

Facile nickel doping into Co_3O_4 nanostructures turned them efficient for oxygen evolution reaction

Adeel Liaquat Bhatti¹, Umair Aftab⁴, Aneela Tahira², Muhammad Ishaq Abro⁴, Muhammad Kashif samoon⁵, Muhammad Hassan Aghem⁵, Muhamad Ali Bhatti⁶, Zafar Hussain Ibupoto^{3*}

¹Institute of Physics, University of Sindh, Jamshoro, 76080, Sindh Pakistan

²Department of Science and Technology, Campus Norrköping, Linköping University, SE-60174 Norrköping, Sweden

³Institute of Chemistry, University of Sindh, 76080 Jamshoro, Pakistan.

⁴Mehran University of Engineering and Technology, 7680 Jamshoro, Sindh Pakistan

⁵Centre of Pure and Applied Geology University of Sindh, Jamshoro 76080, Sindh, Pakistan

⁶Centre of Environmental Sciences 76080, Jamshoro, Sindh Pakistan

* **Corresponding author:** Zafar Hussian Ibupoto, PhD

Email address: zaffar.ibhupoto@usindh.edu.pk

S1: SEM image of pristine cobalt oxide

