

## عنوان مقاله:

Effect of cationic polymer on aerobic granulation in sequencing batch reactor

## محل انتشار:

پانزدهمین کنگره ملی مهندسی شیمی ایران (سال: 1393)

تعداد صفحات اصل مقاله: 5

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## خلاصه مقاله:

The aim of this study was to investigate the influence of cationic polymer on granule formation within a Sequencing Batch Reactor (SBR). To identify whether a polymer addition was capable of enhancing aerobic granulation, two SBR reactors (R1 and R2, each 0.15 m in diameter and 1.8 m in height) were operated. The cationic polymer with concentration of 30 to 2 ppm was added to R2 while no cationic polymer was added to R1. Results showed that the cationic polymer addition, caused granules to form sooner and resulted in a faster granulation process. The polymer-amended reactor contained higher concentration of biomass with better settling ability (23% reduction in SVI), larger and denser granules (112% increase of granular diameter) and showed 17% reduction in effluent SS concentration. As results shown, it is apparent that the addition of cationic polymer to an aerobic granular system has the potential to .enhance the sludge granulation process and shorten reactor start up period

## کلمات کلیدی:

Aerobic granulation, Cationic polymer, Reactor start-up, Compact granules

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/368609>

