## **Electronic Supporting Material**

## Development of carbon-supported Sn-SnO<sub>2</sub> photocatalyst by a hybridized solgel/dextran approach

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ESI Fig. S1: SEM images of pure SnO<sub>2</sub>, Sample 1.



ESI Fig. S2: Time-dependant absorbance spectra of Sample 6 with RhB.

ESI Table 1: Elemental analysis carbon content of annealed samples.

Precursor	Sample	Annealing Condition	Carbon (%)
SnPO	1	500°C / 3h / Air	.09
SnGLY	6	500°C / 3h / N <sub>2</sub>	74.63
SnGLY	7	500°C / 8h / N <sub>2</sub>	52.97
SnGLYw/o dextran	8	500°C / 3h / N <sub>2</sub>	21.50



**ESI Fig. S3**: SEM Images of A: rods and spheres; B: carbon-support; C: pure SnO<sub>2</sub>.

**ESI Table 2**: Energy dispersive spectroscopy table of elemental distribution taken from sample locations of figure S3. Rods and spheres from image A, support from image B, and last pure SnO<sub>2</sub> from image C.

	Tin	Oxygen	Carbon
Rod <sup>a</sup>	82%	6%	10%
Spheres <sup>a</sup>	90%	2%	7%
Support	17%	5%	78%
Pure SnO <sub>2</sub> <sup>a</sup>	79%	17%	<1%

<sup>a</sup>Residual percentage aluminium was detected from the aluminium mounting stub.



**ESI Fig. S4**: SEM Images of sample 6 taken from various locations indicating a range of particulate sizes and shapes. Samples B,D, and F on the right are increased magnification of the samples on the left A,C, and E, respectively.