

## Identification of Kinetic Parameters of Release of Hydrogen Reaction in Acidic Chloride Media by Means of IPZ-analysis

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**Key words and phrases:** hydrogen; diffusion; kinetics; controlling step of a reaction; hydrogenising; discharge; release of hydrogen reaction; re-combination; carbon steel.

**Abstract:** The influence of additives to hydrogenising activator on the kinetics and mechanism of release of hydrogen reaction in acidic chloride media is studied. It is shown that the velocity of hydrogen diffusion into steel doesn't depend on filling the surface with hydrogen. When overexertion is less than 0,4 V controlling step of a reaction of hydrogen release on Steel 3 is the phase of discharge, when overexertion is bigger it is discharge re-combination and double control over velocity.