

Hyo-Jick Choi, PhD PEng

Professor

Department of Chemical and Materials Engineering,
University of Alberta

Homepage: www.hyojickchoi.com

Email: hyojick@ualberta.ca

Phone: 1-780-248-1666

Education and Training

- 2009-2010 **Postdoctoral associate** in School of Chemical and Biomolecular Engineering,
Georgia Institute of Technology, Atlanta, USA
- 2002-2007 **Ph.D.** in Biomedical Engineering University of Cincinnati (2006-2007)/ University of
California, Los Angeles (UCLA) (2002-2006)
- 2001 **M.S.** in Ceramic Engineering Yonsei University, Seoul, Korea
- 1999 **B.S.** in Ceramic Engineering Yonsei University, Seoul, Korea

Professional Experiences

- 2024- **Professor**
Dept. of Chemical and Materials Engineering, University of Alberta, Edmonton, Canada
- 2021-2024 **Associate Professor**
Dept. of Chemical and Materials Engineering, University of Alberta, Edmonton, Canada
- 2015-2021 **Assistant Professor**
Dept. of Chemical and Materials Engineering, University of Alberta, Edmonton, Canada
- 2013-2014 **Research Associate**
Dept. of Chemical and Materials Engineering, University of Alberta, Edmonton, Canada
- 2010-2013 **Research Assistant Professor**
Dept. of Biomedical, Chemical and Environmental Engineering, Cincinnati, USA

Work Experiences

- 2020- Founder, Director of A-BaVi Protec Inc. O2Nano Inc.
- 2007-2009 Development Manager in Danfoss AquaZ, Inc., Cincinnati, USA

Consulting

- 2006-2007 Danfoss AquaZ, Inc., Cincinnati, USA

Editorial Duties

- 2016-present Scientific Reports-Nature (Electronics, Photonics and Device Physics section Editorial
Board)
- 2019- Pharmaceuticals (Reviewer Board Member)

Research Areas

My areas of research have included the developments of universal infection control measures against respiratory/food-borne/hospital associated infectious diseases (e.g. antimicrobial masks/respirators, air filters, antimicrobial food container/packaging materials, etc), noninvasive vaccine/drug delivery systems (e.g. oral & transdermal vaccine/vaccine delivery), solid vaccine formulations, artificial organelle, and gas sensors (CCUS, Hydrogen, smart farm, food spoilage, workplace safety, etc).