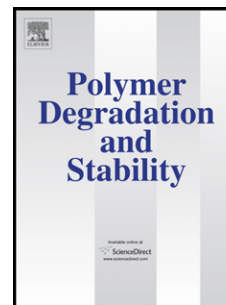


Accepted Manuscript

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PII: S0141-3910(13)00029-3

DOI: [10.1016/j.polyimdegradstab.2013.01.011](https://doi.org/10.1016/j.polyimdegradstab.2013.01.011)

Reference: PDST 6908

To appear in: *Polymer Degradation and Stability*

Received Date: 16 October 2012

Revised Date: 15 January 2013

Accepted Date: 24 January 2013

Please cite this article as: Watthanaphanit A, Saito N, Effect of polymer concentration on the depolymerization of sodium alginate by the solution plasma process, *Polymer Degradation and Stability* (2013), doi: 10.1016/j.polyimdegradstab.2013.01.011.

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ABSTRACT

Depolymerization of alginate was accessed, for the first time, by the plasma treatment in solution called solution plasma process (SPP). The process was done by applying an electrical discharge into a reactor containing sodium alginate aqueous solution. The key of the production is the generation of reactive species induced by the plasma in a liquid environment that can lead to the scission of polymer chains. Effect of polymer concentration on the SPP processing parameters and the depolymerization efficiency were studied. Three concentrations of sodium alginate

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