An Introduction to Glass Science and Technology presents the fundamental topics in glass science and technology including glass formation, crystallisation and phase separation. A detailed discussion of glass structure models with emphasis on the oxygen balance model is also presented. Additional chapters discuss the most important properties of glasses, including physical, optical, electrical, chemical and mechanical properties, and new to this edition, water in glasses and melts. Glass technology is addressed in chapters dealing with the details of glass raw materials, melting and fining, and commercial glass production methods. This expanded second edition also includes new chapters on the compositions and properties of commercial glasses and thermal analysis of glasses and melts. Exercises are included at the end of the chapters.

This introductory text is ideal for undergraduates in materials science, ceramics or inorganic chemistry. It will also be useful to the engineer or scientist seeking basic knowledge of the formation, properties and production of glass.

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