عنوان مقاله:

Comparative Evaluation of Numerical and Gaussian Models for Gas Pollutants Dispersion from Industrial Flares

محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

تعداد صفحات اصل مقاله: 9

نویسندگان:

nosha assareh - *chemical engineering department faculty of engineering shahid bahonar university of kerman iran*

ali dashti - *chemical engineering department faculty of engineering shahid bahonar university of kerman iran*

ali mohebbi - *chemical engineering department faculty of engineering shahid bahonar university of kerman iran*

خلاصه مقاله:

A comparative evaluation of numerical and Gaussian models was developed for gas pollutants dispersion from industrial flares. Numerical model incorporates the finite volume method to estimate pollutants concentration from continuous sources. In this model, different profiles forwind velocity and dispersion coefficients were used depending on atmospheric stability classes.Surface roughness was also considered in numerical modeling. Pollutants concentration predicted by the presented model, were compared to those obtained by the Gaussian plume model which assumes constant wind and dispersion coefficients in vertical direction. The maximum ground level concentration agrees well in both models. However, the concentration distribution profile predicted by Gaussian model is broader than that of obtained by numerical model, due to considering effects of surface roughness in numerical .model

کلمات کلیدی:

comnarative evaluation,gas pollutant numerical ,gaussian industrial elare