

Supporting Information for Publication

**Electrochemical Detection of Profenofos in Water using UiO-67 Metal
Organic Framework with Graphene Oxide Composite**

Shanthosh Maheswari Sivasubramaniyan ², Indhu Suresh ^{1,2}, Selva Balasubramanian

^{1,2}, Noel Nesakumar ^{1,3}, John Bosco Balaguru Rayappan ^{1,2}, Arockia Jayalatha

Kulandaisamy ^{1,2,*}

¹Centre for Nanotechnology & Advanced Biomaterials (CeNTAB), SASTRA Deemed

University, Thanjavur,

613401, Tamil Nadu, India

²School of Electrical and Electronics Engineering, SASTRA Deemed University, Thanjavur,

613401, Tamil Nadu, India

³School of Chemical and Biotechnology, SASTRA Deemed University, Thanjavur 613 401,

Tamil Nadu, India

***Corresponding Author**

Arockia Jayalatha Kulandaiswamy, Ph. D.

Centre for Nanotechnology & Advanced Biomaterials (CeNTAB)

School of Electrical & Electronics Engineering

SASTRA Deemed University

Thanjavur- 613401, Tamil Nadu, India

Phone: +91 4362 264 101; Ext: 2255

Fax: +91 4362 264 120

E-mail: arockiajayalatha@eee.sastra.edu

Section S1:

Table S1: PXRD pattern points of UiO-67 MOF and UiO-67 MOF/GO

Material	2θ (degrees)	Intensity (a.u.)
MOF using HCl Modulator	5.6°	100.00
	6.5°	50.42
	9.2°	29
	11.3°	38.73
	19.6°	28.02
MOF using HCl Modulator/H ₂ O	5.7°	99.92
	6.6°	51.79
	9.3°	28.3
	11.4°	21.76
	19.7°	27.65
MOF-GO Composite	5.6°	111.87
	11.3°	829.86
	16.2°	758.90
	24.2°	799.87

Section S2:

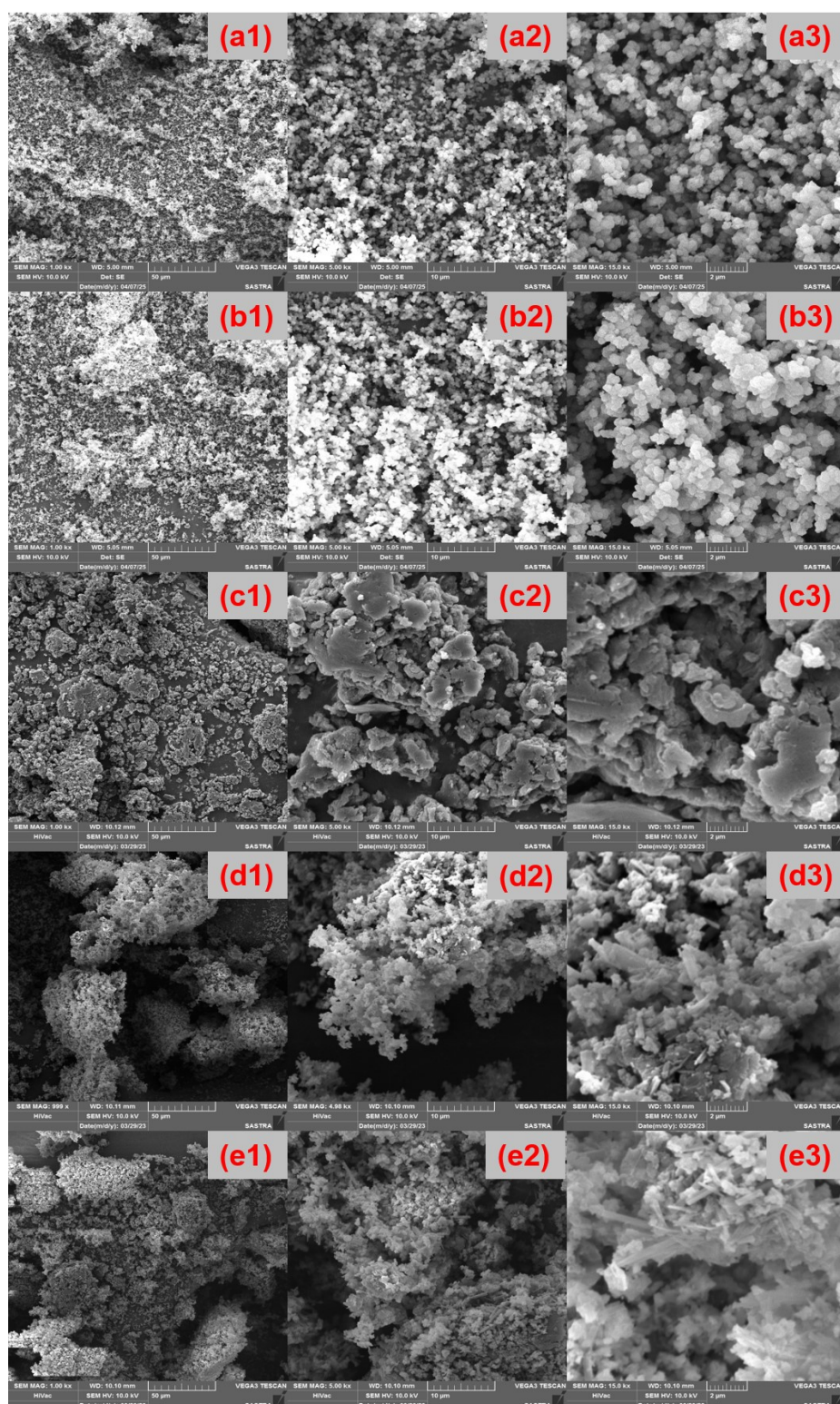


Figure S1. SEM micrographs of: (a1 – a3) UiO-67 synthesized using HCl modulator, (b1 – b3) UiO-67 synthesized using a mixture of HCl and water as the modulator, (c1 – c3) graphene oxide, (d1 – d3) UiO-67/GO prepared with an HCl modulator, and (e1 – e3) UiO-67/GO prepared with a mixture of HCl and water as the modulator at different magnifications (1 KX, 5 KX, & 15 KX).

Section S3:

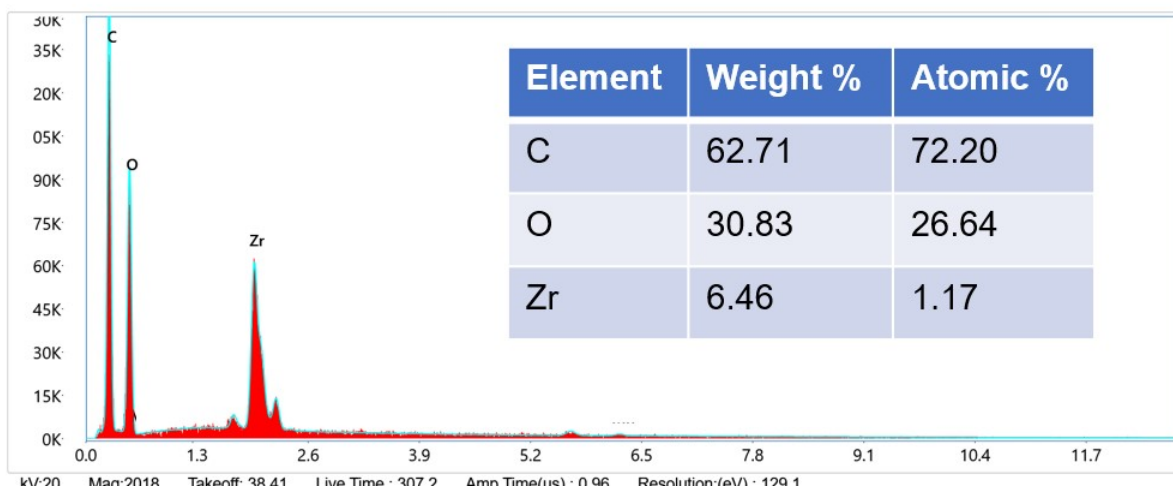


Figure S2. EDX spectrum and atomic weight percentage of UiO-67/GO composite.