

# Academy of Prosthodontics Annual Scientific Session Sofitel Hotel, Chicago, Illinois May 9-12, 2018

# Program Speaker – Dr. John Sorensen

## <u>Title</u>

Back to the Future: Ceramics

# Abstract

The world of dental ceramics has gone through a remarkable transformation over the last four decades. With the challenges of metal-ceramics, dentistry embarked on a quest for alternatives that could deliver fixed prosthodontics with beauty and strength. Through a series of revolutions and evolution in materials science, materials processing, fabrication technologies and optical properties, dental technicians have an incredible artistic palatte with which to fabricate prostheses that provide dentists with predictability, longevity, and natural esthetics. This presentation will review where we have been, the current state of the art and make a few prognostications of future directions in materials science, processing systems and fabrications technology.

## Learning Objectives

- 1. Understand how the processing and structure of ceramics can influence translucency, shade, strength, fracture toughness and clinical longevity.
- 2. Be familiar with novel and current fabrication technologies.
- 3. Understand the advantages and limitations of various systems along with selection criteria for material systems and digital technologies.

## **Biography**

#### JOHN A. SORENSEN, DMD PhD, FACP

Sorensen is Professor, Department of Restorative Dentistry; Director, Biomimetics Biomaterials Biophotonics Biomechanics & Technology (B4T) Laboratory; Director of Research, Graduate Prosthodontics Program at the University of Washington. The B4T is actively engaged in materials science investigation, developing new diagnostic and analysis tools, research and development of digital work flows for conventional prosthodontics and implant surgical-prosthodontics, and clinical trials. Prior to the UW, Sorensen was part of an implant specialty team center in, also in Portland, he conducted clinical trials and materials testing, and hands-on and patient treatment CE programs. At Pacific Dental Institute he had a full-time prosthodontic practice with an in-house lab for seven years and is a diplomate of the American Board of Prosthodontics.