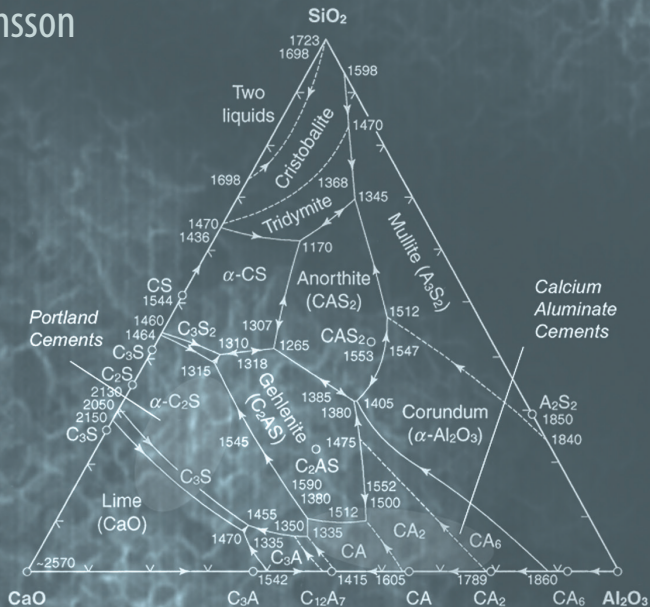


NANOSTRUCTURAL BIOCERAMICS

Advances in Chemically Bonded Ceramics

Leif Hermansson



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Preface

It is a great honor to present this book on 'nanostructural chemically bonded bioceramics'. The direct opportunity of this opened up after a speech on 'Why even difficult to avoid nanostructures in chemically bonded calcium aluminate-based biomaterials'. The invitation to write this book from Pan Stanford Publishing is thankfully acknowledged.

Writing a book, which covers a whole new technology within biomaterials science (materials, processing, properties, biological response, clinical evaluation, new applications, etc.), is of course not one person's work. I would like to acknowledge the following people contributing to the thinking in this book. I will start with my wife Irmeli, a dental technician, who challenged the author some decades ago with the question 'Why don't you from your ceramic platform do something which makes sense?' She wanted a substitute for amalgam. This started a work at Karolinska Institute at the former Center for Dental Technology and Biomaterials, Stockholm University, Sweden. Prof. Rune Söremark, late Associate Prof. Folke Sundström, and Associate Prof. Yangio Li are specifically acknowledged. The input from CEO Torgny Nilsson of KRISS, Sweden, was fundamental for the start of the new activities. After some turbulent years, the author met his 'positive anti-picture,' Dan Markusson, who has been of great general help in understanding biomaterials product development. Dan is now CEO of Peptonic Medical AB, Sweden. The work at Karolinska Institute, and later at Uppsala University, Sweden, have contributed enormously to the understanding of nanostructural chemically bonded biomaterials. The work by Prof. Håkan Enqvist, Tech. Drs. Lars Kraft and Jesper Lööf, and Associate Prof. Erik Adolfsson are thankfully acknowledged. Early cooperation with Prof. Roger Carlsson and Associated Prof. Elis Carlström and colleagues at Swedish Ceramic Institute (now within IVF-SWERA), Prof. Richard Bradt, Pennsylvania State University, USA, and Prof. Hans Larker at former ABB Cerama AB (now Saint Gobain Advanced Ceramics AB), Sweden, have been fundamental for basic understanding of materials science. The author would like to thank all personnel within Doxa AB,

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Leif Hermansson

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