Supporting information for:

The Novel L-histidine Based Ionic Liquid (LHIL) as An Efficient Corrosion Inhibitor for Mild Steel

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Fig. S1. $^1$H-NMR (DMSO-d6) spectrum of LHIL.

Fig. S2. HRMS (ESI) spectrum of LHIL.
**Fig. S3.** The surface compositions of carbon steel under different conditions.