DESCRIPTION

An updated edition of the essential guide to the technology of glass-ceramic technology

Glass-ceramic materials share many properties with both glass and more traditional crystalline ceramics. The revised third edition of Glass-Ceramic Technology offers a comprehensive and updated guide to the various types of glass-ceramic materials, the methods of development, and the myriad applications for glass-ceramics. Written in an easy-to-use format, the book includes an explanation of the new generation of glass-ceramics.

The updated third edition explores glass-ceramics new materials and properties and reviews the expanding regions for applying these materials. The new edition contains current information on glass/glass-ceramic forming in general and explores specific systems, crystallization mechanisms and products such as: ion exchange strengthening of glass-ceramics, glass-ceramics for mobile phones, new glass-ceramics for energy, and new glass-ceramics for optical and architectural application. It also contains a new section on dental materials and twofold controlled crystallization. This revised guide:

• Offers an important new section on glass/glass ceramic forming

• Includes the fundamentals and the application of nanotechnology as related to glass-ceramic technology

• Reviews the development of the various types of glass-ceramic materials
• Covers information on new glass-ceramics with new materials and properties and outlines the opportunities for applying these materials

Written for ceramic and materials engineers, managers, and designers in the ceramic and glass industry, the third edition of Glass-Ceramic Technology features new sections on Glass/Glass-Ceramic Forming and new Glass-Ceramics as well as expanded sections on dental materials and twofold controlled crystallization.

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**ABOUT THE AUTHOR**

**WOLFRAM HÖLAND** is retired from Ivoclar Vivadent AG (Liechtenstein) since 2016 but he is a consultant for this company. In 2018, he finished his activity as a Lecturer at the Department of Inorganic Chemistry, Eidgenössische Technische Hochschule (ETH) in Zürich, Switzerland.

**GEORGE H. BEALL, P HD,** is a Corporate Fellow, retired, in the Science and Technology Division of Corning Incorporated, Corning, New York. He is a Distinguished Life Member of the American Ceramic Society.

Between them, Drs. Höland and Beall hold over 200 US patents, over 200 publications, and 10 textbooks.

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