PREFACE

The roots of the Rolduc Symposia on Coal Science are to be found in the observation that in coal research a gap is clearly visible between science and technology. In general, scientists are involved in characterisation and classification of structure, without paying much attention to practical aspects of conversion technology. Industrial engineers, on the other hand, who are active in coal conversion processes, often overlook the importance of basic coal properties. The purpose of the Rolduc Symposia is to promote the relationship between these two fields of activities.

This special issue of Fuel Processing Technology contains the contributions presented at the Second International Rolduc Symposium on Coal Science, held at Rolduc, Limburg, in the Netherlands on May 22–25, 1989. In selecting the papers for this symposium, we have placed the emphasis on new results rather than comprehensive coverage of the subject.

The proceedings are arranged in five sections: coal pyrolysis, coke manufacture, coal combusion, gasification and liquefaction. Dynamics of coke formation, modeling of combustion and gasification kinetics, and advanced characterisation methods in liquefaction are issues of interest. Detailed contributions are presented on clean coal applications. Novel processes are discussed, e.g. increased coal injection in blast furnace, direct iron ore reduction by coal gasification without the intermediate step of coke production, and co-processing of coal and heavy oils.

We find it very gratifying that the contributions to this symposium are from all over the world, and we trust that these Proceedings clearly reflect the quality of the symposium.

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