# Distillation and Absorption 2006

Institution of Chemical Engineers, Rugby, UK

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# **Distillation and Absorption 2006**

This book contains the papers presented at the 8th Distillation and Absorption conference held in London, UK, 4-6 September, 2006.

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#### Preface

It is now nearly 50 years since the first Distillation & Absorption conference was held in Brighton in 1960. The first meetings were held in Brighton at approximately ten-year intervals and therefore became know as 'the Brighton Conferences'. In 1987, it was recognized that more frequent meetings were needed, so the next conference was in 1992 in Birmingham (UK), then 1997 in Maastricht (Netherlands) and then in 2002 in Baden-Baden (Germany).

Distillation and Absorption are hugely important industrial separation technologies. They are used to produce the world's petroleum fuels; to treat most of our natural gas; and are a critical element in a host of processes making the chemicals and other products that the world needs. Large in scale, and heavy in energy usage, there are enormous incentives to introduce new and improved methods and equipment to improve the sustainability of these operations.

These proceedings present the collected papers of the 8th International Symposium on Distillation & Absorption held in London in September 2006 and include 100 papers selected from over 180 submitted abstracts. Of these contributions, 4 were plenary lectures, 64 scientific lectures and 32 were posters. A number of exhibitors also presented their contributions at the conference.

The papers cover a broad range of topics from the estimation of physical properties to the design and performance of contacting trays and packing, and demonstrate a remarkably high rate of advance in the technology. Our understanding of the behaviour of distillation and absorption processes is continuing to improve rapidly, resulting in new methods of control, better process integration, more effective equipment, novel schemes for reactive and extractive distillation as well as for hybrid processes, and in the many other developments described in the papers in these proceedings.

We would like to record our thanks to everyone who submitted a paper for contributing to an outstanding programme. We received a large number of excellent contributions and the Scientific Committee had a difficult task selecting the most outstanding ones from these and, inevitably, many worthy contributions did not make it through to the final programme. Equally, we would like to thank the theme

leaders and international referees who worked tirelessly to reduce a large number of abstracts down to the final papers detailed here. We would also like to acknowledge the essential contribution of the IChemE team at Rugby. These Proceedings are our distilled product – we hope you enjoy them and find them useful and absorbing.

Dr Eva Sorensen Chair, Organising Committee

Professor Richard Darton Chair, EFCE WP on Distillation, Absorption and Extraction

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