**ABSTRACT**

The current research work deals with the alkaline electroless Ni-B plating of mild steel in the presence ofAzadirachta indica gum (GAI). The deposited Ni-B film on mild steel surface wasanalyzed using FT-IR and Scanning Electron MicroscopeSEM) techniques. The amorphous nature of Ni-B deposits on mild steelwas confirmed by XRD. The amount of Nickel and Boron content on depositedNi-B film on mild steel surface was investigated by Energy Dispersive X-ray Analysis (EDX).