

# Contents

<b>Preface</b> . . . . .	vii
<b>Contributors</b> . . . . .	xi
<b>Chapter 1 Alumina</b> . . . . .	1
Robert H. Doremus	
<b>Chapter 2 Mullite</b> . . . . .	27
David J. Duval, Subhash H. Risbud, and James F. Shackelford	
<b>Chapter 3 The Sillimanite Minerals: Andalusite, Kyanite, and Sillimanite</b> . . . . .	41
Richard C. Bradt	
<b>Chapter 4 Aluminates</b> . . . . .	49
Martin C. Wilding	
<b>Chapter 5 Quartz and Silicas</b> . . . . .	71
Lilian P. Davila, Subhash H. Risbud, and James F. Shackelford	
<b>Chapter 6 Refractory Oxides</b> . . . . .	87
Jeffrey D. Smith and William G. Fahrenholz	
<b>Chapter 7 Clays</b> . . . . .	111
William G. Fahrenholz	
<b>Chapter 8 Concrete and Cement</b> . . . . .	135
Mariano Velez	
<b>Chapter 9 Lead Compounds</b> . . . . .	151
Julie M. Schoenung	

<b>Chapter 10 Zirconia . . . . .</b>	<b>169</b>
Olivia A. Graeve	
<b>Index . . . . .</b>	<b>199</b>