

ENHANCING HYDROGEN EVOLUTION IN WATER SPLITTING WITH PECTIN STABILIZED MAGNETITE NANOPARTICLES

Nompumelelo N. Shibe (0000-0001-9159-5043), Zandile Mhlwatika (0000-0003-2109-175X), Shankara
G Radhakrishnan (0000-0002-2039-0734), Nolwazi Nombona (0000-0002-9946-2568) *

Department of Chemistry, University of Pretoria, Private Bag X20, Hatfield 0028, South Africa

**Corresponding author: nolwazi.nombona@up.ac.za*

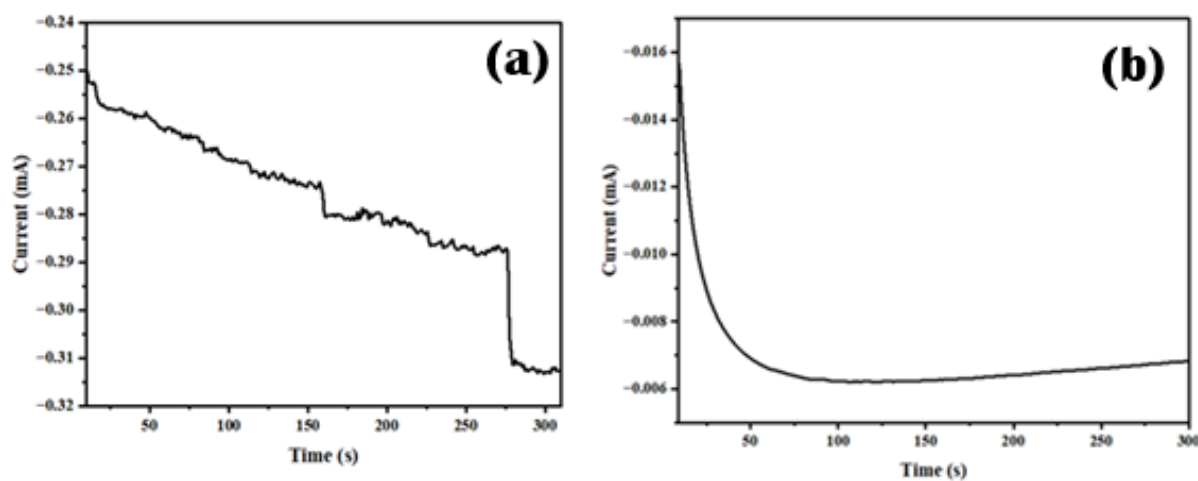


Figure S1: Chronoamperometric responses of (a) uncoated Fe₃O₄ and (b) Fe₃O₄@Pect recorded at an applied potential of -0.37 V vs. RHE in alkaline medium (pH 12.83).

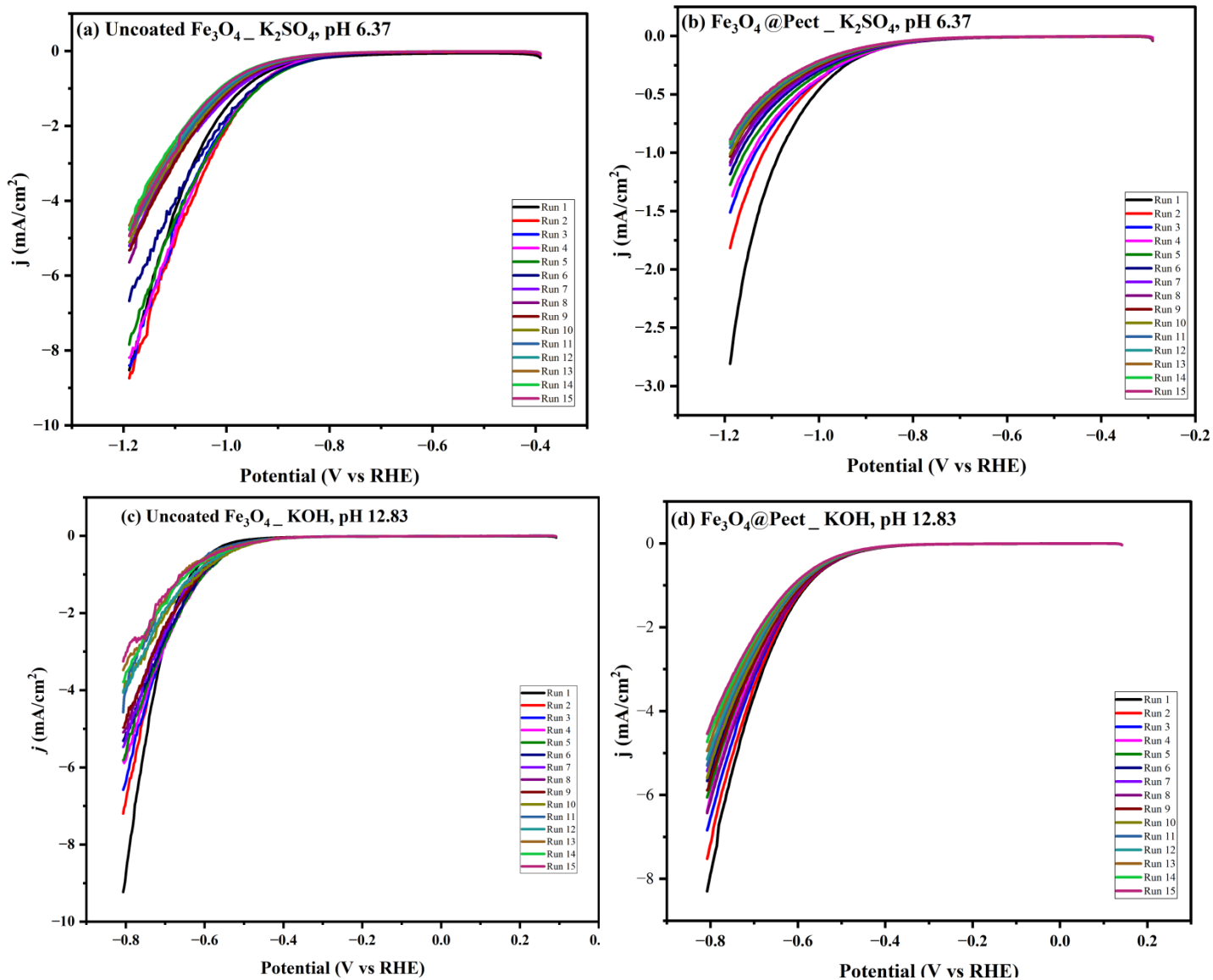


Figure S2: 15 cycles of LSV runs for (a) uncoated Fe_3O_4 in $0.1 \text{ M K}_2\text{SO}_4$, (b) $\text{Fe}_3\text{O}_4@\text{Pect}$ $0.1 \text{ M K}_2\text{SO}_4$, (c) uncoated Fe_3O_4 in 0.1 M KOH and (d) $\text{Fe}_3\text{O}_4@\text{Pect}$ 0.1 M KOH