Te L_{III} edge on Te doped $Fe_2(MoO_4)_3$. Three different compositions have been studied x=0.32, x=0.128 and x=0.256 (x is Te weight in gram per $Fe(MoO_4)_3$ mole. H_6TeO_6 and TeO_2 in ortorombic and tetragonal phases have been used as model compounds[6].

Spectra have been recorded on the PULS X-ray beam line in the energy range 4000-4600 eV with a step of 2 eV. Typical Adone current and energy were 50 mA and 1.5 GeV.

Table I reports results obtained by standard data analysis.

Table I

Sample	N	R	$\Delta\sigma$	ΔE
H_6TeO_6	6	1.916	---	----
Te0.032	8.4	1.93	0.0	-1.4
Te0.128	8.8	1.93	0.0	-0.4
Te0.256	8.5	1.93	0.0	-1.0

Moreover the edge position, which is identical to the H_6TeO_6 one, clearly shows a +6 oxidation state for the Te in the catalists.[6]

Data of Table I on the Te coordination, exclude the presence of substitutional Te atoms in the matrix since Fe coordination is 6 and Mo coordination is 4. So cavities able to arrange eightfold coordinated Te atoms must be present. Such cavities are not present either in the undoped matrix, nor in the MoO_3, generally present as an impurity in all samples.

A possible explanation can be a riorientation of the elementary poliedra induced by the Te.

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