



**International College of Prosthodontists  
19<sup>th</sup> Biennial Scientific Session - VIRTUAL - September 22 – 25, 2021**

**Program Speaker – Ken Hooi**

**Title**

Prosthodontics 2041

**Abstract**

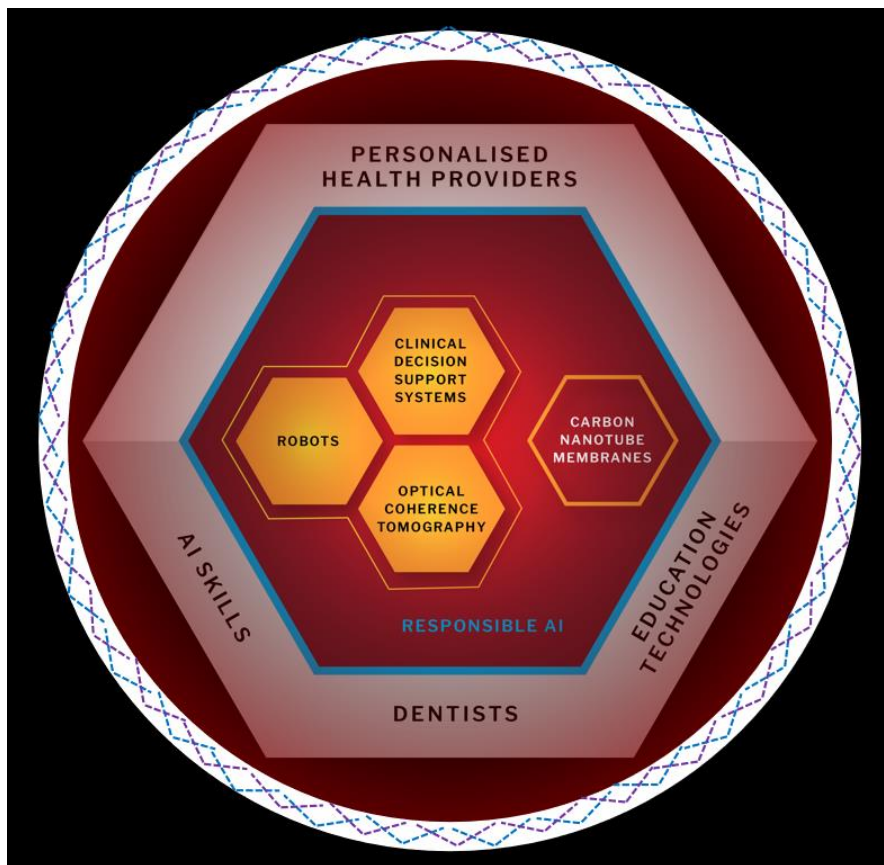
Futurists, Polymaths and Artificial Intelligence and Machine Learning (AIML) Researchers have contributed to the discussion of a Technological Singularity – a theoretical moment in time marking the end of the human era, as a new machine superintelligence upgrades itself and advances technologically at an incomprehensible rate. Many contributors believe this will occur by 2041, and all humans know this is not far away. However, key authors argue that it is difficult or impossible for present-day humans to predict what human beings' lives would be like in a post-singularity world.

As Prosthodontists, Health Care Professionals, Educators and as citizens, we embrace benefits of technology and yet we live in fear of its impact on our personal freedoms and livelihoods. This paradox is what drives the progression of technological advances and its tempering by social and ethical values. Health care and education are major sectors in AIML research and development and dentistry and prosthodontics are prime target disciplines.

This presentation will offer seven predictions across clinical, technological, social and vocational topic areas. Ken is grateful for the opportunity to share this content with ICP and it is hoped it will contribute to the discussion of our fraternity's future.

**Synopsis**

- Robots.
- Optical coherence tomography.
- Neural network clinical decision support.
- Personalised health – the irresistible force.
- Carbon nanotube membrane technology for dental materials.
- Labour markets, reskilling and education technologies.
- Socioethical infrastructure and responsible AI.
- Stem cells.



*Infographic by WOW Studios*

## Biography

Ken is a Prosthodontist with dual qualification in prosthodontics and implant dentistry. Clinical services in his two Sydney private practices comprise all facets of prosthodontics including implant, aesthetic and reconstructive dentistry. His professional career spans 28 years and has included roles in general and specialist private practice in Sydney CBD, metropolitan and NSW regional locations. He has also held public and private hospital appointments.

Between 2005-19, he held multiple clinical supervision, clinical simulation and presenter roles within Sydney Dental School (undergraduate, postgraduate implants and prosthodontic programs, and professional education), Charles Sturt University and James Cook University (postgraduate implant programs).

He is an Executive Member of the Scientific and Continuing Professional Development Committee, Academy of Australia and New Zealand Prosthodontists (2016-). His roles with Australian Prosthodontic Society include Past Federal President of (2013-15) and Executive Member of its Education and Research Committee (2020-). Ken previously held executive membership with Continuing Education in Dentistry, Sydney Dental School (2011-19), including a five year term as its final Chair.

Ken is a Director of CREED CE Pty Ltd, an organisation providing professional education services for dental professionals. His roles include managing, convening and presenting in courses and other initiatives in prosthodontics and treatment planning.