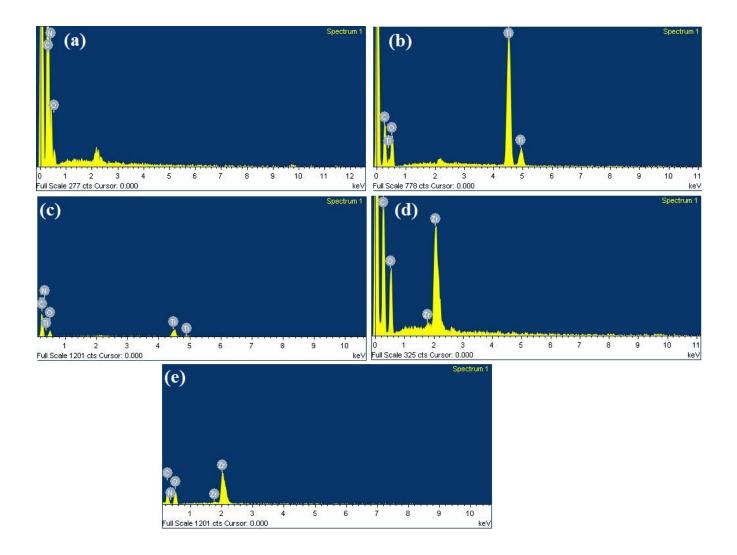
## Development of Efficient Bi-functional g-C<sub>3</sub>N<sub>4</sub>@MOFs Heterojunction for Water Splitting

Muhammad Fiaz,<sup>a</sup> Nkenku Carl,<sup>b</sup> Muhammad Kashif,<sup>a</sup> Muhammad Asim Farid,<sup>c</sup> Nagina Naveed Riaz<sup>c</sup> and Muhammad Athar<sup>a\*</sup>

- <sup>a</sup> Institute of Chemical Sciences, Bahauddin Zakariya University, Multan, 60800, Pakistan
- <sup>b</sup> Department of Energy Systems Research, Ajou University, Suwon, 16499, South Korea
- <sup>c</sup> Department of Chemistry, Division of Science and Technology, University of Education Lahore, Pakistan
- \*corresponding Author: <u>athar.qr@bzu.edu.pk</u>



**Figure S1:** SEM based EDX of (a) g-C<sub>3</sub>N<sub>4</sub>, (b) MIL-125 (Ti), (c) g-C<sub>3</sub>N<sub>4</sub>@MIL-125 (Ti), (d) UiO-66, (e) g-C<sub>3</sub>N<sub>4</sub>@UiO-66

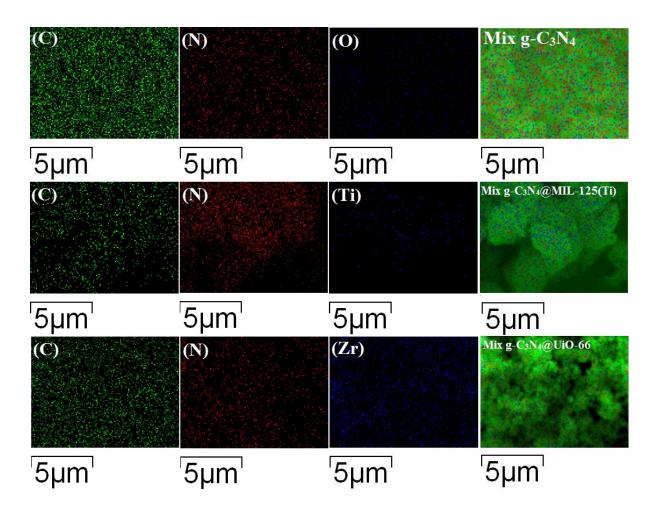


Figure S2: SEM based Elemental mapping of g-C<sub>3</sub>N<sub>4</sub>, g-C<sub>3</sub>N<sub>4</sub>@MIL-125 (Ti) and g-C<sub>3</sub>N<sub>4</sub>@UiO-66

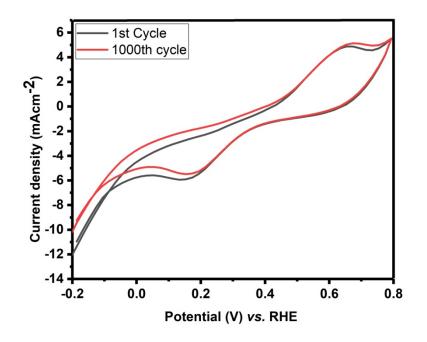


Figure S3: CV curves at 100 mVs<sup>-1</sup> for  $1^{st}$  and 1000<sup>th</sup> cycle of g-C<sub>3</sub>N<sub>4</sub>@MIL-125 (Ti)

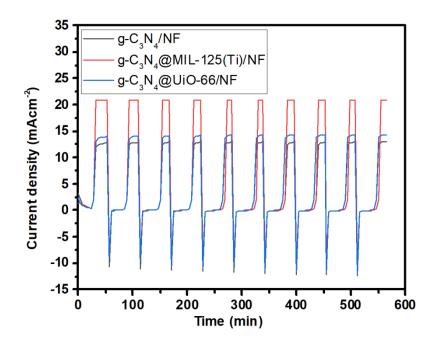


Figure S4: Chronoamperometric measurements at 1.5 V potential for  $g-C_3N_4$ ,  $g-C_3N_4$ @MIL-125 (Ti) and  $g-C_3N_4$ @UiO-66