



## Faculty Profile

<b>NAME</b>	
<b>Abdul Samad Khan</b>	
<b>Position</b>	Associate Professor
<b>College</b>	College of Dentistry
<b>Department</b>	Restorative Dental Sciences
<b>Phone</b>	013-
<b>Arabic Name</b>	
	الوظيفة
	الكلية
	القسم
	الهاتف
<b>Google Scholar Link</b>	<a href="https://scholar.google.com/citations?user=J-3yRfEAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=J-3yRfEAAAAJ&amp;hl=en</a>
<b>Research Gate Link</b>	<a href="https://www.researchgate.net/profile/Abdul_Khan219">https://www.researchgate.net/profile/Abdul_Khan219</a>
<b>Researcher ID (Web of Science)</b>	40096974
<b>Scopus Author ID</b>	<a href="https://www.scopus.com/dashboard.uri?origin=searchbasic&amp;zone=TopNavBar">https://www.scopus.com/dashboard.uri?origin=searchbasic&amp;zone=TopNavBar</a>
<b>ORCID #</b>	0000-0002-2165-800X
<b>Research Areas of Interest</b>	Dental Composites, Adhesives, Bioceramics, Reinforced Glass Fibre Composites, Electrospinning, Tissue Regeneration, Vibrational Spectroscopy



## IAU Dent Bio sketch

Dr Name: Abdul Samad Khan

Rank: Associate Professor

### Personal Data

#### Personal Data

Nationality | Pakistan

Date of Birth | 27<sup>th</sup> September 1976

Department | Restorative Dental Sciences

Official Email | [akhan@iau.edu.sa](mailto:akhan@iau.edu.sa)

Office Phone No. |

Mobile: 0594781075

### Language Proficiency

Language	Read	Write	Speak
English	✓	✓	✓
Others (Urdu)	✓	✓	✓

### Academic Qualifications (Beginning with most recent)

Date	Academic Degree	Specialty	Place of Issue	Address
2014	Postdoctoral Research	Biomaterials	United Kingdom	School of Engineering and Materials Sciences, University of Sheffield, Sheffield, United Kingdom
2009	PhD	Dental Biomaterials	United Kingdom	School of Engineering and Materials Science, Queen Mary University of London, United Kingdom
2005	MSc.	Dental Materials	United Kingdom	Department of Materials, Queen Mary University of London, United Kingdom
1999	BDS	Dentistry	Pakistan	Nishtar Medical College, Multan, Pakistan

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

Doctorate	A Novel Bioactive Nano-Composite: Synthesis and Characterisation with Potential Use as Dental Restorative Material
Master	Comparison of viscoelastic properties of pre-impregnated reinforced glass fibre with resin based hybrid composite (Distinction)
Fellowship	Higher Education

Professional Record: (Beginning with most recent)

Job Rank	Specialty/Department	Place and Address of Work	Date
Associate Professor Dental Biomaterials	Dental Biomaterials	Department of Restorative Dentistry, College of Dentistry, University of Dammam, Saudi Arabia	June 2016 – To Date
Associate Professor Dental Materials	Dental Biomaterials	Interdisciplinary Research Centre in Biomedical Materials, COMSATS Institute of Information Technology, Lahore, Pakistan	Aug 2011 – June 2016
Postdoctorate Research Associate	Dental Biomaterials	The Kroto Research Institute, Department Material Sciences and Engineering, University of Sheffield, United Kingdom	Oct 2013 – Feb 2014
Assistant Professor Dental Materials	Dental Biomaterials	Interdisciplinary Research Centre in Biomedical Materials, COMSATS Institute of Information Technology, Lahore, Pakistan	July 2010 – Aug 2011
Demonstrator	Dental Biomaterials	School of Engineering and Materials Science, Queen Mary University of London, United Kingdom	Sept 2006 – Mar 2010
Research Assistant	Biomaterials	School of Engineering and Materials Science, Queen Mary University of London, United Kingdom	May 2007 – Dec 2007
Demonstrator	Dental Materials	Margalla Institute of Health Sciences, Rawalpindi, Pakistan	Jan 2004 – Sept 2004
Demonstrator	Dental Materials	Islamabad Medical and Dental College, Islamabad, Pakistan	Mar 2001 – Jan 2004
House Office	Dentistry	Pakistan Institute of Medical Sciences, Islamabad, Pakistan	Oct 1999 – Oct 2000
Visiting Associate Professor	Dental Materials	Hamdard Medical and Dental College, Hamdard University, Karachi, Pakistan	2015 – To Date
Visiting Associate Professor	Dental Materials	De'Montmorency College of Dentistry, Lahore, Pakistan	2015 – To Date
Visiting Associate Professor	Dental Materials	University of Health Sciences, Lahore, Pakistan	2015-2016
Visiting Lecturer	Dental Materials	Institute of Dentistry, Queen Mary University of London, United Kingdom	2013 - 2015



#### Board Certification

Certifying Organization	Specialty	Date Certified

#### Administrative Positions Held: (Beginning with most recent)

Administrative Position	Office	Date
Incharge Research	Interdisciplinary Research Centre in Biomedical Materials, COMSATS University Islamabad, Lahore Campus, Pakistan	2011-2016
Incharge Laboratory, Health & Safety	Interdisciplinary Research Centre in Biomedical Materials, COMSATS University Islamabad, Lahore Campus, Pakistan	2011-2016

#### 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
K.S. Almulhim, <b>A.S. Khan</b> , H. Alabdulghani, S. Albasarah, Y. Al-Dulaijan, F.D. al-Qarni	Effect of ageing process and brushing color stability and surface roughness treated white spot lesions: an in vitro analysis	Clinical, Cosmetic and Investigational Dentistry, 2021: 13 (October): 413-419	2021
S.S.B. Qasim, D. Ali, <b>A.S. Khan</b> , S.U. Rehman, A. Iqbal, J.K Baskaradoss.	An evidence based bibliometric analysis on silver diamine fluoride use in dentistry	Biomed Research International. 2021; 2021 (September): Article ID 9917408	2021
Daood, U., Bapat, R.A., Sidhu, P., M.S., <b>Khan, A.S.</b> , Mak, K.K., Pichil M.R., Nagendrababu, V. and Peter O.A	Antibacterial and Antibiofilm Efficacy of k21-E in Root Canal Disinfection	Dental Materials. 2021: 37(10):1511-1528	2021
<b>A.S. Khan</b> , S.U. Rehman, S. Ahme AlMaimouni, M. Alzamil, P. Dumr	Five decades of the International Endodontic Journal: bibliometric overview 1967-2020	International Endodontic Journal, 2021: 54(10): 1819-1839	2021
<b>A.S. Khan</b>	Effect of Ultrasonic Vibration on Structural and Physical Properties of Resin-Based Dental Composites	<i>Polymers</i> 2021, 13(13), 2054	2021
J. Bukhari, <b>A.S. Khan</b> , K. Ijaz, S. Za A.A. Chaudhry, M. Kaleem	Low temperature flow synthesis and urethane grafted zinc oxide based composites: Physical, mechanical, and antibacterial responses	Journal of Materials Sciences: Materials in Medicine, 2021 ;32(8):87	2021
Z. Malik, D.Q. Butt, Z.Q. Butt, N. Muhammad, M. Kaleem, S. Liaqa M.A. Khan, <b>A.S. Khan</b>	Evolution of Anticariogenic Resin-Modified Glass Ionomer Cements	ChemBioEng Reviews, 2021: 8(4): 326-336	2021
M.T. Khan, F. Moeen, S.Z. Safi, F. A. Mansoor, <b>A.S. Khan</b>	The structural, physical and <i>in vitro</i> biological performance of freshly mixed and set endodontic sealers	European Endodontic Journal. 2021; 6(1): 98-109	2021
U. Siddiqui, H. Khalid, S. Ghafoor, Javid, A. Asif, <b>A.S. Khan</b>	Analyses on mechanical and physical performances of nano-apatite grafted glass fibers based dental composite	Materials Chemistry and Physics, 2021: 263(Apr):124188	2021
S. Iftikhar, N. Jahanzeb, M. Saleer S.U. Rehman, J.P. Matinlinna, <b>A.S. Khan</b>	The Trends of Dental Biomaterials Research and Future Directions: A Mapping Review	Saudi Dental Journal, 2021: 33(5): 229-238.	2021



I. Farooq, <b>A.S. Khan</b> , I.A. Moheet, AlShwaimi	Preparation of a toothpaste containing theobromine and fluoridated bioactive glass and its effect on surface microhardness and roughness of enamel	Dental Materials Journal. 2021; 40(2):393-398	2021
<b>A.S. Khan</b> , Y.K. AlMaimouni, M.A. Benrashed, N.I. Alyousef, U. Siddique, N. Ahmad, I.S. Ateeq, A.S. Hakeem	A laboratory study to assess the physical, mechanical, and 3-D structural properties of nano-apatite grafted glass fibre-reinforced endodontic posts	2021: 54(12):2307-2320	2021
H. Gul, M.A. Ghaffar, M. Kaleem, <b>Khan</b>	Hydroxyapatite, a Potent Agent to Reduce Dentin Hypersensitivity	The Journal of the Pakistan Medical Association, 2021: 71: 2604	2021
H. Mehboob, A. Mehboob, F. Abkhalid, <b>A.S. Khan</b> , S. Miran	Bioinspired porous dental implant using the concept of 3D printing to investigate the effect of implant type and porosity on patient's bone condition	Mechanics of Advanced Materials and Structures	2021
F. Naz, <b>A.S. Khan</b> , M. Kader, L. Al Geblan, N. Mousa, R. Asiri, A.S. Hakeem	Comparative evaluation of mechanical and physical properties of a new bulk fill composite with conventional restorative materials	Saudi Dental Journal, 2021: 33; 666-673	2021
K. Almas, A.S. Khan, A. Tabassum Nazir, A. Afaq, A. Majeed	Knowledge, Attitudes, and Clinical Practices of Dental Professionals during COVID-19 Pandemic in Pakistan	European Journal of Dentistry. 2020; 14(S 01): S63-S69	2020
M. Saleem, S. Zahid, S. Ghafoor, H. Khalid, H. Iqbal, R. Zeeshan, S. Ahmad, A. Asif, A.S. Khan	Physical, Mechanical, and in vitro biological analysis of bioactive fiber-reinforced dental composite	Journal of Applied Polymer Science. 2021; 138(18): e50336	2020
A.S. Khan*, S. Rehman, Y. AlMaini, S. Ahmad, M. Khan, M. Aashiq	Bibliometric Analysis of Literature Published on Antibacterial Dental Adhesive from 1996–2020	Polymers. 2020. 12(12), 2848	2020
A.S. Khan* and M. Awais	Low-Cost Deposition of Antibacterial Substituted Hydroxyapatite Coating onto 316L Stainless Steel for Biomedical and Dental Applications	Coatings. 2020: 10: 880	2020
H.I. Arbildo-Vega, B. Lapinska, S. Panda, C. Lamas-Lara, A.S. Khan, Lukomska-Szymanska	Clinical effectiveness of bulk-fill and conventional resin composite restorations. Systematic review and meta-analysis	Polymer, 2020: 12: 1786	2020
N. Hussain, H. Khalid, Y.K. AlMaimouni, S. Ikram, S. Uddin, A. Talal, A.S. Khan	Microwave assisted urethane grafted nano-apatites for dental adhesives	Journal of Bioactive and Compatible Polymers, 2020: 35: 479-490	2020
M.R. Syed, N.Z. Bano, S. Ghafoor, H. Khalid, S. Zahid, U. Siddiqui, A.S. Hakeem, M. Kaleem, A. Asif, A.S. Khan	Synthesis and characterization of bioactive glass fiber-based dental restorative composite	Ceramics International. 2020: 46: 21623-21631	2020
M. Sabir, A. Ali, U. Siddiqui, N. Muhammad, A.S. Khan, F. Sharif, F. Iqbal, A.T. Shah, I.U. Rehman	Synthesis and characterization of cellulose/ hydroxyapatite based dental restorative composites	Journal of Biomaterials Science: Polymer Edition. 2020; 31: 1806-1819.	2020
L. Mishra, A.S. Khan, M.M.A.C. Velo, S. Panda, A. Zavattini,	Effects of surface treatments of glass fiber reinforced post on	Materials. 2020: 13(8):1967	2020



F.A.P. Rizzante, H.I.A. Vega, S. Sauro, M. Lukomska-Szymanska	bond strength to root dentine: A systematic review		
A.S. Khan, S. Ali, I. Farooq, S. Ahmed, A.S. Hakeem.	Comparative evaluation of two chelating agents in collagen fiber network modification over dentinal tubules: An in vitro analysis	Saudi Pharmaceutical Journal. 2020: 28: 657-661	2020
Q.A. Malik, S. Iftikhar, S. Zahid, S.Z. Safi, A.F. Khan, N. Muhammad, S. Ghafoor, A.S. Khan*, A.T. Shah	Smart Injectable Self-Setting Bioceramics for Dental Applications	Materials Science and Engineering C, 2020: 133: 110956	2020
H. Malik, L. Shehzadi, R. Batool, S.Z. Safi, A.S. Khan, A.F. Khan, A.A. Chaudhry, I. Reman, M. Yar	Thyroxine-loaded chitosan/carboxymethyl cellulose/hydroxyapatite hydrogels enhance angiogenesis in ex-ovo experiments	International Journal of Biological Macromolecules, 2020:145:1162-1170	2020
Y. AlMaimouni, S. Khalid, K. Ilyas, A.T. Shah, A. Majeed, A.S. Khan	Structural, fluoride release, and 3-D interfacial adhesion analysis of bioactive endodontic sealers	Dental Materials Journal, 2020:39(3):483-489.	2020
S. Khalid, A. Rafique, A.S. Khan	Application of natural crosslinkers on tooth surface: an in-vitro comparative evaluation of resin-dentin bond strength	Journal of The Pakistan Medical Association, 2020: 70: 1363	2020
H. Gul, M. Nayyer, M. Gilani, N. Aman, A.A. Azad, A.T. Shah, A.A. Chaudhry, M. Kaleem, A.S. Khan	Comparative fluoride release and antimicrobial analysis of commercial and experimental bioactive	European Journal of Dentistry, 2020:14:38-44.	2020
D. Anthoney, S. Zahid, H. Khalid, A.T. Shah, A.A. Chaudhry, A.S. Khan	Effectiveness of thymoquinone and fluoridated-bioactive glass/nano-oxide contained dentifrices on abrasion and dentine tubules occlusion: An ex vivo study	European Journal of Dentistry. 2020: 14:45-54.	2020
Khan AS, Farooq I, Alakrawi KM, Khalid H, Waqas O, Hakeem AS.	Dentin tubule occlusion potential of novel dentifrices having fluoride containing bioactive glass and zinc oxide nanoparticles	Medical Principles and Practice, 2020: 29:338-346	2020
F. Saeed, N. Muhammad, A.S. Khan, F. Sharif, A. Rahim, P. Ahmad, M. Irfan	Prosthodontics dental materials: From conventional to unconventional	Materials Science and Engineering C, 2020: 106: 110167	2020



A.T. Shah, S. Zahid, F. Ikram, M. Maqbool, A.A. Chaudhry, M.I. Rahim, F. Schmidt, O. Goerke, A.S. Khan, I.U. Rehman	Tri-layered functionally graded membrane for potential application in periodontal regeneration	Materials Science and Engineering C, 2019: 103: 109812	2019
H. Firzok, S. Zahid, S. Asad, F. Manzoor, A.S. Khan, A.T. Shah	Sol-Gel derived fluoridated and non-fluoridated bioactive glass ceramics-based dental adhesives: Compositional effect on re-mineralization around orthodontic brackets	Journal of Non-Crystalline Solids, 2019: 521: 119469	2019
A. Qaiser, S. Hussain, N. Yazdani, H. Khalid, A.S. Khan	Effect of Lignocaine addition on the properties of Irreversible Hydrocolloid Impression Material	Journal of Ayub Medical College, 2019: 31: 359-363	2019
A.A. AlSubaie, Z. Sarfraz, A.A. AlAli, A.E. AlEssa, H.A. AlSubaie, A.T. Shah, A.S. Khan	The effect of nano-zinc oxide and fluoride-doped bioactive glass based dentifrices on esthetic restorations	Dental and Medical Problems, 2019, 56(1):59-65	2019
S. Zahid, A.S. Khan, A.A. Chaudhry, S. Ghafoor, Q. Malik, G. Oliver, A. Raza, I. Rahim, I.U. Rehman, A.T. Shah	Fabrication, in vitro and in vivo studies of bilayer composite membrane for periodontal guided tissue regeneration	Journal of Biomaterials Applications, 2019, 33:967-978	2019
N. Iqbal, A.S. Khan, A. Asif, M. Yar, J. Haycock, I.U. Rehman	Recent concepts in biodegradable materials for tissue engineering paradigms: A critical review	International Materials Review, 2019, 64:2, 91-126	2019
A.S. Khan and M.R. Syed	A review on bioceramic based dental restorative materials	Dental Materials Journal, 2019, 38(2):163-176	2019
H. Khalid, F. Suhaib, S. Zahid, S. Ahmed, A. Jamal, M. Kaleem, A.S. Khan	Microwave-assisted synthesis and in vitro osteogenic analysis of novel bioactive glass fibers for biomedical and dental applications	Biomedical Materials, 2018: 14: 015005	2018
H. Gul, S. Zahid, S. Zahid, M. Kaleem, A.S. Khan, A.T. Shah	Sol-gel derived fluoride-doped bioactive glass powders: Structural and long-term fluoride release/pH analysis	Journal of Non-Crystalline Solids, 2018: 498: 216-222	2018
K. Ilyas, S. Qureshi, S. Afzal, R. Gul, M. Yar, M. Kaleem, A.S. Khan	Microwave Assisted Synthesis and Evaluation of Type 1 Collagen-Apatite Composites for Dental Tissue Regeneration	Journal of Biomaterials Applications, 2018: 33: 103-115	2018
M.E. Haq and A.S. Khan	A retrospective study of causes, management and complications of pediatric facial fractures	European Journal of Dentistry, 2018: 12: 247-252	2018



H. Khalid, M.R. Syed, M.I. Rahbar, H. Iqbal, S. Ahmad, M. Kaleem, J.P. Matinlinna, A.S. Khan	Effect of Nano-Bioceramics on Monomer Leaching and Degree of Conversion of Resin-based Composites	Dental Materials Journal, 2018: 37:940-949	2018
M. Nayyer, S. Zahid, S.H. Hassan, S.A Mian, S. Mehmood, H.A Khan, M. Kaleem, M.S. Zafar, A.S. Khan	Comparative abrasive wear resistance and surface analysis of dental resin-based materials	European Journal of Dentistry, 2018: 12: 57-66	2018
A.T. Shah, Q. Ain, A.A. Chaudhry, S. Ahmad, F. Zarif, S.A. Siddiqi, S.B. Qasim, O. Gorke, A.S. Khan, I.U. Rehman	Acid catalysed synthesis of bioactive glass by evaporation induced self assembly method	Journal of Non-Crystalline Solids, 2018: 479: 1-8	2018
A. Siddiqi, A.S. Khan, S. Zafar	Thirty years of translational research in zirconia dental implants: A systematic review of the literature	Journal of Oral Implantology, 2017: 43: 314-325	2017
A.S. Khan, A.N. Hussain, L. Sidrah, Z. Sarfraz, H. Khalid, F. Manzoor, L. Shahzadi, M. Yar, I.U. Rehman	Fabrication and evaluation of hydroxyapatite/carbon nanotube electrospun fibers for dental application	Materials Science and Engineering C, 2017: 80: 387-396	2017
A.S. Khan, H. Khalid, Z. Sarfraz, M. Khan, J. Iqbal, N. Muhammad, M.A. Fareed, I.U. Rehman	Vibrational Spectroscopy of Selective Dental Restorative Materials	Applied Spectroscopy Reviews, 2017: 52: 507-540	2017

#### Other Published Papers

Author(s)	Title	Publication	Date
N. Muhammad, S. Zahid, A.T. Shah, A. Jamal, A. Anwar, A.S. Khan, A.F. Khan, I.U. Rehman	Biological behavior of bioactive glass and their composites	RCS Advances, 2016: 6: 70197-7021	2016
S. Najeeb, Z. Khurshid, M. Zafar, A. Khan, S. Zohaib, J. Marti, S. Sauro J. Matinlinna, I. Rehman	Modifications in glass ionomer cement nano-sized fillers and bioactive nanoceramics	International Journal of Molecular Sciences, 2016: 17: 1134	2016
Z. Sheikh, A.S. Khan, N. Roohpou Glogauer, I.U. Rehman	Protein adsorption capability on polyurethane and modified-polyurethane membrane for periodontal guided tissue regeneration applications	Materials Science and Engineering C, 2016:68:267-275	2016
A. Shah, M. Batool, A.A. Chaudhry, Iqbal, A. Javaid, S. Zahid, S.B. Qasim, A.F. Khan, A.S. Khan, I.U. Rehman	Effect of Calcium hydroxide on mechanical strength and biological properties of bioactive glass	Journal of the Mechanical Behavior of Biomedical Materials. 2016: 61: 617-624	2016
M. Yar, A. Farooq, L. Shahzadi, A.S. Khan, N. Mahmood, A. Rauf, A.A. Chaudhry, I.U. Rehman	Novel meloxicam releasing electrospun polymer/ceramic reinforced biodegradable membranes for periodontal regeneration applications	Materials Science and Engineering C, 2016: 64: 148-156	2016
C.K.Y. Lung, Z. Sarfraz, A. Habib, A.S. Khan, J.P. Matinlinna	Effect of silanization of hydroxyapatite fillers on physical and mechanical	Journal of the Mechanical Behavior of Biomedical Materials, 2016, 54C, 28	2016





	properties of a bis-GMA based resin composite		
B.A. Zai, H. Mehboob, A.S. Khan	Finite Element Method Analysis of Structure upon Surgically Assisted Maxillary Expansion with Various Surgical Procedures	Journal of Pakistan Dental Association 2015: 24: 70-74	2015
N.I. Khan, K. Ijaz, M. Zahid, A.S. Khan, M.R.A. Kadir, R. Hussain, A.U. Rehman, J. A. Darr, I.U. Rehman, A.A. Chaudhry	Microwave Assisted Synthesis and Characterization of Magnesium Substituted Calcium Phosphate Bioceramics	Materials Science and Engineering Letters 2015, 56: 286-293	2015
F. Ahmed, A. Munir, A.S. Khan, A. Chaudhry, M.A.U. Rehman	Facile synthesis and conduction mechanism in RE-substituted oxide systems for enhanced thermoelectric performance	Journal of Materials Science: Materials Electronics, 2015, 26, 7460-7467	2015
A. Farooq, M. Yar, A.S. Khan, L. Shahzadi, S.A. Siddiqi, N. Mahmood, Rauf, Z. A. Qureshi, A.A. Chaudhry, I.U. Rehman	Synthesis of piroxicam loaded novel electrospun biodegradable nanocomposite scaffolds for periodontal regeneration	Materials Science and Engineering Letters 2015: 56: 104-113	2015
M.T. Azam, A.S. Khan, D. Muzaffar, Faryal, A.A. Chaudhry, S.A. Siddiqi, Ahmed, I.U. Rehman	Structural, surface and in-vitro bacterial adhesion analysis of dental restorative composites	Materials. 2015: 8: 3221-3237	2015
M. Kaleem, A.S. Khan, I. Rehman, Wong	Effect of beverages on viscoelastic properties of resin-based dental composites	Materials, 2015: 8: 2863-2872	2015
R. Ramakrishnaiah, S. Basavarajappa, A.A. Al Kheraif, B. H. Durgesh, A.S. Khan, I.U. Rehman	Applications of Raman Spectroscopy in Dentistry: Analysis of Tooth Structure	Applied Spectroscopy Reviews, 2015: 44: 332-350	2015
A.S. Khan, M.T. Azam, M. Khan, S. Mian, I.U. Rehman	An Updates on Reinforced Glass Fiber Composites in Dentistry: A Systematic Review	Materials Science and Engineering Letters 2015: 47: 26-39	2015
G. Tetteh, A.S. Khan, R.M. Delainy, Smith, G.C. Reilly, I.U. Rehman	Electrospun polyurethane/hydroxyapatite bioactive Scaffolds for bone tissue engineering: The role of solvent and hydroxyapatite particles	Journal of the Mechanical Behavior of Biomedical Materials, 2014: 39: 95-104	2014
M. Mir, S.A. Siddiqi, T. Hussain, A. Khan, A.A. Chaudhry, I.U. Rehman, Abbas	Synthesis and Characterization of Calcium Deficient Apatite Granules Drug Eluting Bone Graft Application	Ceramics International, 2014: 40: 10725	2014
D. Khan, H.U. Khan, F. Khan, S. Khan, Badshah, A.S. Khan, A. Samad, F. Khan, N. Muhammad	New Cholinesterase Inhibitory Constituents from Lonicera quinquelocularis	Plos One, 2014: 9: e94952	2014
B. Younas, A.S. Khan, D. Muzaffar, Hussain, A.A. Chaudhry, I.U. Rehman	In-situ reaction kinetic analysis of dental restorative materials	The European Physical Journal Applied Physics, 2013: 64: 30701	2013
A.S. Khan, S. Aamer, A.A. Chaudhry, F.S.L. Wong, I.U. Rehman	Synthesis and characterizations of a fluoride-releasing dental restorative material	Materials Science and Engineering Letters 2013: 33: 3458-3464	2013
M. Yar, N. Mushtaq, S. Afzal, A.S. Khan, I.U. Khan, M.N. Akhter et al.	Synthesis, biological evaluation and of the effect of various N-substituted the thermal stabilities of some new diethanolamine derivatives	Asian Journal of Chemistry, 2013:25: 7297-7304	2013



R. Nazir, A.S. Khan, A. Ahmed, A. Rehman, A.A. Chaudhry, I.U. Rehman, F.S.L. Wong	Synthesis and <i>In-vitro</i> Cytotoxicity Analysis of Microwave Irradiated Nano-Apatites	Ceramics International, 2013; 39: 4347	2013
A.F. Khan, M.A. Younas, A.S. Khar Tabbassam, A.A. Chaudhry, I.U. Rehman	Raman Spectroscopy of Natural Bio-Synthetic Apatites	Applied Spectroscopy Reviews, 2013 (4): 329-355	2013
A.S. Khan, I.J. McKay, R.A. Whaley, F.S.L. Wong, I.U. Rehman	Structural, mechanical and biocompatibility analyses of a novel restorative nano-composite	Journal of Applied Polymer Science 2013; 127 (1): 439-447	2013
R. Nazir, N.I. Khan, A.S. Khan, A. Ahmad, A. Asif, A.A. Chaudhry, I.U. Rehman, R. Hussain	Rapid Synthesis of Thermally Stable Hydroxyapatite	Ceramics International, 2012; 38(1) 462	2012
A.S. Khan, K.R. Hassan, S.F. Bukhari, F.S.L. Wong, I.U. Rehman	Structural and In-vitro Adhesion Analysis of a Novel Covalently-Coupled Bio-Composite	Journal of Biomedical Materials Research Part B: Applied Biomaterials, 2012; (1): 239-248	2012
Abdul Samad Khan and Ihtesham Rehman	Resin-Based Dental Composites: Nanotechnology, Properties and Applications	Materials Science Research Journal 2012; 6(1/2), 1	2012
A.S. Khan, F.S.L. Wong, I.U. Rehman	Synthesis and in-vitro analysis of a bioactive nano-composite	NUST Journal of Engineering Science 2009; 2: 203-210	2009
A. S. Khan, M. S. Aziz, D. Paul, F. V. I. Rehman	Synthesis and in-vitro analysis of degradative resistance of a novel bioactive composite	Journal of Bionanoscience, 2008; 2: 2008	2008
A.S. Khan, Z. Ahmed, M.J. Edirisinghe, F.S.L. Wong, I. U. Rehman	Preparation and characterization of novel bioactive restorative composites based on covalently coupled polyurethane-nanohydroxyapatite	Acta Biomaterialia, 2008; 4: 1275-1281	2008
A. S. Khan, M. J. Phillips, K. E. Tan S. Wong	Comparison of the viscoelastic behavior of a pre-impregnated reinforced glass fibre composite with a resin based composite	Dental Materials, 2008; 24: 1534-1541	2008
A.S. Khan, A. Syed, A. Qureshi, S. A. A. Khan	Evaluation of Problems Related to Malpractice and Professionalism in Islamabad Area-A Study	Pakistan Oral and Dental Journal, 2004 (1): 45-49	2004

#### Accepted Research Projects

Name of Investigator(s)	Title	Publisher	Date of Publication
Abdul Samad Khan	Effect of Ultrasonic Scaler on Physical and Mechanical Properties of Resin Based Dental Restorative Materials	Students' Research Grant	2018
Abdul Samad Khan	In-vitro Adhesion and Fluoride Release Analysis of Bioactive Glass Based Endodontic Sealers	Students' Research Grant	2018
Imran Farooq, Emad AlShwaimi, Abdul Samad Khan	Formulation of a novel dentifrice and its effectiveness in occluding dentinal tubules - An in vitro study	Deanship of Scientific Research	2019
Nawshad Muhammad and Abdul Samad Khan	Fabrication of Endodontic Posts by Incorporating Ionic Liquid Pretreated Cellulose- Nanocomposite Material	Higher Education Commission Pakistan	2018
Abdul Samad Khan	Indigenous development of a novel nanofibrous dental composite for tissue regeneration	Higher Education Commission Pakistan	2016



Abdul Samad Khan	Synthesis of carbon nanotubes and carbonated hydroxyapatite composites	Pakistan Science Foundation	2016
Abdul Samad Khan	Synthesis and characterisation of a Osteoconductive "Monoblock" post-core system for root canal treatment	COMSATS IIT, Pakistan	2016
Abdul Samad Khan	Knowledge Development	British Council, UK	2013

#### Current Researches

Name of Investigator(s)	Title
Abdul Samad Khan, Abdul Majeed, Ahmed Talal, Syed Zubairuddin	Synthesis and Characterization of Drug Loaded Injectable Bioactive Material for Bone/Periodontal Regeneration
Rasha AlSheikh, Laila AlDehailan, Abdul Samad Khan	Antibacterial, mechanical and physical properties of an experimental coconut oil containing composite resin
Amre Atmeh, Mutasim Mohamed, Abdul Samad Khan	Study of the fracture resistance of endodontically treated teeth with minimal thickness of outer coronal tissues restored with bulk or layered posterior composite restorations with cuspal coverage
Abdul Samad Khan	Synthesis and Fabrication of Resin-based Composites and Adhesives based on Bioceramics
Abdul Samad Khan	Reinforced Bioactive Glass Fibers composites for dental restorations
Abdul Samad Khan	Synthesis of injectable bioactive glass for hard tissue regeneration
Abdul Samad Khan	Synthesis of bioactive/antibacterial toothpastes
Abdul Samad Khan	Grafting the ceramic structures in to the backbone of polymeric chain to develop novel dental material
Abdul Samad Khan	Tissue Engineering scaffolds via Electrospinning, Solvent Casting, and fabricate periodontal membranes

#### Books/Chapters

Name of Investigator(s)	Book Title	Report Date
Mashaal Abdullah Benrashed, Nujood Ibrahim Alyousef, Noor Hadi AlQahtani, Yara Khalid AlMaimouni, Maria Khan, Abdul Samad Khan	Conventional to advanced endodontics: Use of bioactive materials. In: Biomaterials in Endodontics	2022, Elsevier, USA
A.T. Shah, S. Attique, M.A. Rehman, A.S. Khan, O. Goerke	Silica-based antibacterial coating for dental implants, In: Dental Implants Materials, Coatings Surface Modifications and Interfaces with Oral Tissues	(2020), ISBN 978-0-12-819586-4, Elsevier, USA, pp. 145-171
Y.K. AlMaimouni, M.A. Benrashed, N.I. Alyousef, A.T. Shah, Abdul Samad Khan	Bioactive glass coated dental implants, In: Dental Implants Materials, Coatings, Surface Modifications and Interfaces with Oral Tissues	(2020), ISBN 978-0-12-819586-4, Elsevier, USA, pp. 93-115
N.I. Alyousef, Y.K. AlMaimouni, M.A. Benrashed, A.S. Khan, S. Shahid	Effects of strontium substituted synthetic apatites for biomedical applications	Handbook of Ionic Substituted Hydroxyapatite, ISBN978-0-08-106, Elsevier, USA (2019)
S. Feroz and A.S. Khan	Fluoride Substituted hydroxyapatite	Handbook of Ionic Substituted Hydroxyapatite, ISBN978-0-08-106, Elsevier, USA (2019)
H. Gul, M. Khan, A.S. Khan	Bioceramics: types and clinical applications	Handbook of Ionic Substituted Hydroxyapatite, ISBN978-0-08-106, Elsevier, USA (2019)



A. Talal, S.K. Hamid, M. Khan, A.S. Khan	Structure of biological apatite bone and tooth	Handbook of Ionic Substituted Hydroxyapatite, ISBN978-0-08-106, Elsevier, USA (2019)
A.S. Khan, R.S. Khan, M. Khan, I.U. Rehman	Incorporation of nanoparticles in glass ionomer cements: Clinical applications, properties, and future perspectives, In: Nanobiomaterials in Clinical Dentistry	Elsevier, USA, 2019
A. Talal, H.M.O. Nasim and A.S. Khan	Enamel Etching and Bonding Agents: In Advanced Dental Biomaterials	Elsevier, UK, 2019
M.R. Syed, M. Khan, F. Sefat, Z. Khurshid, M.S. Zafar, A.S. Khan	Bioactive Glass and Glass Fiber Composite: Biomedical/Dental Applications. In: Biomedical, Therapeutic and Clinical Applications of Bioactive Glasses	Elsevier, USA, 2019
Z. Khurshid, S. Husain, H. Alotaibi, R. Rehman, M.S. Zafar, I. Farooq, A.S. Khan	Novel Techniques of Scaffold Fabrication For Bioactive Glasses In: Biomedical, Therapeutic and Clinical Applications of Bioactive Glasses	Elsevier, USA, 2019
Abdul Samad Khan, Maria Khan and Ihtesham Ur Rehman	Nanoparticles, Properties, and Applications in Glass Ionomer Cements”, In: Nanobiomaterials in Clinical Dentistry	Elsevier, USA, 2013
Rehman IU and Khan AS	Dental Regeneration”. In: “Electrospinning for Tissue Regeneration	Woodhead Publishing Limited, Cambridge, UK, 2011

### Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

Name of Investigator(s)	Title	Publisher	Date of Publication
Y. AlMaimouni, S. Hamid, A. Majeed, Shah, A.S. Khan	Interfacial Adhesion and Fluoride Release Analysis of Bioactive Endodontic Sealers	Journal of Dental Research, \ No. 97A: 0921: 2018	2018
N. Muhammad, K. Ilyas, A.S. Khan	Synthesis and in-vitro analysis of electrospun biopolymers for periodontal regenerations	Journal of Dental Research, \ No. 97A: 2194, 2018	2018
H. Khalid, N. Hussain, M. Khan, A.S. Khan	Synthesis and Characterization of Bioactive Dental Adhesive Material	Journal of Dental Research, \ No. 96A: 0749, 2017	2017
A. Khan, K. Ilyas, S. Qureshi, H. Khalid, Khan, M. Kaleem	Synthesis and in-vitro Evaluation of Fibrous Scaffold for Tooth Regeneration	Journal of Dental Research, \ 96A:0174, 2017	2017
H. Khalid, N. Hussain, A.S. Khan	Synthesis and characterization of novel in-situ grafted bioactive dental filler	Dental Materials: 2017: Vol. e42-e43	2017
H. Gul, S. Zahid, M. Kaleem, A.T. Shah, Khan	Evaluation of ions release and pH of fluoride-based bioactive glass	Dental Materials: 2017: Vol. e43	2017
H.M.O. Nasim, S. Ghafoor, A.T. Shah, Khan	Synthesis of phosphate based bioactive glasses	Dental Materials: 2017: Vol. e59	2017
H. Khalid, M.R. Syed, H. Iqbal, I.U. Rehman, A.S. Khan	Monomer leaching and degree of conversion of bioactive dental composites	Dental Materials: 2016: Vol. e61-e62	2016



A.S. Khan, L. Sidra, Z. Sarfraz, W. Mus	Synthesis of electrospun bioactive (nanotube based dental resin-based composites	Dental Materials: 2015: Vol. Supp 1: e1-e66	2015
H. Khalid, N. Hussain, A.S. Khan, H. Iq Sarfraz	Elution of monomers from commercial and newly synthesized dental comp	Journal of Dental Research (Spec Issue); 2015: 94(B): 28	2015
N. Muhammad, Z. Yaasir, B. Iqbal, A. I H. Khalid	Characterization and evaluation of mechanical properties of artificial t	Journal of Dental Research (Spec Issue); 2015: 94(B): 15	2015
A.S. Khan	Approach of Interdisciplinary Research Dental Materials	Journal of Dental Research (Spec Issue), 2014: 93(C): 0102	2014
Z. Yaasir, A.S. Khan	A Comparative Quantitative and Qualitative Analysis of Human Teeth	Journal of Dental Research (Spec Issue), 2014: 93(C): 6055	2014
H. Khalid, A.S. Khan	Synthesis and characterization of novel dental adhesives with enhanced antibacterial and mechanical prop	Journal of Dental Research (Spec Issue), 2014: 93(C): 023	2014
A.S. Khan, M.T. Azam, A.A. Chaudhry, Siddiqi, I.U. Rehman	Structural, Surface Characteristics and <i>in vitro</i> Bacterial Adhesion on Dental Composites	Journal of Dental Research (Spec Issue), 2013: 92 (A): 2305	2013
A. Khan, R.Nazir, A.A. Chaudhry, S.A. Siddiqi.	Synthesis and in-vitro Analysis of Bioactive Dental Filler Particles	Journal of Dental Research (Spec Issue), 2011; 90 (Spec. Iss B):	2011
M. Kaleem, A.S. Khan, M. Aslam	Effect of Beverages on viscoelastic properties of resin-based dental composites	Journal of Dental Research (Spec Issue), 2011; 90 (B): 105	2011
A.S. Khan, N.I. Khan, R. Nazir, R. Hussain, A.A. Chaudhry	A Novel technique to synthesize next generation bioactive dental fillers	Journal of Dental Research (Spec Issue). 2011; 90 (B): 151823	2011
B. Younas, A.Khan, M. Khan, A.A.Chaudhry	<i>In-situ</i> Structural and Thermal Analysis of Dental Restorative Materials	Journal of Dental Research (Spec Issue), 2011; 90 (B): 108	2011
D. Muzaffar, A. Afaq, A.S. Khan	Effect of Disinfecting Solutions On Thermal Dimensional Stability of Alginates	Journal of Dental Research (Spec Issue), 2011; 90 (B): 151916	2011
B. Younas, A.S. Khan, M.T. Azam, A. A	Infrared Spectroscopic Analysis of Thermal Structure and Dental Restorative Materials	Journal of Dental Research (Spec Issue), 2011; 90 (B): 151829	2011
M. Khan and A.S. Khan	Self-medication prevalence among patients in urban area of Pakistan	Journal of Dental Research (Spec Issue), 2011; 90 (B): 151904	2011
A.A. Chaudhry, A.S. Khan, N.I. Khan, B. Younas, M. Shuja, N. Ashraf	Microwave Assisted Synthesis of Low Substituted Bioactive Ceramics	Journal of Dental Research (Spec Issue), 2011; 90 (B): 151827	2011
A.S. Khan, R. Whiley, F.S.L. Wong, I.U. Rehman	An in-vitro bio-adhesion and biocompatibility analysis of novel bioactive composites	Journal of Dental Research (Spec Issue), 2009; 88 (B): 116	2009
A.S. Khan, I.J. McKay, F.S.L. Wong, I.U. Rehman	Synthesis and in-vitro analysis of a novel bioactive dental restorative composite	Journal of Dental Research (Spec Issue), 2008; 87 (C):0017	2008
A.S. Khan, S. Aamir, F.S.L. Wong, I.U. Rehman	Fluoride Release from Novel Bioactive Dental Restorative Composite	Journal of Dental Research (Spec Issue), 2008; 87 (B): 0245	2008
Z. Sheikh, N. Roohpour, I.U. Rehman, Khan	Effect of surface properties on protein adsorption of polyurethane membranes	Journal of Dental Research (Spec Issue), 2008; 87 (B): 2365	2008
A.S. Khan, N. Roohpour, J.A. Darr, I.U. Rehman, F.S.L. Wong	Synthesis and Characterisation of novel bioactive dental restorative composite	Journal of Dental Research (Spec Issue), 2007; 86 (B): 0150	2007
A.S. Khan, M.J. Phillips, K.E. Tanner, F Wong	Viscoelastic properties of Pre-impregnated Glassfibre vs. Filler-Particulate Composites	Journal of Dental Research (Spec Issue), 2006; 85 (C): 0503	2006



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	7 <sup>th</sup> annual Conference of Pak Association for Dental Research	24-25 October, 2021, Lahore, Pakistan	Keynote Speaker
2	96 <sup>th</sup> General Session & Exhibition of International Association for Dental Research	5-28 July 2018, London, United Kingdom	Poster Presentation
3	5 <sup>th</sup> Pak Association for Dental Research (IADR Pakistan Section) Conference	14-16 October 2018, Lahore, Pakistan	Invited Speaker/ Workshop Facilitator
4	Academy of Dental Materials Annual Meeting	5-7 October 2017, Nuremberg, Germany	Poster Presentation
5	6 <sup>th</sup> International Symposium on Biomedical Materials	14-16 December 2017, Lahore, Pakistan	Invited Speaker
6	4 <sup>th</sup> Pak Association for Dental Research (IADR Pakistan Section) Conference	6-8 December 2017, Lahore, Pakistan	Workshop Facilitator
7	95 <sup>th</sup> General Session & Exhibition of International Association for Dental Research	22-25 March, 2017, San Francisco, CA, USA	Oral Presentation
8	Academy of Dental Materials Annual Meeting	12-15 October, 2016, Chicago, USA	Poster Presentation
9	5 <sup>th</sup> International Symposium on Biomedical Materials	14-16 December 2016, Lahore, Pakistan	Invited Speaker
10	Academy of	7-10 October,	Poster



	Dental Materials Annual Meeting	2015, Maui, Hawaii, USA	Presentation
11	3 <sup>rd</sup> Pak Association for Dental Research (IADR Pakistan Section) Conference	4-6 September, 2015, Lahore, Pakistan	General Secretary Conference/ Oral Presentations
12	93 <sup>rd</sup> IADR General Session International Association for Dental Research	11-14 March, 2015, Boston MA, USA	Oral Presentation

Teaching Activities	
Undergraduate	5
Post-Graduate	1

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Clinical Rest. Dent. I	RESTO 404	Clinics
2	Pre-Clinical Rest. Dent. II	REST 305	Lectures/ Lab Training
3	Comprehensive Care Clinic	CCD 513 – CCD 601	Clinics
4	Dental Biomaterials Science	BMAT 203	Lectures
5	Restorative dentistry topics –	REST 508	Lectures
6	Advanced Dental Biomaterials	BMAT 808	Lectures

#### CURRENT TEACHING RESPONSIBILITIES

Name of Institution, City, State	Course Title	Discipline and Level of Students	Total Contact hour per Year	
			Didactic	Clinic/ Laboratory
College of Dentistry, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia	Clinical Restorative Dentistry I	Undergraduate		Clinical
	Pre-Clinical Rest. Der			Laboratory
	Comprehensive Care			Clinical
	Dental Biomaterials Science			Lecture
	Restorative dentistry topics –			Lecture
	Advanced Dental Biomaterials	Postgraduate		Lecture



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)
International Association for Dental Research	Member	2006	To Date
Pak Association for Dental Research (IADR Pakis Section)	President	2021	2022
International Association for Dental Research Section Division	Member	2019	To Date
Academy of Dental Materials	Member	2013	To Date

Editorial Commitments	
Assistant Editor	The Journal of Pakistan Dental Association
Guest Editor	Frontiers in Materials
Advisory Board	Dental and Medical Problems
Guest Editor	Bio-interactions and Bio-compatibility, Frontiers in Biomaterials Science
Advisory Board	Foundation University Journal of Dentistry
Guest Editor	Polymers
Advisory Board	Journal of University College of Medicine and Dentistry

#### Volunteer Work

#	From	To	Type of Volunteer	Organization
1	6/1/2021		To Heal the Pain Campaign, Al Khobar Prison,	
2	3/6/2021		Oral Health Awareness	
3	19/11/2021		Diabetic Campaign	

#### Honors and Awards

2020	IAU President Letter of Appreciation	Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia
2020	US Patent 16/164,333.	US Patent Office
2019	Best Researcher of the Year (2018-19)	College of Dentistry, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia
2012-2017	Research Productivity Award	COMSATS Institute of Information Technology, Pakistan
2015	IADR/Unilever Hatton Divisional Award	International Association for Dental Research
2011	Dentsply-Charles T Kean Memorial	25th IADR-SEA Division Annual Scientific





	Award	Meeting, Singapore
2005	Best MSc. Student of Dental/Biomaterial, Department of Materials	Queen Mary University of London", Industrial Prize, Advanced Healthcare Limited, UK
2012-16	Focal Person for the Subject of Dental Materials	Higher Education Commission Pakistan
2016	Member Dental Education Committee	Pakistan Medical and Dental Council
2014-2016	Member Board of Studies	Faculty of Dentistry, University of Lahore, Pakistan