

## Preface

This volume is a collection of seven review articles that touch on several relevant issues regarding the sol-gel preparation of materials, with an emphasis on their potential applications in catalysis. We start with two articles that focus on steps that precede and lead to gel formation. Sefcik and McCormick illustrate that even with the most extensively studied precursors, silicon alkoxides, there are still many outstanding questions due to the complexity of the system. Murrell examines the use of alternate precursors, namely sols and mixtures of sols, in preparing oxides. The control of homogeneity, a key concern in the preparation of multicomponent oxides, is covered in the two following

articles. Narendar and Messing provide important insight into the mechanism of phase separation during the gel to solid transformation. Miller and Ko discuss the effect of homogeneity on the textural and acidic properties of the calcined oxides. The last three articles provide a comprehensive review of the catalytic literature up to 1995, with the article of Gonzalez, Lopez and Gomez devoted to supported metals; that of Pajonk to catalytic aerogels in general; and that of Schneider and Baiker to titania aerogels in particular.

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