

# Using scanning electrochemical microscopy to examine copper(I) sensitizers for dye sensitized solar cells.

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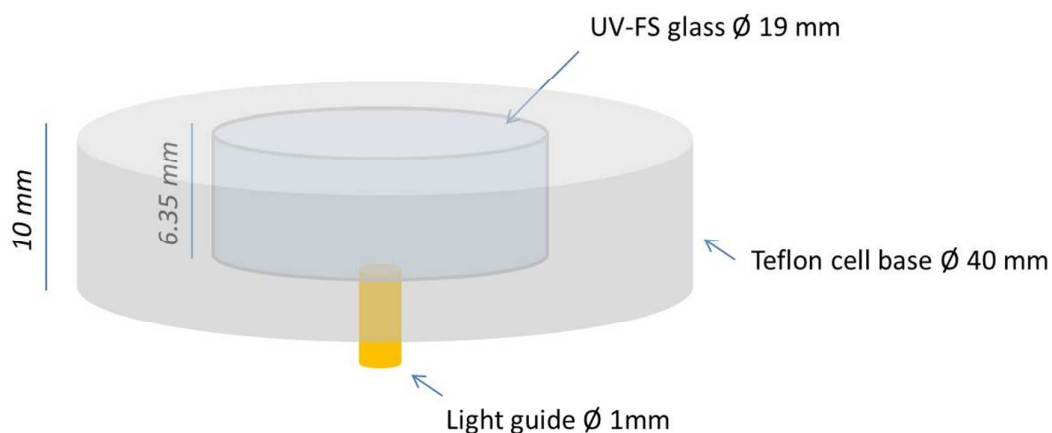
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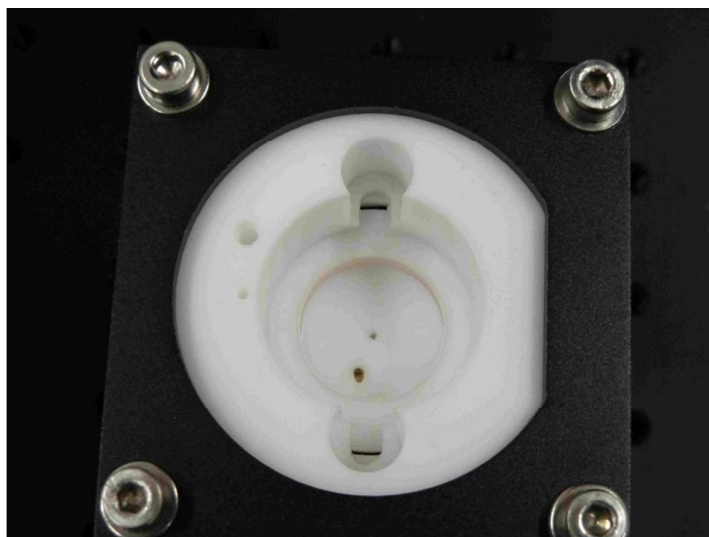
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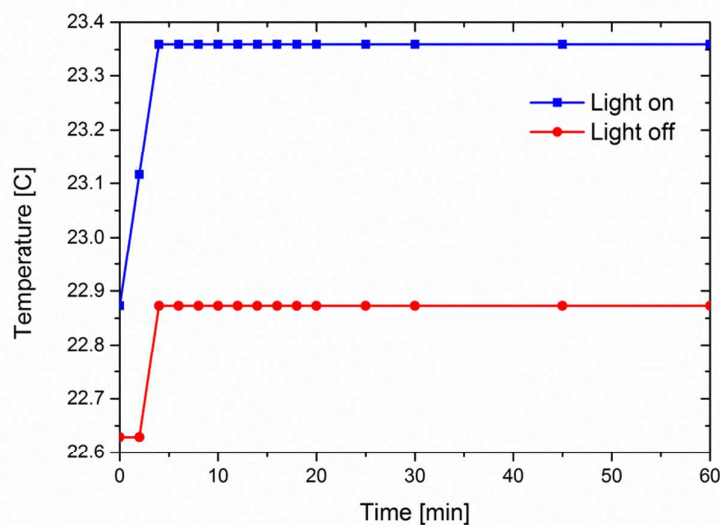
**Figure S1** Schematic of the cell base prepared for use in the experiments



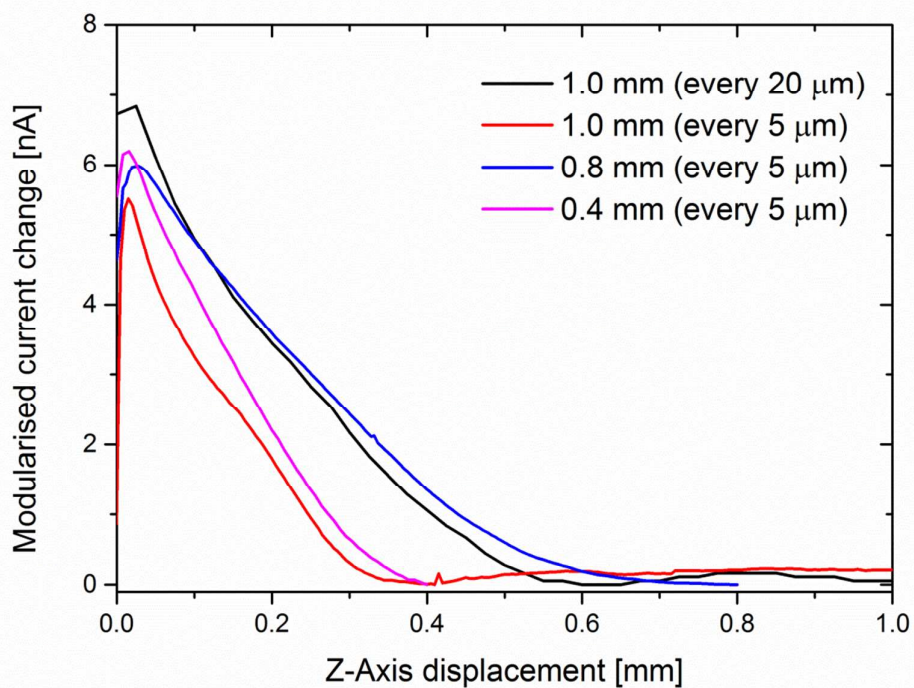
**Figure S2** The modified SECM cell with light on and off (electrolyte and DSC not present).



**Figure S3** Changes in temperature of a solution of a solution of 5 mM [ $n$ Bu<sub>4</sub>N][PF<sub>6</sub>] in 3-methoxypropanitrile over the point of illumination in the dark and at 80 mW cm<sup>-2</sup>.



**Figure S4** Variation from the dark current for N719 cells measured in I<sup>-</sup>/I<sub>3</sub><sup>-</sup> electrolyte (LiI (25mM), I<sub>2</sub> (2.5 mM), 1-methylbenzimidazole (25 mM) and 1-butyl-3-methylimidazolium iodide (30 mM) in 3-methoxypropanitrile) upon retraction from the surface at a tip potential of -0.4 V under illumination at 70 mW cm<sup>-2</sup>.



**Figure S5** Change in current as light of intensity  $70 \text{ mW cm}^{-2}$  is turned off for N719 cells measured in  $\text{I}^-/\text{I}_3^-$  electrolyte ( $\text{LiI}$  (25mM),  $\text{I}_2$  (2.5 mM), 1-methylbenzimidazole (25 mM) and 1-butyl-3-methylimidazolium iodide (30 mM) in 3-methoxypropanitrile) at a tip potential of  $-0.4 \text{ V}$ .

