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## Electrochemical oxidation of paracetamol in water by graphite anode: Effect of pH, electrolyte concentration and current density

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## Highlights

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Degradation of paracetamol (>90%) by electrooxidation process using graphite electrode.

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- Total degradation and <u>mineralization</u> (>82% COD removal & >65% TOC
  removal) at the end of 240 min of <u>electrolysis</u>.
- Effect of initial pH, electrolyte concentration (Na<sub>2</sub>SO<sub>4</sub>) and current density was a crucial parameters.
- Idendification of transformation products of paracetamol by HPLC.
- A pathway for paracetamol degrdation by <u>hydroxyl radicals</u> (•OH) based on reaction intermediates.



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Selvendiran Periyasamy <sup>a</sup>, Muthukumar Muthuchamy <sup>a, b</sup> 유 쯔

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Abstract