

**Study of Surface Characteristics of  
Magnesium Alloy MP-1 After Treatment of  
Sulphite-containing Electrolytes by XPS**

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Application of the protectors is one of simple and effective method of corrosion prevention of metall constructions. It is important studing electrochemical and surface characteristics of its in situ condition. Present report deals with to studing of anodic polarization of magnesium alloy MP-1 and the surface composition after polarisation in different pH of solution ( g / lt ): 1,2 Na<sub>2</sub>SO<sub>3</sub>+0,5 NaCl +0,1 NaHCO<sub>3</sub> +0,1 MgSO<sub>4</sub>+0,1 CaCl<sub>2</sub>.The composition of solution is simler to the composition of waste water of some industry.

Anodic polarisation of sampls in the model solutions are comformed that at  $E_i - 0.8$  V the value of anodic current the same .For the XPS investigation the sampls preliminary vere polarised at  $E = - 1.1$  V in model solutions. It has been observed that on the surface of electrochemically untreated sampls Al and Mg are formed Al<sub>2</sub>O<sub>3</sub> and MgO, after preliminary polarisation of sampls in solution with pH = 8 ,on the surface of sampls are detected C,O,Mg,Al,S and N.The form of sulphur-S +6 , N - NH+ 4 .After one minute of ionic treatment of surfaces sulphur is detected as S-2. It has been established the character of under surface lear of samples depends on ionic treatment time.

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