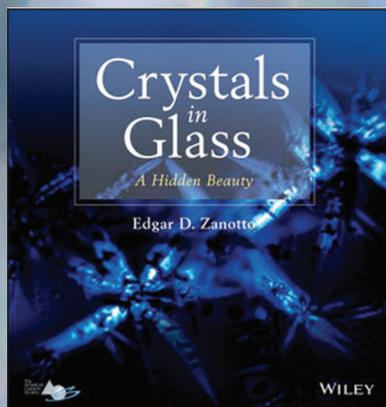


Crystals in Glass

A Hidden Beauty



By: **E. D. Zanotto**

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A stunning collection of photos illuminating thirty-six years of discoveries in glass crystallization

The Vitreous Materials Lab was founded at the Federal University of São Carlos in Brazil in December 1976, the same year author Edgar Zanotto was hired as a young materials engineer to work in the lab. This book celebrates the lab's thirty-sixth anniversary and its thirty-six years of research achievements in the field of glass crystallization.

Crystals in Glass: A Hidden Beauty begins with a review of the most significant scientific work carried out by the lab's research team and collaborators since its founding. However, what sets this book apart from other works in the field is its extraordinary collection of photographs selected from among the thousands taken and analyzed by the author throughout his career. These photographs—taken with an optical or electron microscope—are not only visually stunning, they also reveal intricate secrets about glass crystallization and the beauty of microscopic crystals.

Divided into five sections, the book records some of the most important discoveries and achievements in:

- Internal nucleation in glasses
- Surface nucleation on glasses
- Viscous sintering with concurrent crystallization
- Eutectic crystallization
- Cracks and bubbles in glass-ceramics

Each photograph is accompanied by a succinct description and explanation, helping readers understand not only what they see, but also its place within the science of glass crystallization.

With its outstanding collection of photographs and easy-to-follow explanations, *Crystals in Glass: A Hidden Beauty* is not only recommended for students and professionals in glass and materials science, but also for the many people who will be amazed at the incredible artistry of glass crystallization structures.

EDGAR D. ZANOTTO is a professor in the Materials Engineering Department and Director of the Vitreous Materials Laboratory of the Federal University of São Carlos, Brazil; Chairman of the Crystallization Committee of the International Commission on Glass; Editor of the *Journal of Non-Crystalline Solids*; Fellow of the Society of Glass Technology (UK); and member of the São Paulo State Academy of Sciences, the Brazilian Academy of Sciences, the Academy of Sciences for the Developing World, and the International Academy of Ceramics



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