

Jan Harmsen, André B. de Haan, Pieter L.J. Swinkels

PRODUCT AND PROCESS DESIGN

Driving Innovation



Synopsis

Design for Innovation of processes and products helps the designer in all stages from idea to implementation of novel products and processes to get successful novel products and reliable novel processes implemented in the market, at commercial scale.

A large number of design methods are provided. Methods to generate new product concepts and novel process concepts. Methods to communicate and evaluate novel ideas. For each successive innovation stage more elaborate methods are provided.

In this way it helps the product researchers and the process developers to understand their key contributions in all R&D stages. It also helps all others in the R&D team and also other stakeholders; companies and institutes: (universities, CRO, Technology provider, Detaching companies, Engineering Procurement and Construction (EPC), manufacturing companies, equipment companies to understand their roles and enhance their co-operation.

The book can also be used as a textbook for design courses for MSc, PhD and PDEng programmes. The specific design methods provided have been tested for more than 5 years for courses in process design, chemical product design and biotechnology process and product design.

Why this book

- ▶ Inspires designers to novel and better designs. It aids in co-operation between people and between departments of technology centres. It helps to plan and manage R&D for novel products and processes.
- ▶ Bridges gaps between academia and industry, between departments in companies.
- ▶ Enhances design quality, innovation quality and innovation speed.
- ▶ Such a book is not available elsewhere.

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Plant Design
Process Engineering

Of interest to: Chemical Engineers,
Chemical Process Engineers, Chemists,
Biochemists

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- ▶ Training in process technology, sustainability, process design, scale-up, intensification.
- ▶ Readers will benefit from the authors' industrial experience in research, development, design, start-up, operation and de-bottlenecking.

Jan Harmsen, Harmsen Consultancy BV, Nieuwerkerk aan den IJssel, Netherlands

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