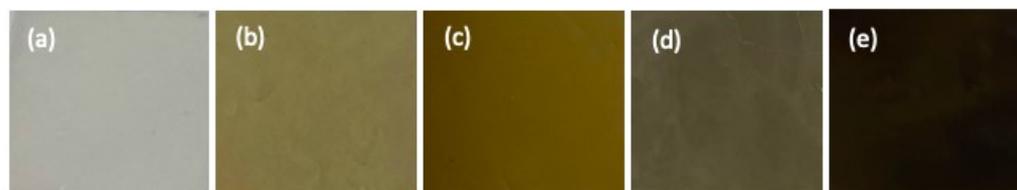


**Supplementary Materials:** The following supporting information can be downloaded at:

## Environmentally Friendly Loading of Palladium Nanoparticles on Nanoporous PET Track-Etched Membranes grafted by Poly(1-Vinyl-2-Pyrrolidone) via RAFT Polymerization for the Photocatalytic Degradation of Metronidazole

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**Figure S1** - The color changing tendency of Pd-loaded PVP-grafted samples by varying reducing agents: a) Pristine PVP-g-PET; b) Pd\_TR@PVP-g-PET by thermal reduction method; c) Pd\_PE@PVP-g-PET by plant extract method; d) Pd\_SBH@PVP-g-PET by Sodium borohydride; e) Pd\_Asc@PVP-g-PET by ascorbic acid.

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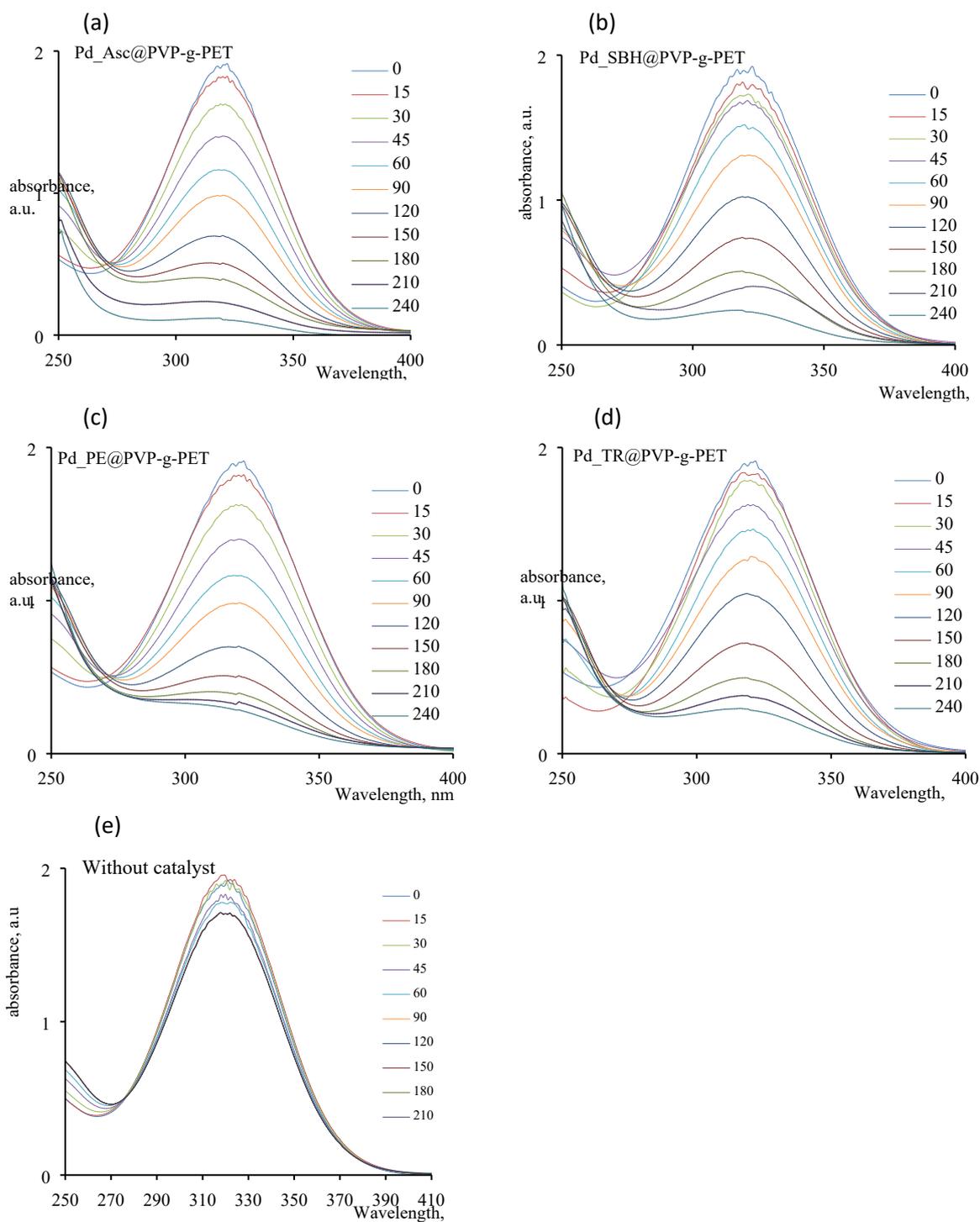
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† Footnotes relating to the title and/or authors should appear here.

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**Figure S2** - Typical absorption spectra for the decomposition reaction of MTZ (30mg/l) in the presence of 1x1 cm Pd\_Asc@PVP-g-PET (a), Pd\_SBH@PVP-g-PET (b), Pd\_PE@PVP-g-PET (c), Pd\_TR@PVP-g-PET (d) composite membranes and without any catalyst (e).