

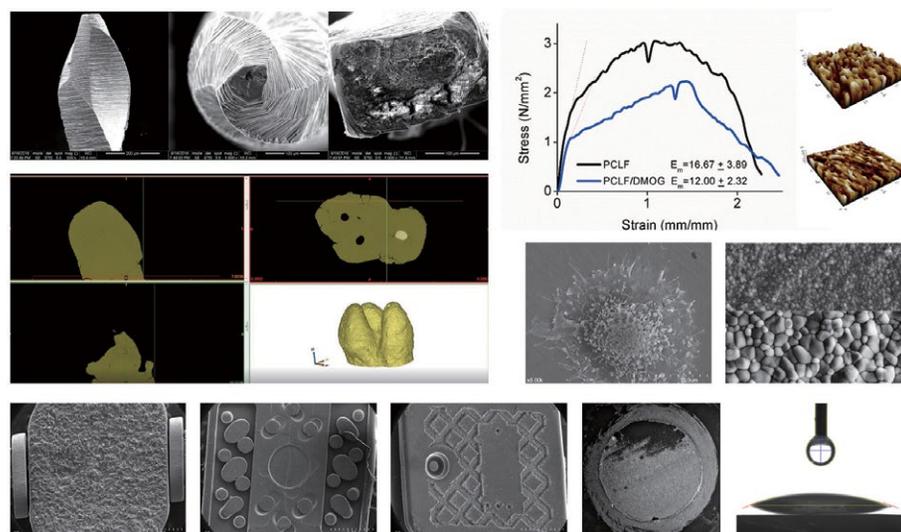
**Shin Hye Chung, DDS, PhD** CHUNG LAB\_ MATERIALS  
den533@snu.ac.kr / ORCID : 0000-0002-9037-1950



## RESEARCH OVERVIEW & CONTENTS

The Chung Lab studies mechanical and biological properties of the dental materials in order to provide practical information for dental practitioners dealing with dental materials and devices

1. Adhesion and differentiation of osteoblasts on modified zirconia surface
2. Improving bonding effectiveness of dental bonding systems
3. Evaluation of mechanical and biological properties of dental materials
4. Development of restorative materials with antibacterial properties
5. Evaluation of dental instruments



[ Key words ] dental zirconia, dental bonding system, antibacterial property, bond strength, surface characterization

## RESEARCH METHODS

1. Panel Data Analysis, fixed and random model
2. HLM (Hierarchical Linear Modeling)
3. Bayesian Linear/Non-linear Regression
4. Qualitative Research Methods in Social Science

## KEY PUBLICATIONS

1. Q. Zhang, J.W. Hwang, J.H. Oh, C.H. Park, S.H. Chung, Y.S. Lee, J.H. Baek, H.M. Ryoo, K.M. Woo, Effects of the fibrous topography-mediated macrophage phenotype transition on the recruitment of mesenchymal stem cells: An in vivo study, *Biomaterials* 149 (2017) 77-87.
2. S.H. Chung, Y.S. Park, Local drug delivery in endodontics: A literature review, *J Drug Deliv Sci Tec* 39 (2017) 334-340.
3. S.H. Chung, S. Cho, K. Kim, B.S. Lim, S.J. Ahn, Antimicrobial and physical characteristics of orthodontic primers containing antimicrobial agents, *Angle Orthod* 87(2) (2017) 307-312.
4. S.H. Chung, Y.S. Park, K.S. Bae, S.H. Baek, K.Y. Kum, W. Lee, W.J. Shon, Saving an Integrating Implant Involved with Endodontic Implant Pathology Using Surgical Treatment, *Int J Periodontics Restorative Dent* 36(6) (2016) 893-898.
5. Y.S. Noh, S.H. Chung, K.S. Bae, S.H. Baek, K.Y. Kum, W.C. Lee, W.J. Shon, S.H. Rhee, Mechanical properties and microstructure analysis of mineral trioxide aggregate mixed with hydrophilic synthetic polymer, *Journal of Biomedical Materials Research Part B: Applied Biomaterials* 103(4) (2015) 777-782.