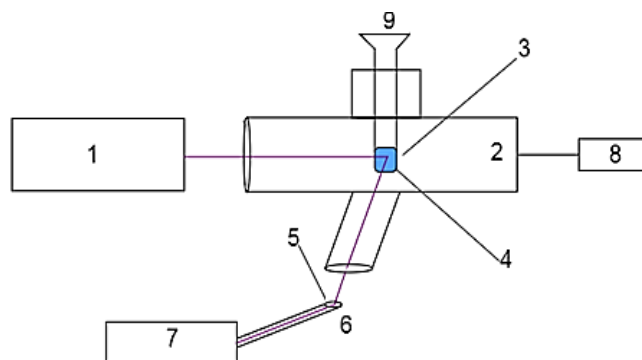


**Table S1.** Peak positions of deconvoluted ZnO and ZnO-PDA PL spectra and power coefficient values

Peak position, eV	P1	P2	P3	P4
ZnO	2.08±0.104	3.28±0.164	3.34±0.167	3.367±0.168
k	0.53±0.026	1.45±0.072	1.44±0.072	1.33±0.066
ZnO-PDA	2.05±0.102	3.27±0.163	3.348±0.167	3.368±0.168
k	0.4±0.02	1.07±0.053	1.42±0.071	1.27±0.063



**Figure S1** - Schematic of PL low temperature Set-up. Labels show: 1 - laser, 2 – vacuum chamber, 3 – sample holder, 4 – sample, 5 – quartz lens, 6 – optical fiber, 7 – spectrometer, 8 – vacuum pump, 9 – temperature controller