



Faculty Profile

NAME: Abdulrahman Abubaker Saeed Balhaddad	
Position	Assistant Professor
College	College of Dentistry
Department	Restorative Dental Sciences
Phone	013-
الاسم: عبدالرحمن أبوبكر سعيد بالحداد	
أستاذ مساعد	الوظيفة
كلية طب الأسنان	الكلية
علوم الأسنان الإصلاحية	القسم
	الهاتف
Google Scholar Link	https://scholar.google.com/citations?user=ZeHB0F8AAAAJ&hl=en&authuser=1
Research Gate Link	https://www.researchgate.net/profile/Abdulrahman-Balhaddad-2?ev=hdr_xprf
Researcher ID (Web of Science)	Author ID: GRS-8244-2022
Scopus Author ID	Author ID: 55950945400
ORCID #	https://orcid.org/my-orcid?orcid=0000-0001-6678-7940
Research Areas of Interest	Restorative and Esthetic Dentistry, Dental Biomaterials, Resin-based Materials Engineering, Dental Biofilms, Antimicrobial Photodynamic Therapy



IAUDent Biosketch

Dr. Abdulrahman Abubaker Balhaddad

Assistant Professor

Personal Data

Nationality | Saudi

Department | Restorative Dental Sciences

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Office Phone No. |

Mobile:

Language Proficiency

Language	Read	Write	Speak
Arabic	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent

Academic Qualifications (Beginning with most recent)

Date	Academic Degree	Place of Issue	Address
December 2021	Doctor of Philosophy in Biomedical Sciences	University of Maryland, School of Dentistry	Baltimore, MD, U.S.A
June 2017	Master of Science in Dentistry	Indiana University-Purdue University Indianapolis, School of Dentistry	Indianapolis, IN, U.S.A
June 2017	Clinical Certificate of Advanced Graduate Studies	Indiana University-Purdue University Indianapolis, School of Dentistry	Indianapolis, IN, U.S.A
June 2013	Bachelor of Dental Surgery	University of Dammam,	Dammam, KSA, School of Dentistry

PhD, Master or Fellowship Research Title (Academic Honors or Distinction)

Doctorate	Nanotechnology-Based Dental Materials for Root Caries Management: Design Concepts and Advanced Strategies to Modulate Dysbiotic Patient-derived Biofilms
Master	First Hand Nicotine/Tobacco Exposure on <i>Streptococcus mutans</i> Biofilm and Effects of Sodium Chloride, Potassium Chloride and Potassium Iodide Salts

Professional Record: (Beginning with most recent)

Job Rank	Place and Address of Work	Date
Assistant Professor	Imam Abdulrahman bin Faisal University, College of Dentistry, KSA)	June 2022-current
Senior Registrar	Imam Abdulrahman bin Faisal University Dental Hospital, College of Dentistry, KSA	June 2022-current
Teaching Assistant	University of Maryland, School of Dentistry, Baltimore, MD, U.S.A	2018-2021
Teaching Assistant	Imam Abdulrahman bin Faisal University, College of Dentistry, KSA	2014-2015

Administrative Positions Held: (Beginning with most recent)

Administrative Position	Office	Date
Head of Innovation and Entrepreneurship Unit	Imam Abdulrahman bin Faisal University, College of Dentistry, Dammam, KSA	November 2022-Current

SCIENTIFIC ACHIEVEMENTS

PUBLISHED WORKS (For the most recent five years, list articles in which you were the principal author that appeared in refereed journals or textbooks, by author(s), title, publication, and date)

Author(s)	Title	Publication	Date
1. Bhadila GY, Baras BH, Balhaddad AA , Williams MA, Oates TW, Weir MD, Xu HHK.	Recurrent caries models to assess dental restorations: A scoping review.	<i>J Dent</i> 2023;136:104604.	
2. Balhaddad AA , AlSheikh RN.	Effect of eucalyptus oil on <i>Streptococcus mutans</i> and <i>Enterococcus faecalis</i> growth.	<i>BDJ Open</i> 2023;9(1):26.	
3. Bin-Jardan LI, Almadani DI, Almutairi LS, Almoabid HA, Alessa MA, Almulhim KS, AlSheikh RN, Al-Dulaijan YA, Ibrahim MS, Al-Zain AO, Balhaddad AA .	Inorganic Compounds as Remineralizing Fillers in Dental Restorative Materials: Narrative Review.	<i>Int J Mol Sci</i> 2023;5;24(9):8295.	
4. Balhaddad AA , Garcia IM, Mokeem LS, AlSahafi R, Majeed-Saidan A, et al.	Three-dimensional (3D) printing in dental practice: Applications, areas of interest, and level of evidence.	<i>Clinical Oral Investigation</i> . 2023;27(6):2465-2481.	
5. Garcia IM, Mokeem LS, Yasmin Shahkarami, Blum L, Sheraphim V, Leonardo R, Balhaddad AA , et al.	Tube-shaped nanostructures for enhancing resin-based dental materials: A landscape of evidence and research advancement.	<i>Smart Materials in Medicine</i> . 2023;4:504–13.	
6. Al-Dulaijan YA, Balhaddad AA .	Prospects on Tuning Bioactive and Antimicrobial Denture Base Resin Materials: A Narrative Review.	<i>Polymers (Basel)</i> 2022;15(1):54.	
7. AlSahafi R, Mitwalli H, Alhussein A, Balhaddad AA , Theeb A Alquria, Melo MAS, et al.	Novel rechargeable nano-calcium phosphate and nano-calcium fluoride resin cements.	<i>Journal of Dentistry</i> . 2022;126:104312.	
8. AlSahafi R, Wang X, Mitwalli H, Alhussein A, Balhaddad AA , Melo MAS, et al.	Novel antibacterial low-shrinkage-stress resin-based cement.	<i>Dental Materials</i> . 2022; S0109-5641(22)00239-1.cn n	
9. Mokeem LS, Balhaddad AA , Garcia IM, Collares FM, Melo MAS.	Benzyldimethyldodecyl Ammonium Chloride Doped Dental Adhesive: Impact on Core's Properties, Biosafety, and Antibacterial/Bonding Performance after Aging.	<i>J Funct Biomater</i> 2022;13(4):190.	
10. Mokeem LS, Garcia IM, Shahkarami Y, Blum L, Balhaddad AA , Collares FM, et al.	Core-shell nanostructures for improving dental restorative materials: A scoping review of composition, methods, and outcome.	<i>Smart Materials in Medicine</i> . 2023;4:102–10.	
11. Albeshir EG, AlSahafi RA, Albluwi R, Balhaddad AA , Mitwalli H, et al.	Low-Shrinkage Resin Matrices in Restorative Dentistry-Narrative Review.	<i>Materials (Basel)</i> 2022;15(8):2951.	
12. Al-Obaida MI, Alzuwayer AA, Alanazi SS, Balhaddad AA .	In Vitro Analysis of the Fatigue Resistance of Four Single File Canal Preparation Instruments.	<i>Materials (Basel)</i> 2022;15(2):688	
13. Balhaddad AA , Mokeem L, Khajotia SS, Florez FLE, Melo MAS.	Perspectives on Light-Based Disinfection to Reduce the Risk of COVID-19 Transmission during Dental Care.	<i>BioMed</i> 2022;2:27–36.	

14. Balhaddad AA , Xia Y, Lan Y, Mokeem L, Ibrahim MS, Weir MD, et al. Magnetic-Responsive Photosensitizer Nanoplatfrom for Optimized Inactivation of Dental Caries-Related Biofilms: Technology Development and Proof of Principle. <i>ACS Nano</i> 2021;15(12):19888-19904.
15. Albeshir EG, Balhaddad AA , Mitwalli H, Wang X, Sun J, Melo MAS, et al. Minimally-invasive dentistry via dual-function novel bioactive low-shrinkage-stress flowable nanocomposites. <i>Dent Mater.</i> 2021 29;S0109-5641(21)00354-7.
16. Balhaddad AA , Garcia IM, Mokeem L, Alsaahfi R, Collares FM, Sampaio de Melo MA. Metal Oxide Nanoparticles and Nanotubes: Ultrasmall Nanostructures to Engineer Antibacterial and Improved Dental Adhesives and Composites. <i>Bioengineering</i> 2021;8:146.
17. Balhaddad AA , Garcia IM, Maktabi H, Ibrahim MS, Alkhubaizi Q, Strassler H, et al. Errors in light-emitting diodes positioning when curing bulk fill and incremental composites: impact on properties after aging. <i>Restor Dent Endod</i> 2021;46:e51.
18. Alsaahfi RA, Mitwalli HA, Balhaddad AA , Weir MD, Xu HHK, Melo MAS. Regenerating Craniofacial Dental Defects With Calcium Phosphate Cement Scaffolds: Current Status and Innovative Scope Review. <i>Frontiers in Dental Medicine</i> 2021;2:62.
19. Garcia MI, Balhaddad AA , Lan Y, Simionato A, Ibrahim MS, Weir MD, Masri R, Xu HHK, Collares FM, Melo MAS. Magnetic motion of superparamagnetic iron oxide nanoparticles- loaded dental adhesives: physicochemical/biological properties, and dentin bonding performance studied through the tooth pulpal pressure model. <i>Acta Biomaterialia</i> 2021;134:337-347.
20. Maktabi H, Ibrahim MS, Balhaddad AA , Alkhubaizi Q, Garcia IM, Collares FM, Strassler H, Fugolin APP, Pfeifer CS, Melo MAS. Improper light curing of bulkfill composite drives surface changes and increases <i>S. mutans</i> biofilm growth as a pathway for higher risk of recurrent caries around restorations. <i>Dentistry Journal</i> 2021;9:83.
21. Alfordous RA, Garcia IM, Balhaddad AA , Collares FM, Martinho FC, Melo MAS. Advancing photodynamic therapy for endodontic disinfection with nanoparticles: present evidence and upcoming approaches. <i>Applied Sciences</i> 2021;11:4759.
22. Balhaddad AA , Garcia IM, Mokeem L, Ibrahim MS, Collares FM, Weir MD, Xu HHK, Melo MAS. Bifunctional composites for biofilms modulation on cervical restorations. <i>J Dent Res</i> 2021:220345211018189.
23. Balhaddad AA , Mokeem LS, Weir MD, Xu H, Melo MAS. Sustained antibacterial effect and wear behavior of quaternary ammonium contact-killing dental polymers after one-year of hydrolytic degradation. <i>Applied Sciences</i> 2021;11:3718.
24. Choe R, Balhaddad AA , Fisher JP, Melo MAS, Huang H-C. Photodynamic therapy for biomodulation and disinfection in implant dentistry: is it feasible and effective?. <i>Photochem Photobiol</i> 2021;97(5):916-929.
25. Bajunaid SO, Baras BH, Balhaddad AA , Weir MD, Xu HHK. Antibiofilm and protein-repellent polymethylmethacrylate denture base acrylic resin for treatment of denture stomatitis. <i>Materials (Basel)</i> 2021;14:1067.
26. Garcia IM, Balhaddad AA , Aljuboori N, Ibrahim MS, Mokeem L, Ogubunka A, Collares FM, Melo MAS. Wear behavior and surface quality of dental bioactive ions-releasing resins under simulated chewing conditions. <i>Front Oral Health</i> 2021;0.
27. Garcia IM, Leitune VCB, Balbinot GS, Balhaddad AA , Melo MAS, Samuel SMW, Collares FM. Physicochemical effects of niobic acid addition into dental adhesives. <i>Front Mater</i> 2021;0.
28. Aldhaian BA, Balhaddad AA , Alfaifi AA, Levon JA, Eckert GJ, Hara AT, Lippert F. <i>In vitro</i> demineralization prevention by fluoride and silver nanoparticles when applied to sound enamel and enamel caries-like lesions of varying severities. <i>J Dent</i> 2021;104:103536.
29. Garcia IM, Balhaddad AA , Ibrahim MS, Weir MD, Xu HHK, Collares FM, Melo MAS. Antibacterial response of oral microcosm biofilm to nano-zinc oxide in adhesive resin. <i>Dent Mater</i> 2021;37:e182–93.
30. Maktabi H, Ibrahim MS, Balhaddad AA , Alkhubaizi Q, Garcia IM, Collares FM, Strassler H, Fugolin APP, Pfeifer CS, Melo MAS. Improper light curing of bulkfill composite drives surface changes and increases <i>S. mutans</i> biofilm growth as a pathway for higher risk of recurrent caries around restorations. <i>Dentistry Journal</i> 2021;9:83.
31. Balhaddad AA , Ibrahim MS, Garcia IM, Collares FM, Weir MD, Xu HH, Melo MAS. Pronounced effect of antibacterial bioactive dental composite on microcosm biofilms derived from patients with root carious lesions. <i>Front Mater</i> 2020;0.
32. Balhaddad AA , Ayoub HM, Gregory RL. <i>In-vitro</i> model of <i>Scardovia wiggisii</i> biofilm formation and effect of nicotine. <i>Braz Dent J</i> 2020;31:471–6.
33. Balhaddad AA , AlQranei MS, Ibrahim MS, Weir MD, Martinho FC, Xu HHK, Melo MAS. Light energy dose and photosensitizer concentration are determinants of effective photo-killing against caries-related biofilms. <i>Int J Mol Sci</i> 2020;21:E7612.

34.	AlSahafi R, Balhaddad AA , Mitwalli H, Ibrahim MS, Melo MAS, Oates TW, Xu HHK, Weir MD. Novel crown cement containing antibacterial monomer and calcium phosphate nanoparticles. <i>Nanomaterials (Basel)</i> 2020;10:E2001.
35.	Silva Teófilo MÍ, de Carvalho Russi TMAZ, de Barros Silva PG, Balhaddad AA , Melo MAS, Rolim JPML. The impact of photosensitizer selection on bactericidal efficacy of pdt against cariogenic biofilms: A systematic review and meta-analysis. <i>Photodiagnosis Photodyn Ther</i> 2021;33:102046.
36.	Mitwalli H, Balhaddad AA , AlSahafi R, Oates TW, Melo MAS, Xu HHK, Weir MD. Novel CaF ₂ Nanocomposites with antibacterial function and fluoride and calcium ion release to inhibit oral biofilm and protect teeth. <i>J Funct Biomater</i> 2020;11:E56.
37.	Mitwalli H, AlSahafi R, Balhaddad AA , Weir MD, Xu HHK, Melo MAS. Emerging contact-killing antibacterial strategies for developing anti-biofilm dental polymeric restorative materials. <i>Bioengineering (Basel)</i> 2020;7:E83.
38.	Balhaddad AA , Garcia IM, Ibrahim MS, Rolim JPML, Gomes EAB, Martinho FC, Collares FM, Xu HHK, Melo MAS. Prospects on nano-based platforms for antimicrobial photodynamic therapy against oral biofilms. <i>Photobiomodul Photomed Laser Surg</i> 2020;38:481–96.
39.	Hsu K-L, Balhaddad AA , Garcia IM, Collares FM, DePaola L, Melo MA. Assessment of surface roughness changes on orthodontic acrylic resins by all-in-one spray disinfectant solutions. <i>J Dent Res Dent Clin Dent Prospects</i> 2020;14:77–82.
40.	Hsu K, Balhaddad AA , Martini Garcia I, Collares FM, Dhar V, DePaola L, Melo MAS. 3D cone-beam C.T. imaging used to determine the effect of disinfection protocols on the dimensional stability of full arch impressions. <i>Saudi Dent J</i> 2020.
41.	Balhaddad AA , Marghalani AA, Raderman MA, Miginsky E, Massey W, Strassler H, Melo MAS. Hands-on training based on quantifying radiant exposure improves how dental students cure composites: Skill retention at 2-year follow-up. <i>Eur J Dent Educ</i> 2021;25:582–91.
42.	Balhaddad AA , Garcia I, Collares F, Felix CM, Ganesh N, Alkabashi Q, Massei W, Strassler H, Melo MAS. Assessment of the radiant emittance of damaged/contaminated dental light-curing tips by spectrophotometric methods. <i>Restor Dent Endod</i> 2020;45:e55.
43.	AlQranei MS, Balhaddad AA , Melo MAS. The burden of root caries: Updated perspectives and advances on management strategies. <i>Gerodontology</i> 2021;38:136–53.
44.	Ibrahim MS, Balhaddad AA , Garcia IM, Hefni E, Collares FM, Martinho FC, Weir MD, Xu HHK, Melo MAS. Tooth sealing formulation with bacteria-killing surface and on-demand ion release/recharge inhibits early childhood caries key pathogens. <i>J Biomed Mater Res B Appl Biomater</i> 2020;108:3217–27.
45.	Balhaddad AA , Ibrahim MS, Weir MD, Xu HHK, Melo MAS. Concentration dependence of quaternary ammonium monomer on the design of high-performance bioactive composite for root caries restorations. <i>Dent Mater</i> 2020;36:e266–78.
46.	Ibrahim MS, Garcia IM, Vila T, Balhaddad AA , Collares FM, Weir MD, Xu HHK, Melo MAS. Multifunctional antibacterial dental sealants suppress biofilms derived from children at high risk of caries. <i>Biomater Sci</i> 2020;8:3472–84.
47.	Ibrahim MS, Garcia IM, Kensara A, Balhaddad AA , Collares FM, Williams MA, Ibrahim AS, Lin NJ, Weir MD, Xu HHK, Melo MAS. How we are assessing the developing antibacterial resin-based dental materials? A scoping review. <i>J Dent</i> 2020;99:103369.
48.	Ibrahim MS, Balhaddad AA , Garcia IM, Collares FM, Weir MD, Xu HHK, Melo MAS. pH-responsive calcium and phosphate-ion releasing antibacterial sealants on carious enamel lesions <i>in vitro</i> . <i>J Dent</i> 2020;97:103323.
49.	Ibrahim MS, Ibrahim AS, Balhaddad AA , Weir MD, Lin NJ, Tay FR, Oates TW, Xu HHK, Melo MAS. A novel dental sealant containing dimethylaminohexadecyl methacrylate suppresses the cariogenic pathogenicity of <i>Streptococcus mutans</i> biofilms. <i>Int J Mol Sci</i> 2019;20:E3491.
50.	Balhaddad AA , Kansara AA, Hidan D, Weir MD, Xu HHK, Melo MAS. Toward dental caries: Exploring nanoparticle-based platforms and calcium phosphate compounds for dental restorative materials. <i>Bioact Mater</i> 2019;4:43–55.
51.	Balhaddad AA , Melo MAS, Gregory RL. Inhibition of nicotine-induced <i>Streptococcus mutans</i> biofilm formation by salts solutions intended for mouthrinses. <i>Restor Dent Endod</i> 2019;44:e4.
52.	Maktabi H, Balhaddad AA , Alkhubaizi Q, Strassler H, Melo MAS. Factors influencing success of radiant exposure in light-curing posterior dental composite in the clinical setting. <i>Am J Dent</i> 2018;31:320–8.
53.	Alsani A, Balhaddad AA . Delayed eruption of maxillary central incisors associated with the presence of supernumerary teeth: A case report with 18 months follow-up. <i>J Contemp Dent Pract</i> 2018;19:1434–6.
54.	Balhaddad AA , Alshammari A, Alqadi A, Nazir MA. Patient satisfaction with dental services and associated factors in a Saudi dental institution. <i>Journal of Clinical and Diagnostic Research</i> 2018;12:36–9.
55.	Wagenknecht DR, Balhaddad AA , Gregory RL. Effects of nicotine on oral microorganisms, human tissues, and the interactions between them. <i>Curr Oral Health Rep</i> 2018;5:78–87.

56. Bukhari R, Al-Sulaimi A, Fadaak AH, Balhaddad AA , AlKhalfan A, Tantawi ME, Al-Ansari A. Oral health amongst male inmates in Saudi prisons compared with that of a sample of the general male population. <i>SADJ</i> 2017;72(9):402-407.
57. Alsani A, Balhaddad AA , Nazir MA. Vertical root fracture: a case report and review of the literature. <i>Giornale Italiano Di Endodonzia</i> 2017;31:21–8.

Other Published Papers

Author(s)	Title	Publication	Date

Accepted Research Projects

Name of Investigator(s)	Title	Publisher	Date of Publication

Current Researches

Name of Investigator(s)	Title

Books/Chapters

Name of Investigator(s)	Book Title	Report Date
Moakeem L, Balhaddad AA , Garcia IM, Collares FM, Melo MAS.	Nanoparticle-based antimicrobial for dental restorative materials. <i>1st edition, Emerging Nanomaterials and Nano-Based Drug Delivery Approaches to Combat Antimicrobial Resistance (Elsevier) Chapter 17.</i>	2022
Melo MAS, Reid A, Balhaddad AA .	An introduction to bioactivity via restorative dental materials. <i>1st edition, Designing Bioactive Polymeric Materials for Restorative Dentistry (Taylor & Francis Group) Chapter 1.</i>	2020
Balhaddad AA , Ibrahim MS, Weir MD, HHK.	Antibacterial, pH neutralizing, and remineralizing fillers in polymeric restorative materials. <i>1st edition, Designing Bioactive Polymeric Materials for Restorative Dentistry (Taylor & Francis Group), Chapter 8.</i>	2020

Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

Name of Investigator(s)	Title	Publisher	Date of Publication
1. Balhaddad AA , Moakeem L, Weir MD, Xu H, Melo MAS.	Toluidine Blue Ortho @ Magnetic Photosensitizing Nanoplatform: Antibiofilm Effect against Thick Constant-depth-film-fermenter Biofilms. <i>Society for Biomaterials</i> , Balimore, USA, April 27-30, 2022.		
2. Moakeem L, Balhaddad AA , Melo MAS.	Efficient Bacteria Killing by Dental Adhesives with Benzyldimethyldodecylammonium Chloride Biofilms. <i>Society for Biomaterials</i> , Balimore, USA, April 27-30, 2022.		
3. Balhaddad AA , Xia Y, Ibrahim MS, Weir MD, Xu H, Melo MAS.	Magnetic-responsive photosensitizer nanoplatform via Fe ₂ O ₃ -TBO improves photodynamic-inactivation against cariogenic biofilms. <i>IADR/AADR/CADR General Session & Exhibition</i> , Boston, USA, July 21-24, 2021.		
4. Albeshir E, Balhaddad AA , Mitwalli H, Albeshir A, Melo MAS, Wang X, Sun J, Weir MD, Xu HHK.	Minimally-invasive dentistry via dual-function novel bioactive low-shrinkage-stress flowable nanocomposite. <i>IADR/AADR/CADR General Session & Exhibition</i> , Boston, USA, July 21-24, 2021.		
5. Garcia IM, Balhaddad AA , Simionato A, Ibrahim MS, Hefni E, Weir MD, Xu HHK, Melo MAS, Collares FM.	Design of magnetic-responsive adhesives for enhancing dentin bonding. <i>IADR/AADR/CADR General Session & Exhibition</i> , Boston, USA, July 21-24, 2021.		

6. Ibrahim MS, Mokeem LS, **Balhaddad AB**, Melo MAS. Microbiome profiling and diversity among saliva inoculum and saliva-derived biofilms. *IADR/AADR/CADR General Session & Exhibition*, Boston, USA, July 21-24, 2021.
7. **Balhaddad AA**, Garcia IM, Mokeem L, Ibrahim MS, Collares F, Weir MD, Xu HHK, Melo MAS. Do quaternary ammonium based-dental composites affect the subgingival microbiota? a study on microcosm biofilms cultured from subgingival plaque. *Society for Biomaterials*, Chicago, USA, April 20-23, 2021.
8. **Balhaddad AA**, Mokeem L, Weir MD, Xu HHK, Melo MAS. Surpassing short-term antibacterial activity for bioactive dental composites with quaternary ammonium compound: a long-term evaluation after artificial aging. *Society for Biomaterials*, Chicago, USA, April 20-23, 2021.
9. Garcia IM, **Balhaddad AA**, Ibrahim MS, Weir M, Xu HHK, Oates T, Collares F, Melo MAS. Nanostructured zinc oxide-loaded bonding agent response against oral microcosm biofilm. *IADR/AADR/CADR General Session*, Washington, D.C., USA, March 18-21, 2020.
10. Melo MAS, Ibrahim MS, **Balhaddad AA**, Garcia IM, Collares F, Martinho F, Weir MD, Xu HHK. Tooth sealing formulation with bacteria-killing surface and on-demand ion release/recharge inhibits early childhood caries key pathogens. *IADR/AADR/CADR General Session*, Washington, D.C., USA, March 18-21, 2020.
11. Bazerbashi J, Alkhubaizi Q, Maria MS, **Balhaddad AA**, Massey W, Strassler S, Melo MAS. Radiographic assessment of class II resin composite restorations. *IADR/AADR/CADR General Session*, Washington, D.C., USA, March 18-21, 2020.
12. Aljuboori N, Ibrahim MS, **Balhaddad AA**, Maktabi M, Melo MAS. Poor curing consequences on incremental vs. bulkfill composites: One-year aging. *IADR/AADR/CADR General Session*, Washington, D.C., USA, March 18-21, 2020.
13. AlSahafi R, Weir MD, Melo MAS, Mitwalli H, Ibrahim MS, **Balhaddad AA**, Oates TW, Xu HHK. Novel crown cement containing antibacterial monomer and calcium phosphate nanoparticles. *IADR/AADR/CADR General Session*, Washington, D.C., USA, March 18-21, 2020.
14. **Balhaddad AA**, Ibrahim M, Weir MD, Xu HHK, Melo MAS. Anti-Biofilm and mechanically stable bioactive composite for root caries restorations. The Academy of Dental Materials Annual Meeting, Jackson Hole, USA, October 2-5, 2019.
15. Ibrahim M, Ibrahim AS, **Balhaddad AA**, Weir MD, Oates TW, Xu HHK, Melo MAS. A rechargeable dual function dental sealant against cariogenicity of *Streptococcus mutans*. *The Academy of Dental Materials Annual Meeting*, Jackson Hole, USA, October 2-5, 2019.
16. Melo MAS, Maktabi H, Ibrahim M, **Balhaddad AA**, Alkhubaizi Q, Fugolin APP, Pfeifer CS, Strassler H. Increased cariogenic biofilm formation on under-cured bulk fill composites. *The Academy of Dental Materials Annual Meeting*, Jackson Hole, USA, October 2-5, 2019.
17. **Balhaddad A**, Gregory. *In-vitro* model of *Scardovia wiggisii* biofilm formation and effect of nicotine. *AAADR/CADR*, Fort Lauderdale, USA, March 21-24, 2018
18. **Balhaddad A**, Gregory RL, Windsor JL, Cook NB. First hand nicotine/tobacco exposure on *Streptococcus mutans* biofilm and effects of salts. *IADR/AADR/CADR*, San Francisco, USA, March 22-25, 2017.
19. AlBukhari R, **Balhaddad A**, AlKhalfan A, AlSulaimi A, Fadaak A, M Tantawi. Oral health status among prison inmates in Dammam and Khobar. *IADR*, Cape Town, South Africa, June 25-28, 2014.

Contribution to Scientific Conferences and Symposia (CE Course taken for the last 5 years)

#	Title	Place and Date of the Conference	Extent of Contribution
1	BDA7 International Dental Conference and Exhibition (7 th edition, BDA center, Manamah, Bahrain)	November 3-6, 2022.	
2	The Annual Conference of the Saudi Society of Restorative Dentistry, October 26-29, 2022.		
3	The 15 th Annual Symposium Innovative Dentistry (Imam Abdulrahman bin Faisal University, College of Dentistry, Dammam, KSA)	November 21-23, 2015.	

Teaching Activities

Undergraduate	<ul style="list-style-type: none"> Dental Biomaterials Science (BMAT 204) Dental Biomaterials Science II (BMAT 209) Clinical Restorative Dentistry I (RESTO 313), 2022-2023. Topics in Restorative Dentistry (RESTO 508), 2022-2023. Research Project (RESCH 604), 2022-2023. Comprehensive Care Clinic (CCD 503 & 601) 2022-2023.
Post-Graduate	

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
	Clinical Restorative Dentistry 2022-2023.	(RESTO 404, Undergraduate Dental Students)	Course Director
	Restorative Dentistry Clinic 2022-2023	(RESTO 414, Undergraduate Dental Students)	Course Director

CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students	Total Contact hour per Year Didactic	Clinic/ Laboratory

Membership of Scientific and Professional Societies and Organizations, Or Appointments Held In Local, State Or National Dental Or Allied Dental Organizations, Including Appointments To State Boards Of Dentistry And Coda

Name of Organization	Title	From (Year)	To (Year)
<ul style="list-style-type: none"> The Saudi Society of Restorative Dentistry (SSRD) The Academy of Dental Materials (ADM) The International Association for Dental Research (IADR) The Saudi Dental Society (SDS) 			
Editorial Commitments			
<ul style="list-style-type: none"> Applied Sciences (IF=2.8). Frontiers in Dental Medicine. Frontiers in Oral Health. 			

Volunteer Work

#	From	To	Type of Volunteer	Organization

Honors and Awards

<p>“Dentist Research Award 2nd Place”. The Saudi International Dental Conference (SIDC), Riyadh, KSA, January 19-21, 2023.</p>
<p>“Best Researcher Award” for Outstanding Contribution in Dental Research, Imam Abdulrahman bin Faisal University, the 15th Annual Symposium, Dammam, KSA, November 30, 2022.</p>
<p>“Post-graduate Research Award 2nd Place”. The Saudi International Dental Conference (SIDC), Riyadh, KSA, January 20-22, 2022</p>
<p>First author of a publication in ACS Nano, one of the top journals in nanotechnology with an impact factor = 15.88.</p>
<p>“Brazilian Division of the IADR Award”. The 38th Meeting of the Brazilian Society of Dental Research, Brazil, September 2021.</p>
<p>“2021 Kulzer Travel Award as a First Author”. The International Association of Dental Research (IADR), Boston, U.S.A. July 21-24, 2021.</p>
<p>“2021 Kulzer Travel Award as a Co-author”. The International Association of Dental Research (IADR), Boston, U.S.A. July 21-24, 2021.</p>
<p>SACM’s Appreciation Certificate. From Cultural Attaché Dr. Fawzi Bukhari, the Saudi Arabian Cultural Mission (SACM) to the United States, Virginia, Fairfax, U.S.A. July 2021.</p>
<p>“Brazilian Dental Materials Award 2nd place”. The 56th Meeting of the Brazilian Dental Materials Group, Brazil, July 2020.</p>
<p>“Outstanding Presentation Award”. 42nd Annual Graduate Research Conference, University of Maryland, Baltimore, U.S.A. March 2020.</p>
<p>“Graduate Student Association Travel Award”. University of Maryland, Baltimore, U.S.A. November 2019.</p>
<p>“The Academy of Dental Materials Travel Award”. The Academy of Dental Materials Annual Meeting, Jackson Hole, Wyoming, U.S.A. October 2-5, 2019.</p>
<p>“Best Summer Research Poster 2nd place”. Summer Research Program, University of Maryland Baltimore, School of Dentistry, U.S.A. August 2, 2019.</p>
<p>“Best Graduate (M.S) Poster 2nd place”. American Society for Microbiology, Indiana Branch (IBASM), Indianapolis, Indiana, U.S.A. April 2017</p>
<p>“Best Community Project Award 3rd place”. Winning as a Group Under the Name of Bareeq Volunteer Club. From Prince. Saud Bin Naif, The Governor of Eastern Province, KSA. January 2014</p>
<p>“Student’s Annual Scientific Research Award 1st place”. University of Dammam, College of Dentistry, KSA, December 2013.</p>
<p>Dean’s Appreciation Certificate for Outstanding Contribution in The College Activities. From Dr. Fahad Al-Harbi, Dean, University of Dammam, College of Dentistry, KSA, December 2013</p>
<p>Appreciation Certificate for Outstanding Contribution in Community Services. General Directorate of Prisons, KSA, December 2013</p>
<p>Vice Dean's Appreciation Certificate for Outstanding Contribution in Community Services. From Dr. Aws Arrejaie, Vice Dean, University of Dammam, College of Dentistry, KSA. May 2013</p>
<p>First Place in UAE International Dental Conference AEEDC (Students Competition). UAE International Dental Conference AEEDC, Dubai, United Arab Emirates. February 2013</p>
<p>Dean’s Appreciation Certificate for Outstanding Contribution in College Activities. From Dr. Fahad Al-Harbi, Dean, University of Dammam, College of Dentistry, KSA, December 2012</p>



