

<b>Name</b>	Dr. Muhammad Zeeshan Ul Haque
<b>Personal</b>	HEC approved Supervisor PEC Program Evaluator Biomedical Engineering Dean Faculty of Engineering Chairperson and Professor Department of Biomedical Engineering Salim Habib University (Formerly Barrett Hodgson University) Mob: +92-333-0279121
<b>Education</b>	<ul style="list-style-type: none"> <li>• 2009 – 2014, Doctor of Philosophy in Bioengineering, The University of Auckland, Auckland, New Zealand</li> <li>• 2004 – 2005, Master of Science in Medical Electronics and Physics, Queen Mary and Westfield College, University of London, London, United Kingdom</li> <li>• 1999 – 2003, Bachelor of Science in Biomedical Engineering (Gold Medalist), Sir Syed University of Engineering and Technology, Karachi, Pakistan</li> </ul>
<b>Experience</b>	<p><b><u>Administrative and Academic Positions:</u></b></p> <ul style="list-style-type: none"> <li>• Oct 2018 – Present, Dean, Faculty of Engineering, Chairperson and Professor, Department of Biomedical Engineering, Salim Habib University (Formerly Barrett Hodgson University), Karachi</li> <li>• Nov 2017 – Oct 2018, Acting Chairman and Associate professor, Biomedical Engineering Department, Sir Syed University of Engineering and Technology Karachi</li> <li>• Jan 2017 – Nov 2017, Interim Dean, Head and Associate Professor, Department of Biomedical Engineering, Barrett Hodgson University, Karachi</li> <li>• Jan 2016 – Dec 2016, Additional Director Research and Planning Development, Office of Research, Innovation and Commercialization (ORIC), Sir Syed University of Engineering and Technology, Karachi</li> <li>• Dec 2015 – Dec 2016, Associate Chairman, Biomedical Engineering Department, Sir Syed University of Engineering and Technology, Karachi</li> <li>• Aug 2014 – Dec 2016, Associate Professor, Biomedical Engineering Department, Sir Syed University of Engineering and Technology, Karachi</li> <li>• Sep 2009 – Apr 2014, Doctoral Researcher, Auckland Bioengineering Institute, The University of Auckland, Auckland</li> <li>• Sep 2007 – June 2008, Principal Investigator, Biomedical Engineering Department, Sir Syed University of Engineering Technology, Karachi</li> <li>• Oct 2005 – Aug 2014, Assistant Professor, Biomedical Engineering Department, Sir Syed University of Engineering and Technology, Karachi</li> <li>• July 2003 – Oct 2005, Junior Lecturer, Biomedical Engineering Department, Sir Syed University of Engineering and Technology, Karachi</li> </ul> <p><b><u>Visiting Academic Positions:</u></b></p> <ul style="list-style-type: none"> <li>• Jan 2015 – Dec 2015, Visiting Associate Professor, Department of Biomedical Engineering, NED University of Engineering and Technology, Karachi</li> <li>• Feb 2014 – July 2014, Lecturer, Engineering Department, Queens Academy Group, Auckland</li> <li>• Jul 2013 – July 2014, Graduate Teaching Assistant, Electrical and Computer Engineering Department, The University of Auckland, Auckland</li> <li>• Mar 2010 – July 2014, Teaching Assistant, Engineering Science Department, The University of Auckland, Auckland</li> </ul>

<p><b>Honor and Awards</b></p>	<ul style="list-style-type: none"> <li>• Co-convenor National Curriculum Review committee, Higher Education Commission (HEC), 2017</li> <li>• Expert Biomedical Engineering, Pakistan Engineering Council, Islamabad, 2017-presents</li> <li>• HEC approved PhD supervisor, Higher Education Commission (HEC), Islamabad, 2015</li> <li>• Travel grant, Physiological Society of New Zealand, 2013</li> <li>• PhD scholarship, Auckland Bioengineering Institute, 2009 – 2013</li> <li>• Research project grant award, Sir Syed University of Engineering and Technology, 2007 – 2008</li> <li>• Expert Biomedical Engineer, selection board panel University of Karachi, 2008</li> <li>• Member, best interview committee for undergraduate admission, 2007</li> <li>• MSc scholarship award, Queen Mary, University of London, 2004 – 2005</li> <li>• Star Man 2003 and Star Laureate 2003 award, South Asia Publication, 2003</li> <li>• BS gold medal and cash award, Sir Syed University of Engineering and Technology, 2003</li> <li>• BS gold medal &amp; cash award, Habib Bank Limited, 2003</li> <li>• BS merit scholarship award, Sir Syed University of Engineering &amp; Technology, 2000 – 2001</li> </ul>
<p><b>Memberships</b></p>	<p><b><u>Branch Counselor</u></b></p> <ul style="list-style-type: none"> <li>• IEEE Student Branch, Sir Syed University of Engineering and Technology, Karachi, May 2016 – Dec 2016,</li> </ul> <p><b><u>Professional membership</u></b></p> <ul style="list-style-type: none"> <li>• International Association of Engineers (IAENG), 2017 – Present</li> <li>• Institute of Electrical and Electronics Engineers USA (IEEEUSA), 2013, 2015</li> <li>• Pakistan Engineering Council (PEC), 2003 – Present</li> <li>• Institute of Engineers Pakistan (IEP), 2004 – Present</li> <li>• Institute of Electrical and Electronics Engineers Pakistan (IEEEEP), 2005 – Present</li> <li>• Institute of Professional Engineers New Zealand (IPENZ), 2013 – 2014</li> <li>• Physiological Society of New Zealand (PSNZ), 2013 – 2014</li> <li>• Engineers without Borders New Zealand (EWBNZ), 2012 – 2013</li> <li>• Institute of Physics &amp; Engineering in Medicine (IPEM, UK), 2004 – 2005</li> </ul>
<p><b>Service Activity</b></p>	<p style="text-align: center;"><b><u>Member of Scientific/Advisory Boards</u></b></p> <p><b><u>Barrett Hodgson University, Karachi</u></b></p> <ul style="list-style-type: none"> <li>• Member, Academic Council and Board of Advanced Studies and Research, 2019 – present</li> <li>• Chair, Board of Faculty of Engineering, Board of Studies of Department of Biomedical Engineering and Industrial Advisory Board, 2018 – present</li> <li>• Member, Board of Faculty of Science, and Information Technology, 2017 - present</li> <li>• Member, Board of Faculty of Management Sciences, 2017-2019</li> <li>• Member, Board of Studies of Department of Biomedical Engineering, 2016 - 2017</li> </ul> <p><b><u>NED University of Engineering and Technology, Karachi</u></b></p> <ul style="list-style-type: none"> <li>• Expert, Board of Studies of Department of Biomedical Engineering, 2019-Present</li> <li>• Member, Department of Biomedical Engineering Industrial Advisory Board, 2019 - Present</li> </ul> <p><b><u>Ziauddin University, Karachi</u></b></p> <ul style="list-style-type: none"> <li>• Member, Board of Studies of Ziauddin College of Biomedical Engineering 2015 – Present</li> </ul>

Sir Syed University of Engineering & Technology, Karachi

- Members Academic Council and Board of Faculty of Engineering, 2007 – 2009, 2017 – 2018
- Chair, Board of Studies and Industrial Advisory Board of Biomedical Engineering Department, 2017 – 2018
- Member, Board of Studies of Biomedical Engineering Department, 2005-2009, 2014-2016

**Member of Research and Coordination Committees**

- Member, University Research Committee, Barrett Hodgson University, 2019-Present
- Chair, Ethics Review Committee, Barrett Hodgson University, 2017
- Member, industry coordination and internship committees, Sir Syed University of Engineering and Technology, Karachi, 2006-2008

**Member of Conference Committees/Project Exhibitions**

- Member, Evaluation Committee of Projects for 5<sup>th</sup> All Pakistan DUHS – DICE Health Innovation Exhibition 2019, Oct, 2019, Karachi
- Member, Program Committee of International Conference on Key Enabling Technologies, Turkey, April 2019
- Member, Program Committee of 21<sup>st</sup> IEEE International Multi-Topic Conference, Karachi, November 2018
- Member, Evaluation Committee of Projects for 4<sup>th</sup> All Pakistan DUHS – DICE Health Innovation Exhibition 2018, Oct, 2018, Karachi
- Member, Program Committee of 3<sup>rd</sup> Global Conference on Wireless and Optical Communications 2017, Spain, Sep 2018
- Member, Program Committee of 3<sup>rd</sup> International Conference on Recent Trends in Computer Science and Electronics 2008, Thailand, Jan 2018
- Member, Evaluation Committee of Projects for 3<sup>rd</sup> All Pakistan DUHS – DICE Health Innovation Exhibition 2017, Dec, 2017, Karachi.
- Member, Program Committee of 2<sup>nd</sup> Global Conference on Wireless and Optical Communications 2017, Spain, Sep 2017
- Conference session Chair, 30<sup>th</sup> IEEEEP Multi-Topic International Symposium 2015, Karachi, Pakistan, Mar 2015

**Service as Reviewer**

- Photodermatology, Photoimmunology & Photomedicine, 2020
- International Conference on Key Enabling Technologies, Turkey, April 2019
- 21<sup>st</sup> IEEE International Multi-Topic Conference, Karachi, November 2018
- 3<sup>rd</sup> International Conference on Recent Trends in Computer Science and Electronics 2018, Thailand
- 2<sup>nd</sup> Global Conference on Wireless and Optical Communications 2017, Spain Sep 2017
- Review of Scientific Instruments 2017
- Sir Syed University Research Journal of Engineering and Technology, ISSN: 1997-0641, 2014
- 30<sup>th</sup> IEEEEP Multi-Topic International Symposium 2015, Karachi, Pakistan Mar 2015

**Service as an External Examiner/Assessor**

- External GEC member, Biomedical Engineering Department, Sir Syed University of Engineering and Technology, 2020-Present

	<ul style="list-style-type: none"> <li>• PhD Biomedical Engineering Admission test, Sir Syed University of Engineering and Technology, 2019-Present</li> <li>• MS Biomedical Engineering thesis, NED University of Engineering and Technology, Karachi, 2019-Present</li> <li>• HEC SAR Assessor, PhD and ME Biomedical Engineering program, 2018- Present</li> <li>• MS Biomedical Engineering Thesis Initial/final seminars, Mehran University of Engineering &amp; technology, Jamshoro, 2018</li> <li>• MS Biomedical Engineering thesis, Riphah international University, Islamabad, 2017-18</li> <li>• SAR Assessor, B.E Biomedical Engineering Program, Ziauddin University, 2015</li> </ul>
<p><b>Brief Statement of Research Interest</b></p>	<ul style="list-style-type: none"> <li>• Development of the multiscale computational model which emphasis on applying the experimental recordings, signal processing and mathematical modeling in the field of neurophysiology</li> <li>• Interested in the development of computational physiological model which can be used clinically to diagnose and treatment of different types of diseases such that various neurodegenerative disorders</li> <li>• My plans for prospective research are to continue and combine the present research areas i.e., Biomedical Instrumentation and computational modeling of the physiological system.</li> </ul>
<p><b>Publications (Selected)</b></p>	<ul style="list-style-type: none"> <li>• M. Z. Ul Haque, P. Du, and Leo K. Cheng, “A combined unmyelinated and myelinated functional dorsal nerve model of the human foot” in NED University Journal of Research (<i>in review</i>)</li> <li>• F. Muhammad, N. Shahid, S. M. Omair and M. Z. Ul Haque, “Integrated Wristband using an Inertial Measurement Unit and Electromyography Sensors to Control Robotic Car”, in Journal of Information Communication Technologies and Robotic Applications, 10 (2): 36-41, 2019.</li> <li>• S. R. A. Jafri, T. Hamid, R. Mahmood, M. A. Aslam, T. Rafi, M. Z. Ul Haque and M. W. Munir, “Wireless Brain Computer Interface for Smart Home and Medical System” in Wireless Personal Communication, Vol. 106, PP 2163–2177, 2019</li> <li>• S. R. A. Jafri, N. Shahid, M. F. Shamim, M. A. Aslam, M. W. Munir, and M. Z. Ul Haque, “Wireless EEG Based Blood Pressure Monitoring”, in <i>International Journal of Engineering and Technology (UAE)</i>, Vol. 7, No. 4.38, PP 904-907, 2018</li> <li>• S. M. Omair, M. F. Shamim, A. Desai, N. Shahid, G. Munir, and M. Z. Ul Haque, “Digital and Analog Body Mass Index Calculating Device: A comparative study”, in <i>Indian Journal of Science and Technology</i> vol. 10, No. 45, PP 1-5, Dec 2017</li> <li>• M. Z. Ul Haque, P. Du, and Leo K. Cheng, “A Mathematical Framework Simulating Nerve Fiber Physiology” in <i>International Journal of Advanced and Applied Sciences</i>, Vol. 4, No. 10, PP 124-129, Oct 2017</li> <li>• N. Sheikh, F. Muhammad, N. Shahid, M. F. Shamim, S. M. Omair, and M. Z. Ul Haque, “Finger Movement Identification Using EMG Signals of the Forearm” in <i>Journal of Biomedical Engineering and Medical Imaging</i>, Vol. 4, No. 4, PP. 12 – 19, Aug 2017</li> <li>• M. Z. Ul Haque, P. Du, and Leo K. Cheng, “Geometrical interruption in the nerve geometrical model of the human foot to simulate small fiber neuropathy” in <i>Indian Journal of Science and Technology</i>, Vol. 10, No. 29, PP 1-6, Aug 2017</li> <li>• M. W. Munir, N. Shahid, S. M. Omair, G. Munir, and M. Z. Ul Haque, "Comparative investigation of remote tracking devices for aging care," <i>International Journal of Information Technology</i>, PP 1-6, 2017/08/14 2017</li> <li>• N. Shahid, S. M. Omair, M. F. Shamim, M. W. Munir, and M. Z. Ul Haque, “Comparative Analysis and Accuracy of a Devised Automated Non Invasive Blood Pressure Monitor Based on Oscillometric Method” in <i>Indian Journal of Science and Technology</i>, Vol. 10, No. 3, PP 1-6, Jan 2017</li> <li>• M. W. Munir, S. M. Omair and M. Z. Ul Haque, “An android based application for determine a specialized hospital nearest to patient's location” in <i>International Journal</i></li> </ul>

	<p><i>of Computer Applications</i>, Vol. 118 S. No. 9, PP 43-46, May 2015</p> <ul style="list-style-type: none"> <li>• S. M. Omair, N. Shahid, M. A. Haleem, M. Azam, M. W. Munir, and M. Z. Ul Haque, “Fluid dispenser prototype: A time-based approach, in <i>Sir Syed University Research Journal of Engineering and Technology</i>, Vol. 4, S. No. 1, 2014</li> <li>• M. Z. Ul Haque, P. Du, L. K. Cheng, and M. D. Jacobs, “An anatomically realistic geometrical model of the intra-epidermal nerves in the human foot” in <i>IFMBE Proceedings</i> Vol. 43, PP. 368-371, 2014</li> <li>• M. Z. Ul Haque, P. Du, L. K. Cheng, and M. D. Jacobs, “An anatomically based model of the nerves in the human foot” in the <i>International Journal of Medical, Health, Biomedical, Bioengineering and Pharmaceutical Engineering</i>, Vol. No. 6, S. No. 9, PP 433-438, 2012</li> <li>• J. W. Fernandez, M. Z. Ul Haque, P. Hunter, and K. Mithraratne “Mechanics of the foot part 1: A continuum framework for evaluating soft tissue stiffening in the pathologic foot " in <i>International Journal for Numerical Methods in Biomedical Engineering</i>, Vol. No. 28, No. 10, PP. 1056-1070, 2012</li> </ul>
<b>Research Grants and Contracts</b>	<ul style="list-style-type: none"> <li>• Sep 2007 – June 2008, Computerized blood pressuring monitoring systems, Sir Syed University of Engineering Technology, Karachi Status: Completed</li> </ul>
<b>Other Research or Creative Accomplishments</b>	<ul style="list-style-type: none"> <li>• N. A</li> </ul>
<b>Selected Professional Presentations</b>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup> International Conference on Biomedical Engineering and Medical Sciences, Sir Syed University of Engineering and Technology, Karachi, Pakistan, 2017</li> <li>• 1<sup>st</sup> Invention to Innovation Summit, the University of Karachi, Karachi, Pakistan, 2016</li> <li>• PhD Exit Seminar, Auckland Bioengineering Institute, the University of Auckland, Auckland, New Zealand, 2014</li> <li>• 15<sup>th</sup> International Conference on Biomedical Engineering, Singapore, 2013</li> <li>• Medical Science Congress, Queenstown, New Zealand, 2013, 2012</li> <li>• Exposure Postgraduate Research Exposition, the University of Auckland, Auckland, New Zealand, 2012</li> <li>• International conference on Medical Physics and Biomedical Engineering, Singapore, 2012</li> <li>• Friday Forum of Auckland Bioengineering Institute, the University of Auckland, Auckland, New Zealand, 2011, 2010</li> </ul>