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Unravelling the Role of –OCH_3 Positional Isomerism and Dihedral Angle in Ni(II)-dppe Dithiolates for Enhanced Heterogeneous Electrocatalytic Oxygen Evolution Reaction (OER)

Devyani Srivastava,[a] Aparna Kushwaha,[a] Ratna Chauhan,[b] Suresh W. Gosavi,[c] Sarfaraz Ahmed,[d] Gabriele Kociok-Köhn,[e]* Abhinav Kumar [a]*

[a] *Department of Chemistry, Faculty of Science, University of Lucknow, Lucknow 226007, India.*
Email: abhinavmarshal@gmail.com

[b]*Department of Environmental Science, Savitribai Phule Pune University, Pune-411007, India.*

[c]*Department of Physics, Savitribai Phule Pune University, Pune-411007, India.*

[d]*Department of Pharmacognosy, College of Pharmacy, King Saud University, P.O. Box 2457 Riyadh 11451, Saudi Arabia*

[e]*Physical Structure Characterization, University of Bath, Claverton Down, Bath, BA2 7AY, UK.*
Email: chsgk@bath.ac.uk

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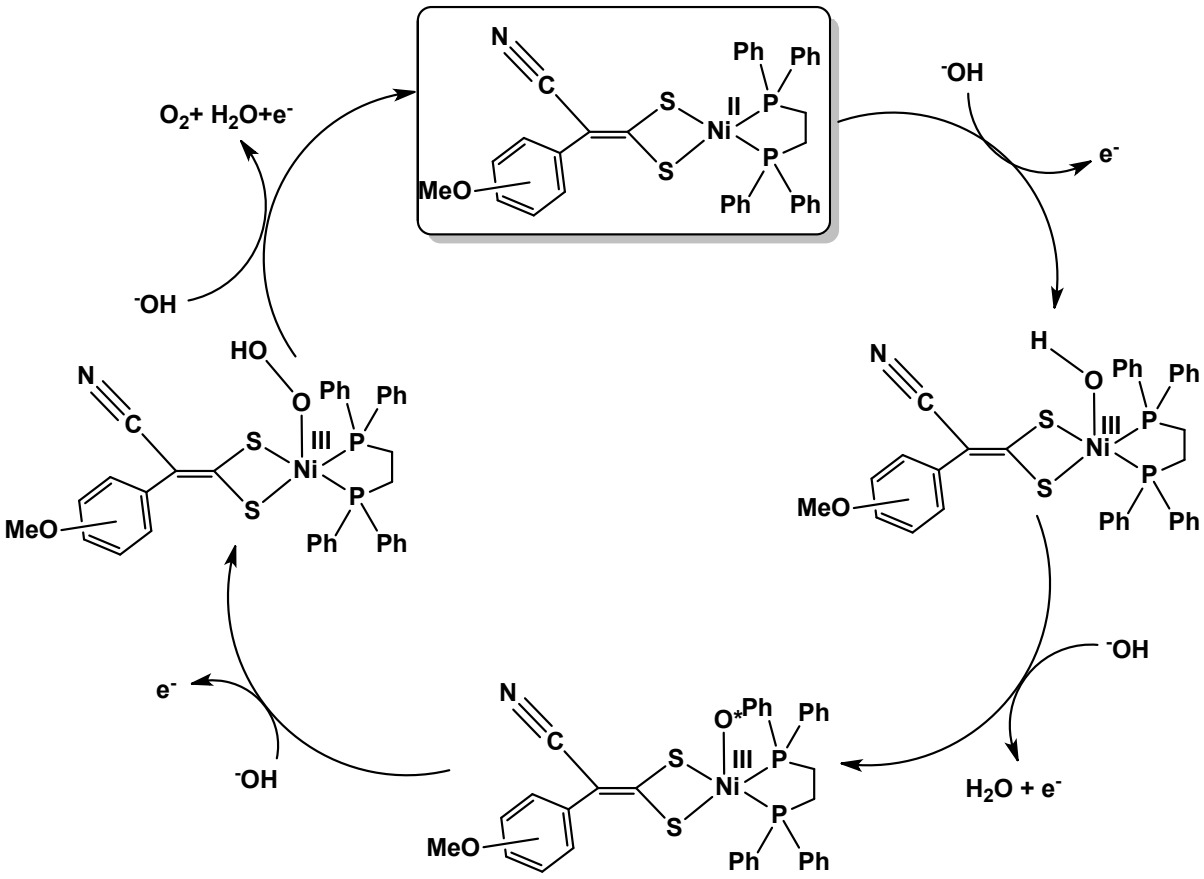

Scheme S1. The plausible mechanistic pathway for dppe appended Ni(II)-dithiolate electrocatalysed OER.

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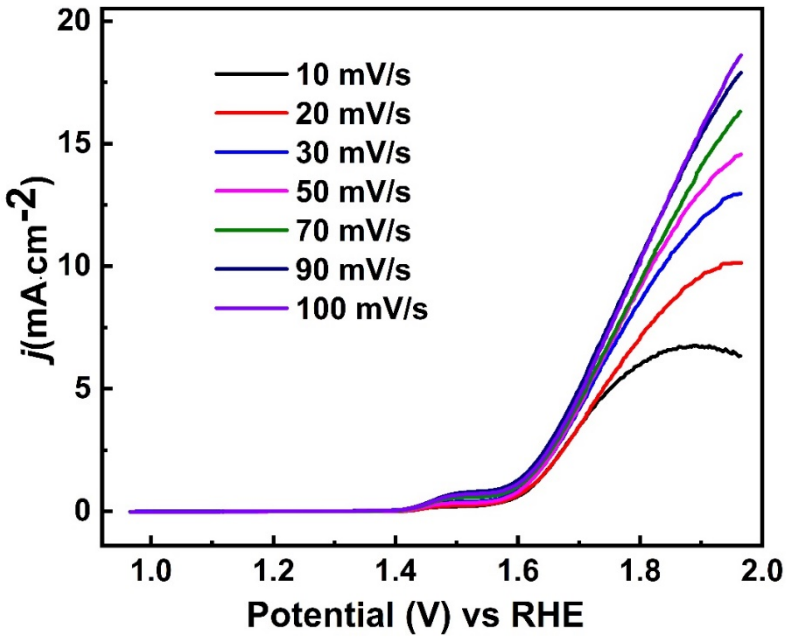

Fig. S1 Linear sweep voltammograms for Ni-L1 at different scan rates

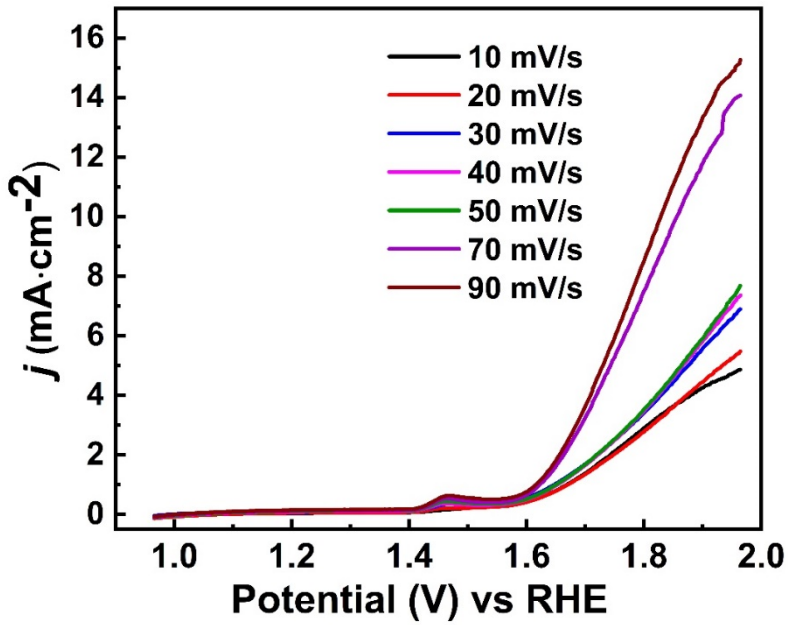

Fig. S2 Linear sweep votammograms for Ni-L2 at different scan rates

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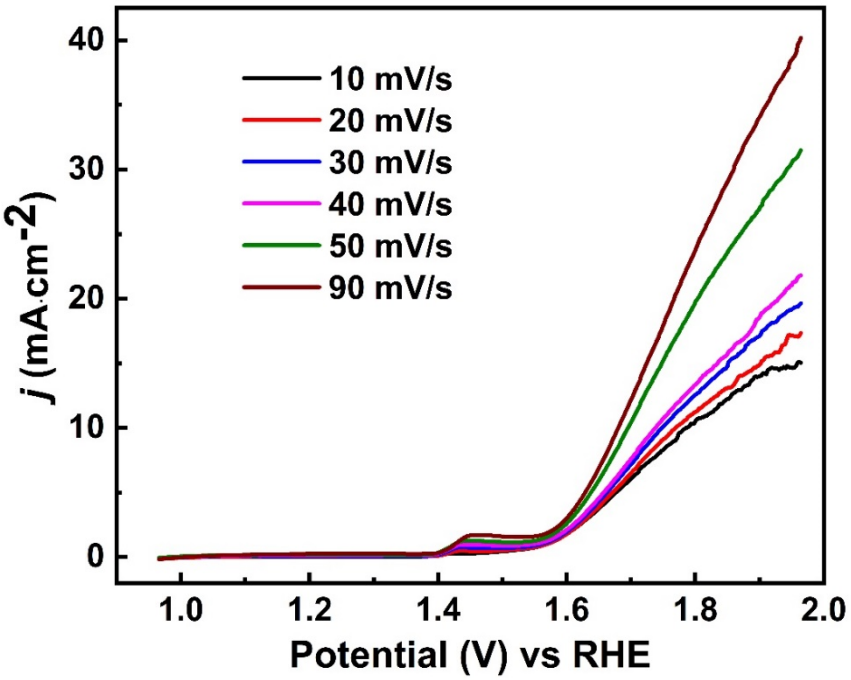

Fig. S3 Linear sweep votammograms for Ni-L3 at different scan rates

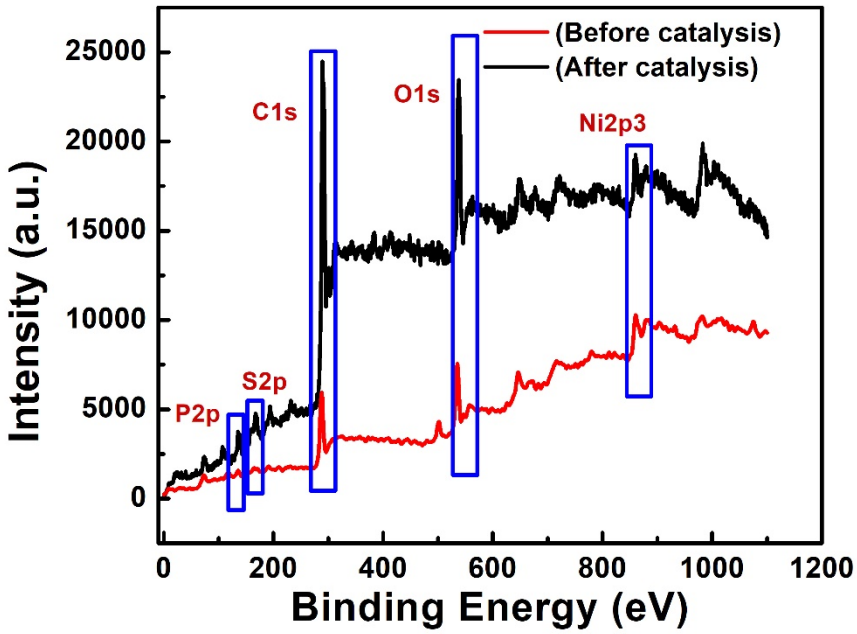

Fig. S4 XPS spectra for Ni-L3 before and after OER electrocatalysis.

Table S1 The OER electrocatalytic performances of some previously reported analogous complexes.

Electrocatalyst	Supporting	Onset Potential	Potential (V) at 10	Ref.

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	Electrolyte	**(V)**	**$mV \cdot cm^{-2}$**	
Ni-L1	0.1M KOH	1.58	-	This work
Ni-L2	0.1M KOH	1.59	1.60	This work
Ni-L3	0.1 M KOH	1.56	1.49	This work
Ni-mtsq	0.1 M KOH	1.54	-	1
Nidtsq	0.1 M KOH	1.50	1.38	2
1	0.1 M KOH	1.69	-	3
Ni-1	0.1 M KOH	1.49	1.05	4
Ni-2	0.1 M KOH	1.55	1.43	4
Ni-3	0.1 M KOH	1.52	1.12	4
Ni-4	0.1 M KOH	1.57	1.13	4
GC_{rde}/Nf-1	1 M KOH	1.72	1.82	5
GC_{rde}/Nf-2	1 M KOH	1.52	1.58	5
GC_{rde}/Nf-3	1 M KOH	1.57	1.67	5
GC_{rde}/Nf-4	1 M KOH	1.56	1.65	5
GCE/Nf/Complex-1	0.1M KOH	-	-	6
GCE/Nf/Complex-2	0.1M KOH	-	1.73	6
GCE/Nf/Complex-3	0.1M KOH	-	1.68	6

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