

## عنوان مقاله:

(Hydrogen Network Retrofit in Oil Refineries (with Capital Investment Limitation

## محل انتشار:

پنجمین کنگره بین المللی مهندسی شیمی (سال: 1386)

تعداد صفحات اصل مقاله: 6

## نویسندگان:

Jafari Nasr - IPetrochemical Research & Technology Co. (NPC-RT), Affiliated of National Petrochemical Company (NPC), Tehran, Iran

Amidpour - Department of Energy Systems Engineering, Faculty of Mechanical Engineering, K. N. Toosi University of Technology, Tehran, Iran

Salary - Department of Energy Systems Engineering, Faculty of Mechanical Engineering, K. N. Toosi University of Technology, Tehran, Iran

## خلاصه مقاله:

In general, during hydrogen integration in oil refineries, there are two basic scenarios. First, is integration without any capital investment limitation and second is integration with regarding capital investment limitation. Because of most refineries are facing with investment limitation, so the engineers prefer to recover hydrogen instead off investing for new units. This paper elaborates hydrogen network retrofit in oil refineries with considering the capital investment limitation. In this regard, hydrogen distribution network of Tehran refinery was considered as proper case study of the research (certain data have been disguised for confidentiality). In this research, through using REFOPT software<sup>1</sup>, which is based on mathematical and graphical approaches, the hydrogen network was simulated and optimized. Ultimately, by analyzing the results and with remarking capital investment limitation, existing hydrogen network was modified, existing potentials of hydrogen recovery in Tehran refinery were identified, the optimum conditions .determined and profitability was increased consequently

## کلمات کلیدی:

Hydrogen network, integration, oil refineries

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/46033>

