

Investigation of Wear Resistance and Corrosion of Ni-PTFE Composite Coatings Prepared by Electrodeposition Method

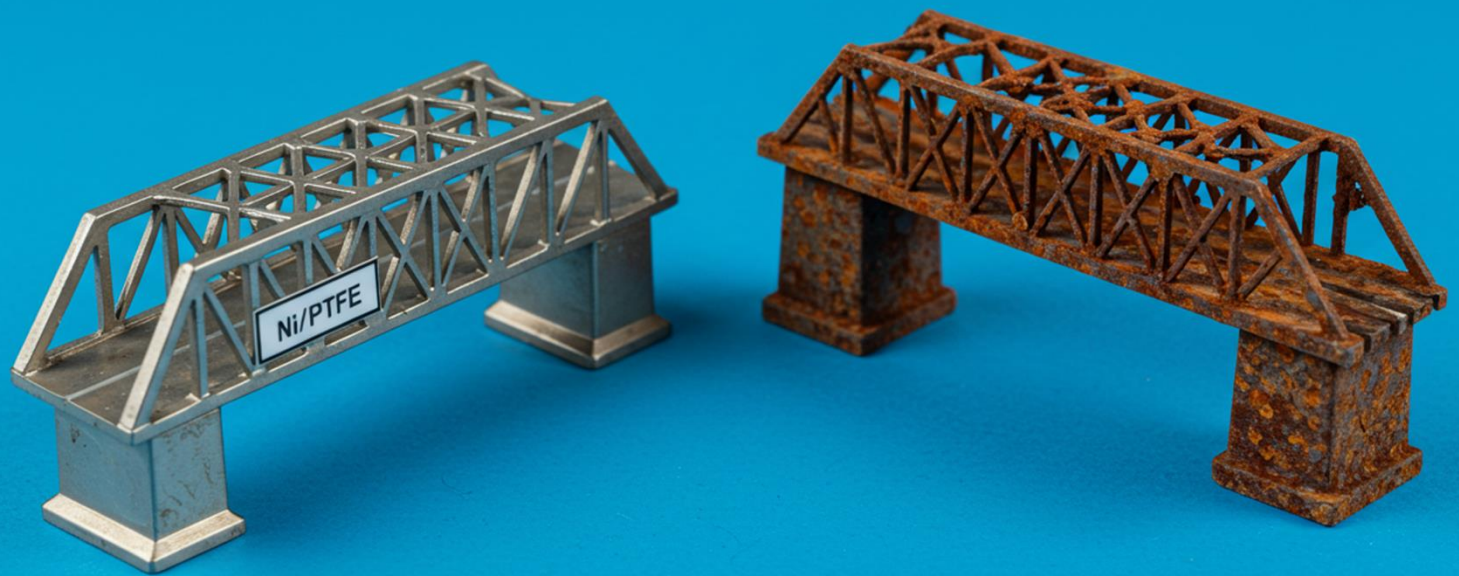
Zainab Wetwet *

College of Materials Engineering, University of Babylon, Babylon, Iraq

Editor's note: Composite coatings are recognized for their effectiveness in providing corrosion protection and wear resistance. An investigation was conducted by Wetwet on the impact of varying concentrations of polytetrafluoroethylene (PTFE) particles on the corrosion inhibition and wear resistance of nickel-based coatings applied to a St37 steel substrate. The results indicate that achieving an optimal concentration of PTFE through the electrodeposition coating process significantly enhances the wear resistance and corrosion inhibition performance of nickel-based coatings. This makes the final coating ideal for developing metal-based infrastructures that require corrosion resistance.

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