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Electronic Supplementary Information (ESI)

An experimental and computational investigations of photosensitive Schottky barrier diode property of an azobenzene based small organic molecule

Saikat Banerjee,[a] Arka Dey,[b] Pravat Ghorai,[a] Paula Brandão,[c] Joaquín Ortega-Castro,[d] Antonio Frontera,*[d] Partha Pratim Ray,*[b] and Amrita Saha*[a]

[a]*Department of Chemistry, Jadavpur University, Kolkata- 700032, India.*
E-mail: asaha@chemistry.jdvu.ac.in; Tel. +91-33-24572941
[b]*Department of Physics, Jadavpur University, Kolkata- 700032, India.*
E-mail: partha@phys.jdvu.ac.in; Tel: +91-9475237259
[c]*Department of Chemistry, CICECO-Aveiro Institute of Materials, University of Aveiro, 3810-193 Aveiro, Portugal.*
[d]*Departament de Química, Universitat de les IllesBalears, Crta. deValldemossa km 7.5, 07122 Palma de Mallorca, Baleares, Spain. E-mail: toni.frontera@uib.es*

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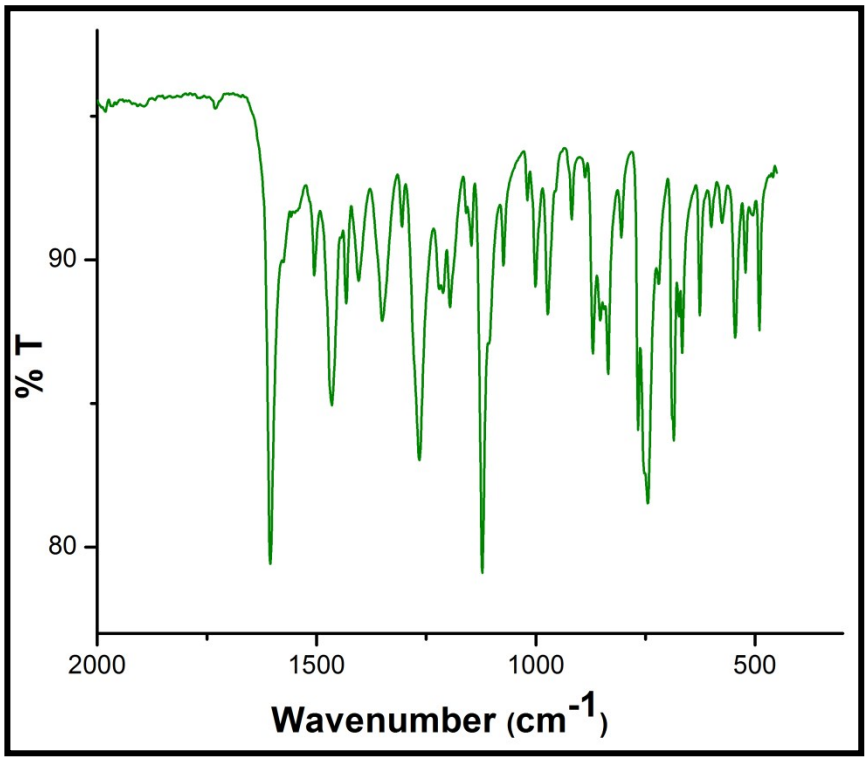

Fig. S1. FTIR spectrum of compound **1**.

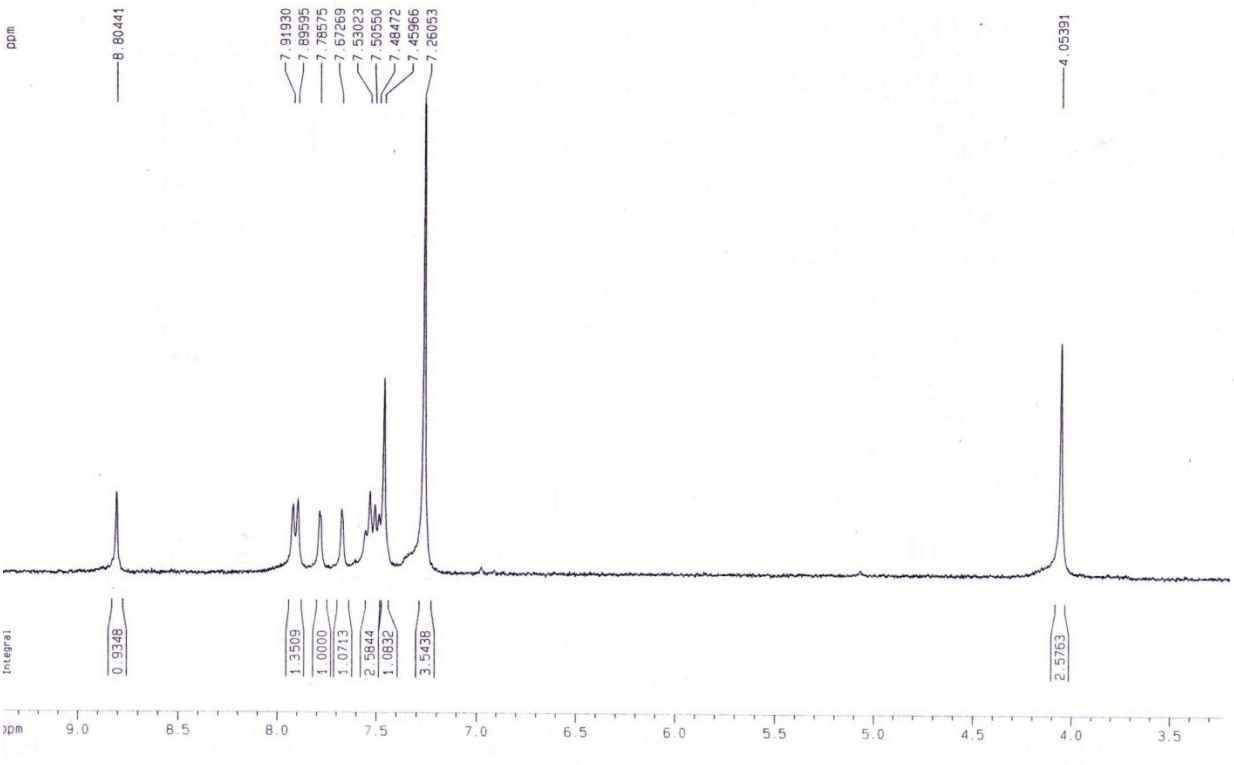

Fig. S2. ^{1}H NMR($CDCl_3$, 300 MHz) spectrum of compound **1.**

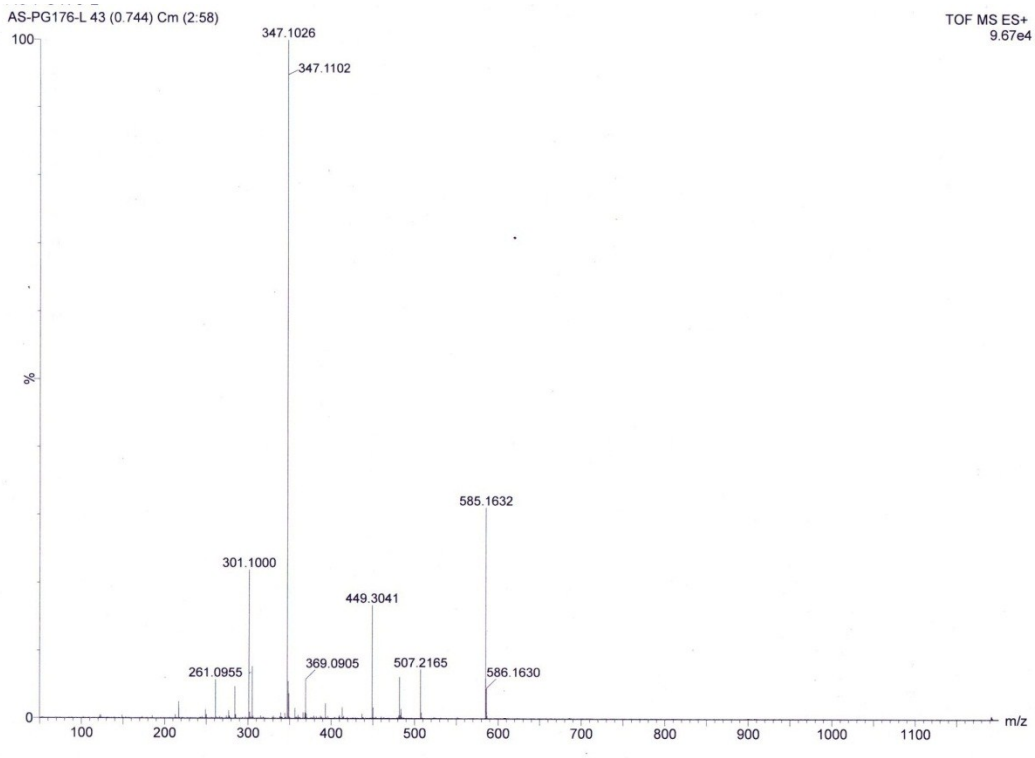

Fig. S3. Mass spectrum of compound **1.**

TGA (Thermo Gravimetric Analysis)

TGA of the compound **1** is measured using Platinum crucible with alpha alumina powder as reference in a PerkinElmer (SINGAPORE) instrument (Model No. - Pyris Diamond TG/DTA). The result shows good stability of the compound up to 290ºC (Figure S4).

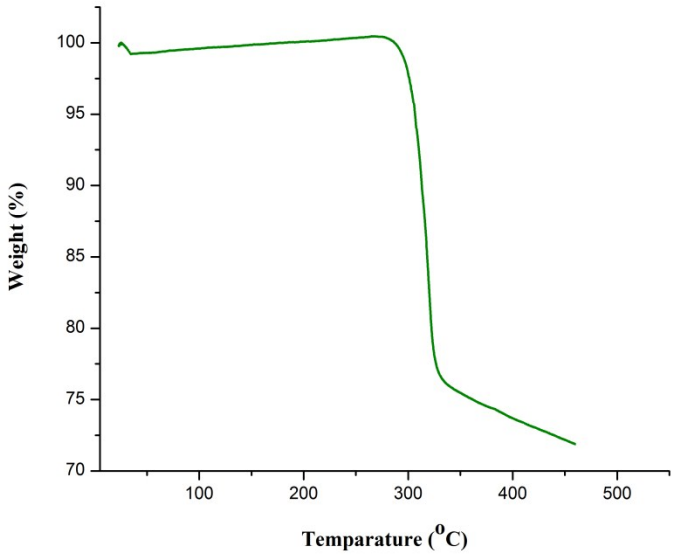

Fig. S4. Thermo Gravimetric Analysis of compound **1** showing stability of the compound is very appreciable up to 290ºC.

Powdered X-ray diffraction

The bulk purity of the complex **1** has been confirmed. It is shown in Figure S5. The simulated pattern (A) is obtained from cif file of the complex and experimental pattern (B) is collected from powdered XRD.

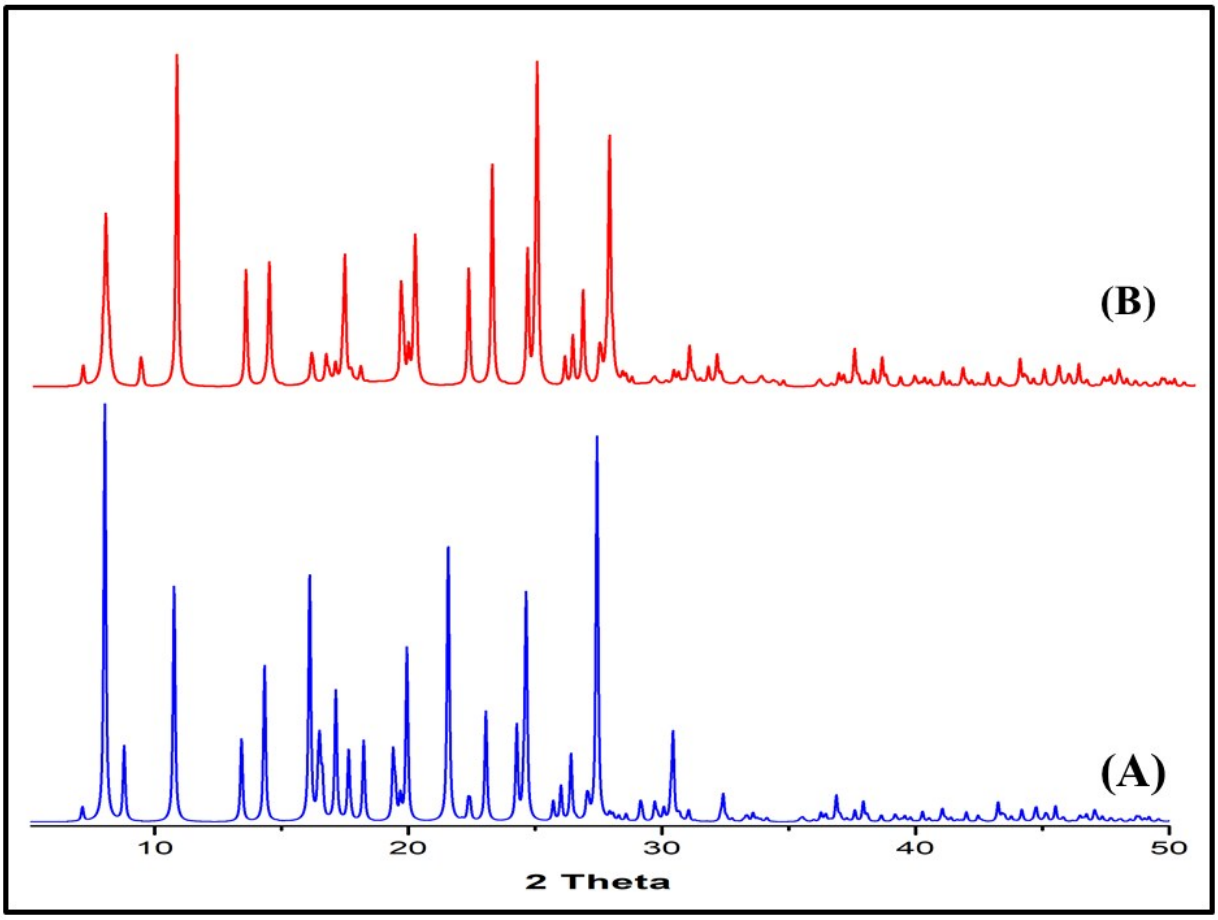

Fig. S5. Simulated (A) and experimental (B) powdered XRD pattern indicating the purity of the bulk materials of compound **1**.