

Curriculum Vitae

Kyu-Bok Lee, DDS, Ph D.

EDUCATION & DEGREES

Mar. 1989 ~ Feb. 1995 : College of Dentistry, Kyungpook National University, Korea
Feb. 1995 : Licensed as D.D.S (Doctor of Dental Surgery), Korea
Feb. 2007 : Ph. D., Chonbuk National University Post Graduate School, Korea.

OCCUPATION

May. 1995 ~ Feb. 1998 : Trainee (Intern & Resident),
Department of Prosthodontics,
Kyungpook National University Hospital, Daegu, Korea

May. 2001 ~ Sep. 2002 : Clinical fellow and full-time lecturer
Department of Dentistry,
Daegu Catholic University Hospital, Daegu, Korea

Mar. 2003 ~ Sep. 2005 : Full-time lecturer
Department of Prosthodontics,
School of Dentistry,
Kyungpook National University, Daegu, Korea

Oct. 2005 ~ Nov. 2009 : Assistant Professor

Oct. 2009 ~ Nov. 2014 : Associate Professor

Oct. 2014 ~ present : Professor
Department of Prosthodontics,
School of Dentistry,
Kyungpook National University, Daegu, Korea

INTERNATIONAL PUBLICATION

- International Journal (SCI): 68 articles published since 2008.

- International Publication During Last 3 Years (2019~2022).
1. Park, J.H., Son, K., Son, Y.T., Kim, Y.G., Suh, J.Y., **Lee, K.B.**, Lee, J.M. Comparison of Osseointegration of Dental Implants Placed in Rabbit Tibia Using Two Dental Laser and Implant Handpiece Systems. *Bioengineering* 2022;9(11):681.
 2. Kim, H.R., Son, K., Son, Y.T., Kim, Y.G., **Lee, K.B.**, Lee, S.C., Suh, J.Y., Lee, J.M. A Comparative Immunohistochemical Study of Wound Healing after Dental Diode Laser Treatment in the Rat Oral Mucosa. *Bioengineering* 2022;9(9):466.
 3. Son, K., Lee, J.M., Son, Y.T., Kim, J.W., Jin, M.U., **Lee, K.B.** How Does the Use of an Intraoral Scanner Affect Muscle Fatigue? A Preliminary In Vivo Study. *Bioengineering* 2022;9(8):358.
 4. Lee, H., Son, K., Lee, D.H., Kim, S.Y., **Lee, K.B.** Comparison of Wear of Interim Crowns in Accordance with the Build Angle of Digital Light Processing 3D Printing: A Preliminary In Vivo Study. *Bioengineering* 2022;9(9):417.
 5. Son, K., Cho, H., Kim, H., Lee, W., Cho, M., Jeong, H., Kim, K.H., Lee, D.H., Kim, S.Y., **Lee, K.B.**, Jeon, M., Kim, J. Dental diagnosis for inlay restoration using an intraoral optical coherence tomography system: A case report. *Journal of Prosthodontic Research* 2022.
 6. Mai, H.Y., Mai, H.N., Lee, C.H., **Lee, K.B.**, Kim, S.Y., Lee, J.M., Lee, K.W., Lee, D.H. Impact of scanning strategy on the accuracy of complete-arch intraoral scans: a preliminary study on segmental scans and merge methods. *The Journal of Advanced Prosthodontics* 2022;14(2):88.
 7. Ahn, J.J., Bae, E.B., Lee, J.J., Choi, J.W., Jeon, Y.C., Jeong, C.M., Yun, M.J., Lee, S.H., **Lee, K.B.**, Huh, J.B. Clinical evaluation of the fit of lithium disilicate crowns fabricated with three different CAD-CAM systems. *The Journal of Prosthetic Dentistry* 2022;127(2):239-247.
 8. Son, K., Son, Y.T., Jin, M.U., **Lee, K.B.** Satisfaction Factors with a Dental Unit Chair System in South Korea: A Dentist's Perspective. *Healthcare* 2022;10(3):437.
 9. Lee, D.G., Son, K., **Lee, K.B.** Comparison of the Accuracy of Intraoral Scanners Based on the Type of Tooth Preparation for a Single Crown. *Applied Sciences* 2021;11(20):9399.
 10. Son, K., Lee, W.S., **Lee, K.B.** Effect of different software programs on the accuracy of dental scanner using three-dimensional analysis. *International Journal of Environmental Research and Public Health* 2021;18(16):8449.
 11. Yu, B.Y., Son, K., **Lee, K.B.** Evaluation of intaglio surface trueness and margin quality of interim crowns in accordance with the build angle of stereolithography apparatus 3-dimensional printing. *The Journal of Prosthetic Dentistry* 2021;126(2):231-237.

12. Son, K., Lee, J.H., **Lee, K.B.** Comparison of intaglio surface trueness of interim dental crowns fabricated with SLA 3D printing, DLP 3D printing, and milling technologies. *Healthcare* 2021;9(8):983.
13. Kim, Y., Jung, G.I., Jeon, D., Wijesinghe, R.E., Seong, D., Lee, J., Do, W.J., Kwon, S.M., Lee, J.H., Hwang, J.H., Kim, H.D., **Lee, K.B.**, Jeon, M.S., Kim, J. Non-invasive optical coherence tomography data-based quantitative algorithm for the assessment of residual adhesive on bracket-removed dental surface. *Sensors* 2021;21(14):4670.
14. Son, K., Son, Y.T., Lee, J.M., **Lee, K.B.** Marginal and internal fit and intaglio surface trueness of interim crowns fabricated from tooth preparation of four finish line locations. *Scientific Reports* 2021;11(1):1-9.
15. Son, K., Son, Y.T., Kim, J.Y., Lee, J.M., Yu, W.J., Kim, J.W., **Lee, K.B.** Effect of repeated use of an implant handpiece on an output torque: An in-vitro study. *The Journal of Advanced Prosthodontics* 2021;13(3):136.
16. Son, K., Jin, M.U., **Lee, K.B.** Feasibility of using an intraoral scanner for a complete-arch digital scan, part 2: A comparison of scan strategies. *The Journal of Prosthetic Dentistry* 2021.
17. Huang, M.Y., Son, K., **Lee, K.B.** Effect of distance between the abutment and the adjacent teeth on intraoral scanning: An in vitro study. *The Journal of Prosthetic Dentistry* 2021;125(6):911-917.
18. Son, K., **Lee, K.B.** Effect of computer literacy on the working time of the dental CAD software program. *The Journal of Prosthodontic Research* 2021;65(2):255-260.
19. Ren, X., Son, K., **Lee, K.B.** Accuracy of proximal and occlusal contacts of single implant crowns fabricated using different digital scan methods: an in vitro study. *Materials* 2021;14(11):2843.
20. Son, K., Yu, B.Y., Lee, J.H., Son, Y.T., **Lee, K.B.** Comparison of intaglio surface adjustment in the oral cavity for lithium disilicate crowns fabricated using different scanners. *Journal of Prosthodontics* 2021;30(3):276-281.
21. Son, K., **Lee, K.B.** Effect of finish line locations of tooth preparation on the accuracy of intraoral scanners. *International Journal of Computerized Dentistry* 2021;24(1):29-40.
22. Son, K., **Lee, K.B.** Marginal and Internal Fit of Ceramic Prostheses Fabricated from Different Chairside CAD/CAM Systems: An In Vitro Study. *Applied Sciences* 2021;11(2):857.
23. Son, K., **Lee, K.B.** A novel method for precise guided hole fabrication of dental implant surgical guide fabricated with 3d printing technology. *Applied Sciences* 2020;11(1):49.
24. Lee, J.H., Son, K., **Lee, K.B.** Marginal and internal fit of ceramic restorations fabricated using digital scanning and conventional impressions: A clinical study. *Journal of*

Clinical Medicine 2020;9(12):4035.

25. Kim, M.K., Son, K., Yu, B.Y., **Lee, K.B.** Effect of the volumetric dimensions of a complete arch on the accuracy of scanners. *The Journal of Advanced Prosthodontics* 2020;12(6):361.
26. Lee, S., Son, K., Lee, J., Jeon, M., **Lee, K.B.** and Kim, J. Fabrication of Dental Crown by Optical Coherence Tomography: A Pilot Study. *IEEE Access* 2020;8:144969-144975 2020.
27. Kim, H.K., Park, S.Y., Son, K., Kim, Y.G., Yu, W.J., **Lee, K.B.**, Lee, J.M. Alterations in Surface Roughness and Chemical Characteristics of Sandblasted and Acid-Etched Titanium Implants after Irradiation with Different Diode Lasers. *Applied Sciences* 2020;10(12):4167.
28. Kim, J., Son, K., and **Lee, K.B.** Displacement of scan body during screw tightening: A comparative in vitro study. *The Journal of Advanced Prosthodontics* 2020;12(5):307-315.
29. Son, K., **Lee, K.B.** Effect of Tooth Types on the Accuracy of Dental 3D Scanners: An In Vitro Study. *Materials* 2020;13:1-13.
30. Lee, K., Son, K., **Lee, K.B.** Effects of Trueness and Surface Microhardness on the Fitness of Ceramic Crowns. *Applied Sciences* 2020;10(5):1-11.
31. Kang, B.H., Son, K., **Lee, K.B.** Accuracy of Five Intraoral Scanners and Two Laboratory Scanners for a Complete Arch: A Comparative In Vitro Study. *Applied Sciences* 2020;10(1):1-11.
32. Ko, B.D., Son, K., Kang, S.H., **Lee, K.B.** Accuracy of different electronic torque drivers: A comparative evaluation. *The Journal of Advanced Prosthodontics* 2019;11(6):350-357.
33. Lee, H., Son, K., Lee, W.S., **Lee, K.B.** Displacement of Customized Abutments Designed on a Working Cast and in the Oral Cavity: A Comparative in vivo Study. *Journal of Prosthodontics* 2020;29:12-18.
34. Kim, D.Y., Son, K., **Lee, K.B.** Evaluation of High-Speed Handpiece Cutting Efficiency According to Bur Eccentricity: An In Vitro Study. *Applied Sciences* 2019;9:1-7.
35. Kim, S.M., Son, K., Kim, D.Y., **Lee, K.B.** Digital Evaluation of the Accuracy of Computer-Guided Dental Implant Placement: An In Vitro Study. *Applied Sciences* 2019;9:1-8.
36. Son, K., and **Lee, K.B.** "Prediction of learning curves of 2 dental CAD software programs. Part 2: Differences in learning effects by type of dental personnel" *The journal of Prosthetic Dentistry* 2020;123:747-752.
37. Son, K., Huang, M.Y., and **Lee, K.B.** "A method to evaluate the accuracy of dental implant placement without postoperative radiography after computer-guided implant surgery: A dental technique" *The journal of Prosthetic Dentistry* 2020;123:661-666.

38. Lee, J., Han, S., Hwang, J., Park, S., Jeon, D., Kim, K., **Lee, K.B.** and Kim, J. “Identification of multi-dimensional thread geometry using depth-resolved swept-source optical coherence tomography for assessment of dental implant fabrication.” *Optics and Lasers in Engineering* 2020;127:105951.
39. Jang, D., Son, K., **Lee, K.B.** A Comparative Study of the Fitness and Trueness of a Three-Unit Fixed Dental Prosthesis Fabricated Using Two Digital Workflows. *Applied Sciences* 2019;9:1-12.
40. Lee, J.J., Son K., Bae E.B, Choi J.W., **Lee, K.B.**, and Huh J.B. “Comparison of the trueness of lithium disilicate crowns fabricated from the all-in-one and combination CAD/CAM systems” *The International Journal of Prosthodontics* 2019;32:352-354.
41. Kim R.H., Lee W.S., Son K., and **Lee, K.B.** “A Comparison of Tightening Screw Accuracy of Electronic Torque Drivers Type” *The International Journal of Prosthodontics* 2019;32:349-351.
42. Son, K., Lee, S., Kang, S.H., Park, J., **Lee, K.B.**, Jeon, M., and Yun, B.J. “A Comparison of marginal and internal fit assessment methods for fixed dental prostheses” *The journal of Clinical Medicine* 2019;8:1-17.
43. Pearson, J.J., Gerken, N., Bae, C., **Lee, K.B.**, Satsangi, A., McBride, S., and Guda, T. “In vivo hydroxyapatite scaffold performance in infected bone defects.” *Journal of Biomedical Materials Research Part B: Applied Biomaterials* 2020;108:1157-1166.
44. Son, K., Yu, B.Y., Yoon, T.H., and **Lee, K.B.** “Comparative Study of the Trueness of the Inner Surface of Crowns Fabricated from Three Types of Lithium Disilicate Blocks” *Applied Sciences* 2019;9:1-11.
45. Lee, S., Son, K., Park, J., Lee, J., Kang, S.H., Wijesinghe, R.E., Kim, P., Hwang, J.H., Park S., Yun, B.Y., Jeon, M., **Lee, K.B.**, and Kim, J. “Non-ionized, high-resolution measurement of a marginal and internal discrepancy of dental prosthesis using optical coherence tomography” *IEEE Access* 2019;7:6209-6218.
46. Park, G.H., Son, K., and **Lee, K.B.** “Feasibility of using an intraoral scanner for a complete-arch digital scan” *The journal of Prosthetic Dentistry* 2019;121:803-810.
47. Son, K., Lee, W.S., and **Lee, K.B.** “Prediction of the learning curves of 2 dental CAD software programs” *The journal of Prosthetic Dentistry* 2019;121:95-100.

DOMESTIC PUBLICATION

- Book chapters: 9 book chapter.
- Domestic Journal: 56 articles published in the Korean language.

RESEARCH PROJECTS DURING THE LAST 5 YEARS

“User-friendly unit chair development for digital information provision” - Sponsor : Ministry of Trade, Industry and Energy (MOTIE, Korea) (Principal Investigator : Lee KB). Period : Dec 1. 2020 – Apr 1. 2022.

“Development of Laser Handpiece Package to Stabilize System Optimized for Clinical Environment and Obtain Overseas Certification” - Sponsor : Ministry of Trade, Industry and Energy (MOTIE, Korea) (Principal Investigator : Lee KB). Period : Oct 1. 2020 – May 5. 2021.

“Development of Customized Multi-Handpiece System using Laser” - Sponsor : Ministry of Trade, Industry and Energy (MOTIE, Korea) (Principal Investigator : Lee KB). Period : Oct 1. 2018 – Dec 31. 2020.

“Development of handpiece design for air turbine and root canal treatment” - Sponsor : Ministry of Trade, Industry and Energy (MOTIE, Korea) (Principal Investigator : Lee KB). Period : Apr 1. 2017 – Dec 31. 2019.

“New hybrid milling machine with a resolution of less than 10 μm development, using open CAD/CAM S/W integrated platforms for one day prosthetic treatment of 3D smart medical care system” - Sponsor : Ministry of Trade, Industry and Energy (MOTIE, Korea) (Principal Investigator : Lee KB). Period : Jan 1. 2017 – Dec 31. 2020.

“Development of wireless digital composite handpiece with torque driver for implant prosthesis and endodontic treatment” - Sponsor : Ministry of Trade, Industry and Energy (MOTIE, Korea) (Principal Investigator : Lee KB). Period : Jan 1. 2017 – Oct 11. 2017.

ACADEMIC HONORS

- 4 International Awards & 26 Domestic Awards since 2006

Poster Presentation Award: The 2022 Scientific Meeting of the Korean Academy of Stomatognathic Function and Occlusion, Online, Korea.

Topic: “How does the use of an intraoral scanner affect muscle fatigue? A preliminary in vivo study.”

Oral Presentation Award: The 2022 Scientific Meeting of the Korean Academy of Dental Science, Seoul, Korea.

Topic: “Accuracy of intraoral scanners according to subgingival depth of abutment for fixed prosthesis.”

Paper Award: The 2022 Excellence Award of the Korean Academy of Dental Science, Seoul, Korea.

Topic: “Comparison of Temperatures of the Resin Cement in Polycrystalline Ceramic Brackets Irradiated Using a Diode Laser.”

Poster Presentation Award: The 2022 Scientific Meeting of the Korean Academy of Digitalized Dentistry, Seoul, Korea.

Topic: “Accuracy of intraoral scanners according to subgingival depth of abutment for fixed prosthesis.”

Poster Presentation Award: The 2021 Scientific Meeting of the Korean Academy of Stomatognathic Function and Occlusion, Online, Korea.

Topic: “Feasibility of using an intraoral scanner for a complete-arch digital scan: A comparison of scan strategies.”

Poster Presentation Award: The 2021 Scientific Meeting of the Korean Academy of Prosthodontics, Online, Korea.

Topic: “Marginal and internal fit and intaglio surface trueness of interim crowns fabricated from tooth preparation of four finish line locations.”

Poster Presentation Award: The 2021 Scientific Meeting of the Central Dental Congress, Daejeon, Korea.

Topic: “Marginal and internal fit and intaglio surface trueness of interim crowns fabricated from tooth preparation of four finish line locations.”

Poster Presentation Award: The 2021 Scientific Meeting of the Central Dental Congress, Daejeon, Korea.

Topic: “Comparison of temperatures of the resin cement in polycrystalline ceramic brackets irradiated using a diode laser.”

Poster Presentation Award: The 2021 Scientific Meeting of the Central Dental Congress, Daejeon, Korea.

Topic: “Satisfaction Factors with Dental Unit Chair System in South Korea: Dentist Perspective.”

Science and Technology Paper Award: The 31th Science and Technology Excellence Paper Award of the Korean Federation of Science and Technology Societies, Seoul, Korea, 2019.

Topic: “Displacement of scan body during screw tightening: A comparative in vitro study.”

Poster Presentation Award: The 2020 Scientific Meeting of the Korean Academy of Stomatognathic Function and Occlusion, Online, Korea.

Topic: “Effect of finish line locations of tooth preparation on the accuracy of intraoral scanner.”

Poster Presentation Award: The 2020 Scientific Meeting of the Korean Academy of Prosthodontics, Seoul, Korea.

Topic: “The effect of finish line locations of abutment on the accuracy of intraoral scanner.”

Poster Presentation Award: The 2020 Scientific Meeting of the Korean Academy of Prosthodontics, Online, Korea.

Topic: “Alterations in surface roughness and chemical characteristics of sandblasted and acid-etched titanium implants after irradiation with different diode lasers”

Poster Presentation Award: The 60th Year of the KAP (Korean Academy of Prosthodontics) and 7th Biennial Joint Congress of CPS-JPS-KAP, Seoul, Korea, 2019.

Topic: “Learning curve of dental CAD software program.”

Poster Presentation Award: The 10th Scientific Meeting of the Japan Academy of Digital Dentistry and the 5th Annual Meeting of the International Academy for Digital Dental Medicine, Nara, Japan, 2019.

Topic: “A Comparative Study of the Fitness and Trueness of a Three-Unit Fixed Dental Prosthesis Fabricated Using Two Digital Workflows.”

Poster Presentation Award: The 2019 Scientific Meeting of the Korean Academy of Prosthodontics, Seoul, Korea.

Topic: “A comparative study on the accuracy of the inner surface of the interim prosthesis produced by 3D printing according to the angle.”

Grand Prize in Technology Innovation: The 9th Creative Makers Field 'The 4th Industrial Revolution Era SW Utilization Idea Contest', Seoul, Korea, 2019.

Poster Presentation Award: The 2018 Scientific Meeting of the Korean Academy of Prosthodontics, Seoul, Korea.

Topic: “Comparison of torque accuracy versus set torque of electronic torque driver.”

Poster Presentation Award: The 2018 Scientific Meeting of the Korean Academy of Stomatognathic Function and Occlusion, Seoul, Korea.

Topic: “Digital evaluation of axial displacement by implant abutment connection type: An in vitro study.”

Poster Presentation Award: The 2017 Scientific Meeting of the Korean Academy of Stomatognathic Function and Occlusion, Seoul, Korea.

Topic: “Accuracy of a direct drill-guiding system with minimal tolerance of surgical instruments used for implant surgery: a prospective clinical study.”

Oral Presentation Award: The 2015 Scientific Meeting of the Korean Academy of Prosthodontics, Seoul, Korea.

Topic: “A case of maxillary implant prosthesis experienced by a 5th-year clinician.”

Poster Presentation Award: The 2015 Scientific Meeting of the Korean Academy of Prosthodontics and the Biennial Joint Congress of CPS-JPS-KAP, Japan.

Topic: “Influence of cementation gap on the retrievability of implant prostheses with a lingual slot.”

Oral Presentation Award: The 2015 Scientific Meeting of the Korean Academy of Stomatognathic Function and Occlusion, Seoul, Korea.

Topic: “Development of evaluation method for repeatability and reproducibility of dental CAD/CAM scanner using Taguchi technique.”

Oral Presentation Award: The 2014 Scientific Meeting of the Korean Academy of Stomatognathic Function and Occlusion, Seoul, Korea.

Topic: “Development of evaluation method for repeatability and reproducibility of dental CAD/CAM scanner.”

Poster Presentation Award: The 2014 Spring Scientific Meeting of the Korean Academy of Prosthodontics, Seoul, Korea.

Topic: “Impact on Retrievability by Cement Variety for Implant Restorations Equipped with a Lingual Slot.”

Poster Presentation Award: The 2014 Scientific Meeting of the Korean Academy of Stomatognathic Function and Occlusion, Seoul, Korea.

Topic: “Shear bond strength of porcelain to a new millable alloy and a conventional castable alloy.”

Poster Presentation Award (Best Presentation): The 2010 Scientific Meeting of the Academy of Osseointegration, Orlando, Florida, USA.

Topic: “Porous Hydroxyapatite Bone Graft Containing Biodegradable Polymeric Microspheres Loaded with Bioactive Molecules.”

Oral Presentation Award: The 2008 Scientific Meeting of the Korean Academy of Stomatognathic Function and Occlusion, Seoul, Oct 18~19, 2008.

Topic: “Dental light automatic system.”

Poster Presentation Award: The 2006 Spring Scientific Meeting of the Korean Academy of Prosthodontics, Seoul, Nov 17~18, 2006.

Topic: “A comparison of the crown fidelity between various cores fabricated with CAD/CAM and conventional cast metal coping.”

Oral Presentation Award, (Academic awards of new figure, First Prize): The 2006 Spring Scientific Meeting of the Korean Academy of Prosthodontics, Seoul, Nov 17~18, 2006.

Topic: “Marginal and internal fit of all-ceramic crowns, generated with two different CAD/CAM systems.”

ACADEMIC ACTIVITIES

Advanced Dental Device Development Institute

Director

The Korean Academy of Stomatognathic Function and Occlusion

Vice-President

I affirm that the above statement is true and correct in every respect.

Kyu-Bok Lee, D.D.S., Ph.D

Professor

Department of Prosthodontics

School of Dentistry, Kyungpook National University