

## PROSYN<sup>®</sup> Membranes – development of a public membrane expert system

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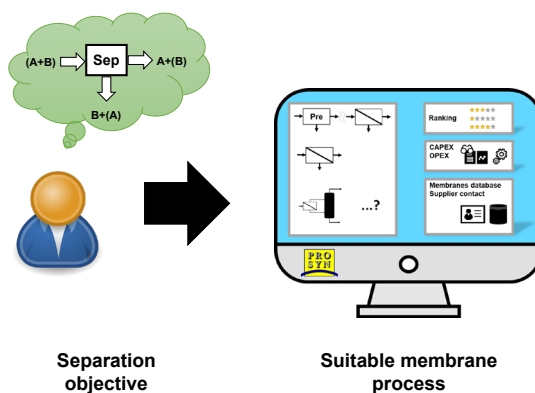


### Introduction

Membrane processes are used sporadically and reluctantly in the Dutch and international process industry. In addition to the conservative approach that characterizes the process industry in general, membrane systems do not appear extensively in the normal process manuals or in the practice of comparative system studies by engineering contractors and consultants. One of the causes is the lack of easily accessible comparative tools with sufficient basic data to calculate a membrane process as a variant on existing processes. This project aims to change that.

### Project summary

PROSYN<sup>®</sup> Membranes expert system was originally developed in the 1990s in Germany to aid process engineers for better initial selection and preliminary design of various membrane processes. The system contains a collection of heuristic-numeric knowledge rules and a database of membranes. In the context of this project, the system will be updated and further expanded. Knowledge rules will be verified, adapted and validated in cooperation with industrial partners. At the end of the project, the updated system will be made publicly available (free of charge) to the participants in a user-friendly form via a web application



### Project goals

The aim of the project is to revise the existing expert system PROSYN<sup>®</sup> Membranes, and to make it publicly accessible to all possible users via the internet. The effort within this project is to make at least an update until 2020 with the membrane community, suitable for internet-based deployment, and a central platform for additional membranes and suppliers for the future.

### Contact information

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