

Dr. John A. Sorensen

Title

Modern Ceramics & Digital Technologies: A Synergistic Partnership Enhancing Prosthodontics

Abstract:

The synergistic interaction between modern material systems, digital technologies and software developments have propelled enormous advancements in both conventional and implant prosthodontics. While dental laboratories have utilized digital technologies for restoration design and fabrication for decades, in just the last few years digital technologies enabled by modern ceramic systems have revolutionized clinical conventional fixed prosthodontics and especially implant prosthodontics. Digital prosthodontics has enabled laboratory design and CAM fabrication of the entire spectrum of esthetic restorations from thin veneers to monolithic prostheses, to full mouth rehabilitation on bruxers, to many forms of fixed detachable implant prostheses. Dr. Sorensen will explore monolithic versus layered ceramic restorations in terms of longevity and mechanical complications, wear of antagonist tooth structure, ease of design and fabrication, advancements in chair-side implant prosthodontics and practice efficiency and economics. The clinical implications of novel zirconia formulations are presented.

Learning Objectives

1. To understand how digital technologies in modern ceramics can enhance the design and fabrication of definitive ceramic fixed prosthodontics
2. To understand how digital technologies in modern ceramics can, with today's rapid processing ceramic systems, fabricate esthetic monolithic restorations and even chair-side implant restorations
3. To understand how digital technologies and modern ceramics can improve the control, efficiency and productivity of prosthodontic practice

Biography

JOHN A. SORENSEN DMD, PhD, FACP

Sorensen is Professor, Department of Restorative Dentistry; Associate Dean for Clinics; Director, Biomimetics Biomaterials Biophotonics Biomechanics & Technology Laboratory; Director of Research, Graduate Prosthodontics Program at University of Washington. As founder and director of Pacific Dental Institute in Portland, Oregon, he conducted clinical trials and materials testing, and CE programs. He had a full-time prosthodontic practice and then an implant specialty center for nine years and is a diplomate of the American Board of Prosthodontics. Dr. Sorensen has published over 80 research articles and chapters as well as over 135 research abstracts. He has given over 150 invited lectures in 33 countries as well as over 300 lecture courses, hands-on programs and patient-treatment classes.