



# Curriculum Vitae

## • **PERSONAL INFORMATION:**

NAME	<b>Prof. Dr. RAJA RIZWAN HUSSAIN</b>
QUALIFICATION	PhD IN CIVIL ENGINEERING (University of Tokyo – Ranked among Top 20 in the World and Top 10 in Civil Engineering)
AGE	36 YEARS
PHONE	+966-590011078
LANGUAGES	English, Urdu, Arabic, Japanese, Hindi, Punjabi
MAILING ADDRESS	Associate Professor, CoE-CRT, Civil Engineering Department, PO Box: 800, College of Engineering, King Saud University, 11421, Riyadh, Saudi Arabia.
E-MAIL ADDRESSES	<a href="mailto:raja386@hotmail.com">raja386@hotmail.com</a>
HOMEPAGE/WEBSITE	<a href="http://faculty.ksu.edu.sa/raja">http://faculty.ksu.edu.sa/raja</a> ; <a href="http://fac.ksu.edu.sa/rhussain">http://fac.ksu.edu.sa/rhussain</a>
SOCIAL NETWORK	<a href="http://www.facebook.com/raja.rizwan.hussain">http://www.facebook.com/raja.rizwan.hussain</a>
RESEARCH INTERESTS	Steel Reinforced Concrete Technology - Materials & Structures, especially Corrosion
DESIGNATIONS	Professor, Scientist, Academician, Designer, Consultant, Project Manager, Inventor & Distinguished Scholar

## • **ACADEMIC INFORMATION:**

Ph.D CIVIL ENGINEERING	UNIVERSITY OF TOKYO (2006-2008), ON SCHOLARSHIP FROM ADB-JAPAN. (Obtained degree in a record short period of just two years from a university ranked among TOP 20 in the world and TOP 10 in Civil Engineering)
M.Sc. CONCRETE ENGINEERING	UNIVERSITY OF TOKYO, JAPAN (2004-2006) (Best Research Thesis Award, Medal and Prize from The University)
B.Sc. CIVIL ENGINEERING	University of Engineering & Technology (U.E.T), Lahore (1996-2000) (Remained in Top 5 university positions)
F.Sc. (Pre-Engineering)	Forman Christian College, Lahore (1993-1995) (Obtained 4 <sup>th</sup> position in college with 83% marks and A grade)
MATRICULATION (Science Group)	Model High School, Lahore (1988-1993) (Obtained 1 <sup>st</sup> position in school with 86% marks and A+ grade)

## • **SUMMARY OF ACHIEVEMENTS:**

Total Publications (157)  
 ISI Journal Papers (49)  
 International Conference Proceeding Papers (31)  
 International US & WO Patents (5)  
 Books, editorials, expos, invention shows, technical reports, monographs, other journal papers etc. (54)  
 R&D Government and Private Funded Research Project Grants (18)  
 Journal Editorial Board Positions (71)  
 Organizational, Scientific & Technical Committee Works for Conferences, Seminars and Symposiums (62)  
 Societies, Organizations, Councils & Committees (26)  
 Subjects taught to under graduate, M.Sc. and Ph.D students (14)  
 Medals, Awards, Prizes, Distinctions and Achievements (76)  
 Countries Visited (47)

• **Medals, Awards, Prizes, Achievements & Distinctions:**

2015:

- Recommended Expert & Assessor by Elsevier Editorial Team for Currency Timestamping of Articles related to Corrosion.
- Invited by Radio-Riyadh, FM radio frequency: 97.0, for a discussion and my expert opinion in their program which went on air Live on 11th January from 8:00-09:00 pm.
- Re-Included in Marquis Who's Who in the World, USA.
- Member board for International Journal of Geomate, Japan.

2014:

- Winner of Al Kasabi Award for Best Research Project of the year in the whole Kingdom of Saudi Arabia and 50,000SR (USD 13,500 approx.) cash prize.
- Nominated for Vice President of Saudi Section ASCE (American Society of Civil Engineers), USA.
- External Examiner, M.Sc. and Ph.D dissertations, University of Malaya, Malaysia.
- Invited to write an Editorial for Journal of Advanced Chemical Engineering, JCEE, OMICS, USA.
- Invited frequently by Radio-Riyadh, FM radio frequency: 97.0, for a discussion and my expert opinion in their programs which went on air Live on 13<sup>th</sup> July, 2014 from 10:30-11:30 pm, and on 14<sup>th</sup> Sep., 21<sup>st</sup> Sep., 19<sup>th</sup> Oct. and 23<sup>rd</sup> Nov., 2014 from 8:00 pm to 9:00 pm.
- Invited Consultant for the International Project "Sustainable Rural Development in the Refugee-Affected and Hosting Areas of Pakistan" programme (RAHA) (Contract n°260022)", SSIL, FWC Beneficiaries 2013, Lot 12 (Humanitarian Aid, Crisis Management and Post-Crisis assistance) EuropeAid/132633/C/SER.
- Invited for a personal interview by Radio Riyadh (FM radio frequency: 97.0) regarding my life, background, education, experiences, exceptional achievements etc. under the program "lets connect".
- Invited editor for ebook series volumes, Bentham Science Book Publishers.
- Invited to write an Editorial for Journal of Civil & Environmental Engineering, JCEE, OMICS, USA.
- Hands on experience on a huge number of laboratory equipments used in civil engineering laboratory including daily use instruments as well as state of the art equipment such as GECOR, GAMRY, EIS, Potentiostat, Galvanostat, SEM, XRD, XRF, Raman, Half-Cell, Corrosion Current and Potential, Concrete Resistivity meter, multi purpose data loggers etc.

2013:

- Received Gold Medal at the 41<sup>st</sup> International Exhibition of Inventions, Geneva, Switzerland which is one of the largest invention shows in the world.
- 3<sup>rd</sup> position in all the 17 research chairs, 3 research centers and 2 research institutes, totalling 22 research bodies of the college of engineering, KSU. (personal communication)
- Invited and Interviewed regarding my achievements and successes by John Wiley and Sons, Inc., England in the Take Note and Promote Series published online on 08th July.
- Invited and Judged the young researcher best paper competition on Civil, Structural and Environmental Engineering Computing, CC2013, Civil-Comp Limited, U.K.
- Invited and Interviewed again by Wiley publishers, England which was published online on 24th July regarding me being a successful young research scientist in the construction industry, my editorial board and publication experiences, my passion for traveling, my jobs/positions held over the years, including both private and public sector positions etc. Weblink: <http://writeforwiley.com/2013/07/24/interview-dr-raja-rizwan-hussain/>
- Re-Included in Marquis Who's Who in the World, USA.
- Invited Editor for Research SignPost, book publishers inc., India.
- Invited to write an Editorial for Journal of Civil & Environmental Engineering, JCEE, OMICS, USA.
- Editor, Athens Institute for Education and Research, ATINER, Athens, Greece.
- Invited by Radio-Riyadh, FM radio frequency: 97.0, for a discussion on the topic "infrastructure development and economic growth" which went on air Live on 22<sup>nd</sup> December from 08:00-09:00 pm.
- Invited as Foreign Collaborator for the Research Project, Developing High Performance Lightweight Concrete using nano and Local Waste of Malaysia" at the University of Malaya, Malaysia.

2012:

- Official reviewer of XJT Liverpool University for their research grants and proposals.
- Invited by Radio-Riyadh, fm radio frequency: 97.0, for a discussion and my expert opinion on the topic of “recent technology & scientific developments in the world” which went on air Live on 17<sup>th</sup> December from 08:30-09:30 pm and again in the repeat telecast of recording next day morning 08:30-09:30 am.
- Invited External Examiner for PhD Thesis Dissertation by the University of Auckland.
- Invited by Riyadh Radio (FM radio frequency: 97.0) for a talk show and my expert opinion on “research and research centres” which went on air Live on 1<sup>st</sup> October from 08:30-09:30 pm and again in the repeat telecast of recording next day morning 08:30-09:30 am.
- Invited for a personal interview by Radio Riyadh (FM radio frequency: 97.0) regarding my life, education, achievements etc. which went on air Live on 15<sup>th</sup> October from 08:30-09:30 pm in the night and repeat telecast of my interview recording on 16<sup>th</sup> October from 08:30-09:30 am in the morning .
- Included in Education and Development Committee of WPEP, Canada.
- Sir Issac Newton Scientific Award by American Biographical Institute, Inc. USA.
- Nominated for Great Minds of the 21<sup>st</sup> Century by American Biographical Institute (ABI), Inc.
- 2<sup>nd</sup> position in all the 22 research bodies (17 research chairs, 3 research centers and 2 research institutes) of the college of engineering, KSU. (personal communication)
- Received letter of appreciation in acknowledgement of my achievements from the Dean of the College of Engineering at King Saud University.
- Received Silver Medal for computation of dispersed individual activation energies and development of activation energy model in 11<sup>th</sup> MTE Invention and Innovation Awards at Kuala Lumpur, Malaysia.
- Re-Included in Marquis Who’s Who Publications 2012 edition, USA.
- Received Silver Medal for technique of preventing macro-cell corrosion in the simulated reinforced concrete patch at 11<sup>th</sup> MTE Invention and Innovation Awards at Kuala Lumpur, Malaysia.
- Distinguished Research and Publication Quality Award in the consecutive four years of service (2009, 2010, 2011 & 2012) from DSR, King Saud University, KSA.

2011:

- Excellent research award for the year 2010-2011 with 1<sup>st</sup> position in the entire college of engineering, KSU including electrical, civil, mechanical, chemical, petroleum and gas, industrial engineering departments as well as all the research centers, institutes and research chairs.
- Included in Top 100 Engineers for the year 2011 by IBC, England.
- Received 21<sup>st</sup> Century Award for Achievement.
- Nominated as International Educator of the Year.
- Included in Top 200 Intellectuals of the Century by IBC, U.K.
- Appointed as Project Co-ordinator for the Center of Excellence for Concrete Research & Testing.
- 2010-2011: Included in Who’s Who in the World 2010 & 2011 edition, USA.
- 2009: Best journal paper award for the last four years (2005-2009) from SSMS, Tokyo, Japan.
- 2008: Open offer of appointment from Higher Education Commission (H.E.C) NUST Branch, Govt. of Pakistan for appointment as Asst. Professor with BPS-19 special pay scale.
- 2006-2008: Appeared in several T.V programs (interviews, talk shows, live performances, reality TV, cultural shows, events, trainings etc.) broadcasted on NHK T.V National Channel of Tokyo, BS2 and BS hi Vision TV channels in Japan under the series name of Cool Japan.
- 2006-2008: Obtained PhD degree in a record short time period of just two years from the University of Tokyo.
- 2007: USIRS Award from the University of Sydney international research scholarship, Australia.
- 2006: Extended the ADB scholarship from Master course to PhD course which is very rare and highly competitive as ADB scholarship is primarily meant for Master course only.
- 2006: Obtained Medal and Prize for outstanding best research thesis in Master course from the University of Tokyo.

- 2004-2006: Passed all the course work of Master Degree from The University of Tokyo with all 'A' grades throughout the studies and obtained certification for the same.
- 2004: ADB (Asian Development Bank)-University of Tokyo scholarship for M.Sc./Ph.D holder, 2004-2006.
- 2004: Received AIT (Asian Institute of Technology) Bangkok, M.Sc./Ph.D Fellow ship.
- 2004: Successfully completed public service commission and became Asst. Director / SDO (Sub divisional Officer) in Ministry of C&W Department, Government of Pakistan (Communication and works Department) Buildings and Roads Division.
- 2002-2004: Got promoted to asst. Professor at University of Engineering and Technology (U.E.T), Lahore (best engineering university of Pakistan) within less than 1.5 years of total experience which is a record.
- 2002: Received invitation letter from the chairman, Civil Engineering Department, University of Engineering & Technology (U.E.T), Lahore to join the department as a lecturer.
- 2000-2002: Successfully designed and executed several RC high rise building projects in competition to much more senior and reputed structural designers and finally developed a national fame in the country (Received several experience certificates and letters of appreciation for the same).
- 1993-2001: Marshall Arts expert and former member of Shotokan Judo & Karate Centre, Lahore, Pakistan.
- 1999-2000: Participated in survey camp from Govt. Of Pakistan-U.E.T collaboration & obtained certificate of excellent performance.
- 1996-2000: Remained in top five university positions & obtained certification for the same.
- 1983-1995: Always remained on 1<sup>st</sup> position in every class until high school/college and obtained certification for the same.

### • **International Journal Editorial Boards:**

2015:

- Editorial Board Member, Construction Engineering (CE) Journal, ISSN Online: 2329-3373, ISSN Print: 2329-3365, 6815 E Manor Drive, Terre Haute, IN 47802, USA.
- Editorial Manager Reviewer, Environment, Development and Sustainability, Springer.

2014:

- Online Manuscript Managing & Assigning Editor, Cogent Engineering Journal, UK.
- Editorial Board Member, Corrosion Engineering section, Journal of Advanced Chemical Engineering, OMICS Publishing Group, USA.
- Editorial Board Member, Journal of Materials Science and Chemical Engineering, Scientific Research Publishing Inc., USA.
- Editorial Board Member (EBM) for Evolving Trends in Engineering & Technology (E-TET), India, Impact Factor: 4.313.
- Co-Editor for a publication volume on Architectural Construction Materials & Building Technologies, ATINER, Athense, Greece.
- Manuscript Assessing Editor & Member of Editorial Advisory Panel, Construction Materials Journal, Institute of Civil Engineers (ICE), U.K.
- Board Member, Journal of Civil Engineering and Science (JCES), The World Academic Publishing Co., LTD.
- Journal of Control Science and Engineering, NY, USA.
- Associate Editor, Basic Research Journal of Engineering Innovation (BRJENG).
- Honorary Editorial Advisory Board Member, Scientia Research Library, USA.
- Editor, Journal of Physical Science and Engineering, Pencil Academic Press Publishers.
- Editorial Board Member, Current Advances in Civil Engineering CACE, American V-King Scientific Publishing, New York, USA.

- Member of EIC for Innovations in Corrosion and Materials Science Journal, Bentham Science Publishers.
- Editorial Member, Global Scholastic Research Journal, Asian Academic Research Associates, India.
- Editorial Board Member, IRJPEH, Journal Issues Publishers.
- Board Member, Global Educational Research Journal.
- Editorial Board Member, Zeal Scienza, Secunderabad, India.
- Member of Editorial Board, Cogent Engineering, Taylor & Francis Group, UK.

2013:

- Editor-in-Chief, American Journal of Engineering and Construction Technology, USA.
- Member of Editorial Board, Computers and Concrete, An International Journal (CAC), Techno Press, ISI Impact Factor: 1.015.
- Editorial Board Member for Structural Engineering and Mechanics, An International Journal (SEM), Korea, ISI Impact Factor: 0.863.
- Editorial Board, Scientific Research and Impact (SRI), ISSN 2315-5396, Science Park Services Inc.
- Editorial Manager, online submission and peer review tracking system for Journal of Civil & Environmental Engineering, JCEE, OMICS, USA.
- Member of Editorial Board, Journal of Civil Engineering and Architecture, USA (ISSN: 1934-7359)
- Editor-in-Chief, Frontiers in Geoscience (FG), American V-King Scientific Publishing, LTD, NY, USA.
- Co-Editor, GSTF Journal of Engineering Technology (JET) Forum, Singapore.
- Editorial Board, International Journal of Interdisciplinary Current Researches, India.
- Member of Editorial Board for Applied Scientific Letters, Herbert Publications, U.K.
- Member of Editorial Board, Petrotex Publication Group, USA.
- Editor, ISSJ publishing house, safety science.
- Editorial Board Member for Advances in Concrete Construction (ACC), An International Journal, Korea, ISSN:2287-5301(Print) ISSN:2287-531X(Online).
- Member of Editorial Board, Journal of Scientific Research and Reviews (JSRR), ISSN 2277 0690.
- Editorial Board, AOCSR Research Journal of Chemical Sciences, India.
- Editorial Board Member, Journal of Educational Research, Wudpecker Publishers.
- Editor-in-Chief, Advances in Geological and Geophysical Engineering Journal, AGGE, USA.
- Editor, News in Engineering (NiE), Civil Engineering section, sci-pub, Thomson Ltd., Slovakia.
- Member Editorial Board for Research Journal in Chemical Sciences.
- Editorial Board Member, Advancement and Development in Mathematical Sciences.
- Member of Editorial Board, Advancements and Developments in Applied Mathematics.
- Editor, Journal of Advances in Chemistry, Impact Factor 0.71.

2012:

- Editor Member of Current Advances in Civil Engineering, USA.
- Editorial Board Member for International Journal of Nano Science and Technology, USA.
- Associate Editor for the African Journal of Engineering Research (AJER).
- Invited Editorial Board Member of International Journal of Engineering and Technology Research (IJEATR), New York, USA.
- Editorial Board Member by appointment for Internatioanl Journal of Engineering & Technology, Germany.
- International Editor of IJAS Journal, USA.

- Invited to be Editor-in-Chief of IJRS Journal, ISI Impact Factor: 1.17, Taylor & Francis, U.K.
- Editorial board member of Open Journal of Civil Engineering, USA.
- Editorial Board member of Open Journal of Earthquake Engineering, SCIRP, USA.
- Guest Editor for Applied Mathematics Journal, USA Special Issue on “Numerical Analysis”
- Member of Editorial Board, Recent Patents on Engineering, USA.
- Editorial Board member of Engineering, Technology & Applied Science Research Journal (ETASR), Greece, Scientific Journal Impact factor 3.447.
- Editorial board member for Recent Patents on Corrosion Science.
- Member Editorial board of Engineering and Technology, Inventi Journals.

2011:

- International Editor for The structural design of tall and special buildings, Wiley, England, ISI Impact Factor: 1.041
- Editorial board member of Journal of Materials Science Research, Canada.
- Official evaluator for Mehran University of Engineering and Technology Research Journal.

### • **Countries Visited:**

**I have been to 47 Countries and hundreds of major cities around the World:** FRANCE (Paris, Tours, Strasbourg, Alsace, Colmar, Gillard, Ammenesse), CHINA (Beijing, Shenzhen, Yi-chang), THAILAND (Bangkok), JAPAN (Tokyo and many other cities), KUWAIT (almost everywhere), QATAR (Doha), SAUDI ARABIA (Makkah, Medina, Jeddah, Riyadh, Dammam, kharj, Taif, Abha, Jazan and many other cities), AUSTRALIA (Sydney, Melbourne, New Castle, Coffs Harbor, and many other cities), BAHRAIN (Manama and surrounding cities), CANADA (Toronto, Montreal and British Columbia), USA (New York, Texas; Houston, Dallas and Washington), UAE (Dubai, Abu Dhabi and Sharjah), MALAYSIA (Kuala Lumpur), SINGAPORE (SG, Capital City), SIRILANKA (Colombo), U.K (London), PAKISTAN (almost every city), GREECE (Athens, Hydra, Poros), ITALY (Bari), TURKEY (Istanbul), GERMANY (Frankfurt, Stuttgart, Freiburg, Gottenheim, Munich, Black Forest), CZECH REPUBLIC (Plzen), BELGIUM (Liege), AUSTRIA (Salzburg), BULGARIA (Sofia), DENMARK (Tonder), HUNGARY (Gyor), LUXEMBURG (main city), NETHERLANDS (Heerlen), POLAND (Kostrzyn), SPAIN (Elizondo), PORTUGAL, CROATIA, CYPRUS, ESTONIA, FINLAND, IRELAND, LATVIA, LITHUANIA, ROMANIA, SLOVAKIA, SLOVENIA, SWEDEN, SWITZERLAND (Basel, Zurich, Geneva), SOUTH KOREA (Seoul, Jeonju, Jeonbuk) and RUSSIA (Moscow).

### • **International Conference Scientific & Organizing Committees, Chairs, Keynotes etc.**

2015:

- International advisory committee member and representative of Arab countries, GEOMATE2015, Osaka Nov.16-18 2015, Japan.
- Organizing and Scientific Committee Member of the 5<sup>th</sup> Annual International Conference on Civil Engineering, Structural Engineering and Mechanics, 25-28 May 2015, Athens, Greece (<http://www.atiner.gr/2015/ORG-CIV.htm>).
- Organizing and Scientific Committee Member of the 2<sup>nd</sup> Annual International Conference on Technology & Engineering, 22-25 June 2015, Athens, Greece (<http://www.atiner.gr/2015/ORG-TEN.htm>).
- Invited Board Member, The Fifteenth International Conference on Civil, Structural and Environmental Engineering Computing: Civil-Comp 2015 (CC2015) Prague, Czech Republic from 1-4 September 2015.
- Invited Technical Committee Member, 4th International Conference on Engineering and Innovative Materials, Penang, Malaysia 3-4 September, 2015.

2014:

- Scientific Committee Member, International Conference on Regeneration and Conservation of Concrete Structures (RCCS), 1-3 June 2015, Nagasaki, Japan.
- Organizing Committee Member, World Congress and Exhibition on Construction and Steel Structure (Steel Structure-2015) Dubai, UAE from November 05-07, 2015, focused on the theme “Exploring Advances in Construction and Steel Structure”.
- Technical Committee member, International Conference on multi-span large bridges, July 1-3, 2015, Porto, sponsored by IABSE, *fib* and IABMAS.
- Invited Symposium Organizer at 25th Annual International Conference on Computational & Experimental Engineering & Sciences, ICCES'15, 20-24 July 2015, in Reno, Nevada, USA.
- Member of Program Committee in 3rd Annual Conference on Architecture and Civil Engineering, ACE-CFP 2015, April 13-14, Singapore.
- Technical Program Committee (TPC) member of CCES2014, Conference of Civil Engineering & Safety, Sep. 12-14, Wuhan, China.
- International Technical Committee Member, International Seminar on “Developments in Cement Based Composites”, NICE-National University of Science and Technology (NUST), Islamabad, Pakistan, September, 2014.
- Committee Member, 3<sup>rd</sup> International Conference on Engineering and Innovative Materials (ICEIM 2014), 4-5 September, Kuala Lumpur, Malaysia.
- Scientific Committee Member, 2<sup>nd</sup> International Congress on Materials and Renewable Energy MRE 2014, 8-10 August, Hong Kong.
- Technical Program Committee (TPC) member, International Conference on Advance Materials Research & Application AMRA, 12-14 December, Sanya, china, 2014.
- Committee Member, 4<sup>th</sup> International conference on geotechnique, Construction Materials and environment, GEOMATE2014, 19-21<sup>st</sup> Nov., Brisbane, Australia.
- Technical Program Committee (TPC) member, Conference on Civil Engineering and Safety (CCES 2014), September 12-14, Wuhan, China.
- Member of Scientific Committee, 3rd International Conference on Service Life Design for Infrastructure (SLD' 14), 15-17 October 2014, Zhuhai, china.
- Invited Session Chair, The Twenty-second Annual International Conference on Composites and Nano Engineering (ICCE-22), July 13-19, 2014, Malta.
- Member of Scientific Committee for Conference ARSA 201, from December 1 – 5.
- Member Scientific Committee, The 2nd International Conference on Energy and the Future of Heat Treatment and Surface Engineering (EFHTSE), 11-13 October 2014, Beijing.
- Member of Program Committee in 2nd Annual Conference on Architecture and Civil Engineering, ACE2014, April 13-14, Singapore.

2013:

- Session Chair for the session in Corrosion Research at International Conference on Concrete Sustainability (ICCS13), 27-29 May, 2013, Tokyo. Japan.
- Invited member of the Scientific Committee of International Scientific Corrosion Conference CORROSION 2014, to be held in Gliwice, Poland, from 18 to 21 November, 2014.
- Invited Technical Committee, ICEES 2014, 4th International Conference on Energy and Environmental Science (<http://www.icees.org>) Kuala, Lumpur, Malaysia, September 4-5, 2014.

- Scientific Committee Member, Mechanics of Composites, 8-12 June 2014 at Stony Brook University, New York, USA.
- Member Technical Committee, and co-chair for the student session, 15th Middle East Conference on Corrosion and Exhibition, 2014, Manama, Bahrain.
- Member of Technical Program Committee, Conference on Civil Engineering and Safety (CCES 2013), September 20-22, 2013 in Beijing, China.
- Advisory Board Member, International Science and Technology Conference (ISTEC) supported by Sakarya University, SUNY Korea and TASET, July 18-20, 2013 at Songdo-Dong, Korea.
- Technical Committee Member, 2<sup>nd</sup> International Conference on Engineering and Innovative Materials, ICEIM 2013, IACSIT, China.
- Conference Chair, International Forum on Advances in Engineering (IFAE 2013), March 22-23, 2013, New Delhi, India.
- Invited Technical Program Committee Member of the 2013 International Conference on Kinematics, Mechanics of Rigid Bodies and Materials (KINEMATICS 2013), Arya Duta Hotel, Jakarta, Indonesia, 2 – 4, November 2013.
- Scientific Committee Member, 1st International Virtual Conference on Advanced Scientific Results (SCIECONF), June 10 - 14, 2013.
- Invited as Symposium Organizer in the International Conference of Numerical Analysis and Applied Mathematics (ICNAAM 2013), in Rhodes, Greece from 21-27 September, 2013.
- Member Organizing Committee, International Conference on Computational and Theoretical Nanoscience, ICCTN2013, March 1-3, Hong Kong.
- Scientific Committee Member of the International Conference on Computational Technologies in Concrete Structures (CTCS13), 8-12 September 2013, Intl. Convention Center, Jeju, Korea.
- Program Chair for International Conference on Manufacturing, Optimization, Industrial and Material Engineering (MOIME 2013), 09 - 10 March, Bandung, Indonesia.
- Scientific Committee Member for INTE2013, 25-27 June, Rome, Italy. (ISSN:2146-7358)

#### 2012:

- Session Chair in IJAS Conference held in Gottenheim, Germany from 02-07 December 2012.
- Technical Program Co-Chair, ISTIE 2013, 10 - 11 May, Bogor, Indonesia.
- Member Scientific Committee & Invited Plenary Speaker, International Congress on Materials & Structural Stability CMSS2013, 27-30 November in Rabat, Morocco.
- Member of Program Committee in 1st Annual Conference on Architecture and Civil Engineering, ACE2013, March 18-19, Singapore.
- Scientific Committee member of GV-CONF 2013 Slovakia, April 8 - 12.
- Invited as Keynote Speaker for a talk on International Conference on Advanced Nano Composite for Construction Materials (ICNC – 2013) March 12-14, India.
- Member of Scientific Committee for Conference ARSA 2012 held from December 3 – 7.
- Invited Editorial Board Member of Fourteenth International Conference on Civil, Structural and Environmental Engineering Computing (CC2013) in Sardinia, Italy from 3-6 September.
- Program Chair for Sciotech 2013 in Jakarta, Indonesia from 24 - 25 January, indexing in EI Compdex, SCOPUS, Conference Proceedings Citation Index – Science (CPCI-S) (Thomson Reuters, Web of Science).
- Member of International Scientific Committee for Fifth North American Conference on the Design and Use of Self-Consolidating Concrete (SCC2013), May 12-15, Chicago, USA.
- Member of Technical Committee for International Conference “Advanced Concrete Technology and Applications” (ACTA 2012)-NICE NUST, 6-7 November, Islamabad, Pakistan.

#### 2011:

- Member of Organizing Team & Scientific Review Committee for ISG-ISARC Conference, June 26-29, 2012, Netherlands.



• **Society, Organization, Council & Committee Memberships:**

2014:

Member Engineer in the Board at American Commission of Expert Engineers (ACOE)  
Member of Gulf Engineering Association (GEA).  
IABSE, International Association of Bridge and Structural Engineering (with SEI, Structural Engineering International), Switzerland.  
Honorary Member of Gulf PMC-Project Management Consortium as Project Management Expert.  
OMICS, Accelerating Scientific Discovery, Civil & Environmental Engineering, USA.  
Petrotex Society, USA.

2013:

American Concrete Institute (ACI) Member, USA.  
Associate Member, ACI Committee 222, Corrosion of Metals in Concrete.  
NACE Corrosion Technical Committee STG 01 – Reinforced Concrete, USA.  
Member of IEEE, USA.  
fib, International Federation for Structural Concrete, Switzerland.

2012:

Bahrain Society of Engineers  
American Chemical Society (ACS), USA.  
InterNations, Munich, Germany.

2011:

Honorary Member, National Association of Corrosion Engineering (NACE) International, USA.  
(World's largest and most prestigious corrosion organization).  
Institution of Civil Engineering (ICE), London, U.K.

2008: Research Cooperative Organization, Japan.

2006: Japan Concrete Institute (JCI).

2000:

ASCE (American Society of Civil Engineers), USA.  
Pakistan Engineering Council (PEC).  
L.D.A Sports Complex, Lahore, Pakistan.

1995: Speers Chemical Society.

1993: Benade Physics Society.

1990: World Wildlife Fund (WWF).

• **Selected International High Quality ISI Journal Reviews:**

(Certified & Recognized Outstanding Reviewer by Elsevier)

2015:

\* Electroanalysis, Wiley, ISI Impact Factor: 2.502

2014:

\* NDT & E International, Elsevier, ISI Impact Factor: 2.105

\* Journal of Advanced Concrete Technology, ISI Impact Factor: 0.508

\* International Journal of Precision Engineering and Manufacturing, Springer, ISI Impact Factor: 1.5

\* Fatigue Fracture of Engineering Materials & Structures, Wiley, ISI Impact Factor: 0.861

- \* KSCE Journal of Civil Engineering, Springer, ISI Impact Factor: 0.383
- \* Environment, Development and Sustainability, Springer.
- \* Earthquake Engineering and Engineering Vibration, Springer, ISI Impact Factor: 0.604
- \* Canadian Journal of Civil Engineering, Canada, Scholarone, ISI Impact Factor: 0.602

2013:

- \* American Concrete Institute (ACI) Materials Journal, ISI Impact Factor: 0.826, USA.
- \* Cement & Concrete Composites, Elsevier, ISI Impact Factor: 2.523.
- \* Industrial & Engineering Chemistry Research, ACS, USA, ISI Impact Factor: 2.237
- \* Journal of Applied Remote Sensing, ISI.
- \* Construction Materials, Institute of Civil Engineers (ICE), U.K.

2012:

- \* Journal of Composite Materials, Sage, ISI Impact Factor: 1.060.
- \* Journal of Materials Engineering and Performance, ISI, Springer.

2011:

- \* Construction and Building Materials, Elsevier, ISI Impact Factor: 2.293.
- \* Automation in Construction, Elsevier, ISI Impact Factor: 1.820.
- \* Anti-Corrosion Methods and Materials.
- \* Cement and Concrete Research, ISI, Elsevier.

2010:

- \* ASTM (American Society of Testing and Materials) Reviewer for 'Testing and Evaluation', ISI.
- \* ASCE (American Society of Civil Engineering) Reviewer for 'Materials in Civil Engineering', ISI.
- \* Swarm and Evolutionary Computation, Elsevier.
- \* Computers and Structures, Elsevier, ISI Impact Factor: 1.440.

### • **Computer Skills:**

C++, Sap & Staad, JAVA Programming, Fortran-77 with visual interface, Primavera Project Planning, Pca Structural Design, Finite Element Modeling (FEM) Analysis, Spread sheet analysis, MS Office, Autocad and 3D Studio Max, Hardware assembling & trouble shooting.

## **WORK EXPERIENCE**

### **GOVERNMENT REGULAR FULL TIME EMPLOYMENTS**

- **KING SAUD UNIVERSITY, RIYADH, KSA:** (Ranked among Top 5 in the arab world and 147 in the world)  
From 14<sup>th</sup> December 2008 to date working at present.  
**DESIGNATION:** Associate Professor in CoE-CRT, Civil Engineering Department, College of Engineering.
- **UNIVERSITY OF TOKYO, JAPAN:** (Ranked among TOP 20 in the world)  
From 04<sup>th</sup> Oct 2004 to 1<sup>st</sup> Dec 2008.  
**DESIGNATION:** Doctoral and Masters Research Fellow at Concrete Laboratory, School of Civil Engineering, College of Engineering.

- **GOVERNMENT OF PAKISTAN (Ministry of Buildings and Roads):**

From 05<sup>th</sup> January, 2004 to 3<sup>rd</sup> Oct, 2004.

**DESIGNATION:** Asst. Director / SDO (Sub divisional Officer) in Ministry of C&W Dep't.  
**Government of Pakistan** (Communication and works Department) **Buildings and Roads Division.**

- **UNIVERSITY OF ENGINEERING & TECHNOLOGY, LAHORE, PAKISTAN:**

From 14<sup>th</sup> March, 2002. to 04<sup>th</sup> January 2004.

**DESIGNATION:** Joined as Lecturer & promoted to asst. Professor in Civil Engineering Department in less than 1.5 years.

## **PRIVATE CONSULTANCIES/SERVICES ON PART TIME/ CONTRACT/ PROJECT BASIS**

### **15 YEARS OF VAST & VERSATILE FIELD EXPERIENCE FROM YEAR 2000-2015**

- **GANDHARA CONSULTANTS (pvt.)Ltd. & THE CONSTRUCTION SERVICES OF PAKISTAN:**  
(Off Address : 92/1. A- Block, New Muslim Town, Lahore, Pakistan.)

**GANDHARA CONSULTANTS:**

**PROJECT:** Pakistan State Oil Filling station (P.S.O: G.M Khalid ) at Kasur, Pakistan.

**DESIGNATION:** \* Planning Engineer. (using PRIMAVERA computer software)

\*Site Engineer.

**PROJECT:** Deans Trade Centre & Hotel tower, Saddar Road, Peshawar, Pakistan. (Project value: 6,500 millions pak rupees)

**DESIGNATION:** Asst. Structural Engineer, Cost Estimation & Preparation of tender documents.

**THE CONSTRUCTION SERVICES OF PAKISTAN:**

**PROJECT:** Pakistan Air Force Officers Housing Scheme, Walton Air Port, Lahore, Pakistan.

**DESIGNATION:** Site Incharge.

**DUTIES:** Site supervision & execution, billing, deviation orders, inspections, material purchasing, site execution, labour payments, store maintenance, project management.

- **MASS CONSULTANTS:**

(Off Address : First Floor, Business Arcade, Defence Chowk, Lahore, Pakistan.)

**GENERAL DESIGNATION:** PROJECT MANAGER

### **Commercial Projects:**

**PROJECT:** National Telecommunication Building at Garden Town, Lahore, Pakistan.

**DESIGNATION:** Site Engineer.

**PROJECTS:** \* Pakistan Telecommunication Buildings (PTCL) at Batapur, Muridke, Guldasht town,  
\* Sharakpur, Rana Town, Johar Town & Sheikhpura.  
\* Usmania Trade Centre at Rehmat Chowk, Wapda Housing Scheme, Lahore  
\* PTC Customer Service Centre at Gatt.wala, Faisal Abad.

**DESIGNATION:** \* Site Engineer, Cost Estimation, B.O.Qs, QS, Structural Design & Tender Docs

**PROJECT:** National Telecommunication Corporation Head quarters Building at Islamabad, Pakistan.

**DESIGNATION:** Structural Engineer.

**PROJECT:** MAKKI CENTRE, chowburgi, lahore, Pakistan.

**DESIGNATION:** Structural Design Engineer.

**PROJECT:** Commercial plaza at 19&20 Valencia Town, lahore (client: Mr. Tahir Naseem)

**DESIGNATION:** Structural Engineer

Residential Projects:

**PROJECTS:** \* House of Mr. Sheikh Iftikhaar (M/S Balqees Carpets) at Tariq Road, Lhr. (Area: 5 Kanals)

\* House of General Iqbal at Sarwer Road, Kentt, General Saeed at Cavalry Ground, Lahore, Pakistan.

\* House of Mr. Naqi at Defence, Dr. Shahid at Garden Town, Lahore.

\* House of Mr. Shahzad Raza (Mecatech Engineers) at Defence, Lahore.

**DESIGNATION:** Site Engineer & Structural / Architectural Designer.

Industrial Projects:

**PROJECT:** Fatima Textile Mills at Okara. (Project Consultant: M/S M.R Associates, 20-Masson road, Lahore, Pakistan.)

**DESIGNATION:** Structural Design Engineer.

**INMOLE EMPLOYEES CO-OPERATIVE HOUSING SOCIETY, PAKISTAN: (ROADS)**

**PROJECT:** Construction of Coloney Roads.

**DESIGNATION:** Site Engineer

**PROJECT:** D.G Khan Cement Factory, at 45km D.G Khan (Project Consultant: Sakina Enterprises for Habib Bank, Lahore, Pakistan.)

**(PROJECT VALUE: 8.5 Million USD / 852 Crore Pak Rupees)**

**DESIGNATION:** Evaluation Engineer.

**PROJECT:** Novamed Pharmaceuticals (Pvt.) Ltd., Factory at 28 km Ferozpur road, Lahore, Pakistan.

**DESIGNATION:** Over all consultant of the Project planning, tendering, execution and construction.

- **HORTI GROUP:**

**(Garden, lawn design, landscaping, irrigation and indoor plant display services)**

**DESIGNATION:** Operation Manager ( Design, supervision & Construction Dep't.)

- **PRESTON UNIVERSITY, Lahore, Pakistan:**  
DESIGNATION: Visiting faculty teacher in Civil Engineering Technology, B-Tech-(Honors) Program.

- **HERITAGE DEVELOPERS:**

**PROJECT: Gulberg Arcade, Main market Gulberg, Lahore. (Project value: 14 Crores)**  
DESIGNATION: Structural Design ( Analysis on SAP2000 and Re-Design)

- **USMANIA DEVELOPERS:**

**PROJECT: Usmania Towers at Wapda Town, commercial Area, Lahore, Pakistan.**  
DESIGNATION: Structural Design Engineer ( Analysis on SAP2000 and Re-Design)

- **MEDIA/PRESS COVERAGE**

#### **NHK Television, Tokyo, Japan:**

Appeared (by invitation and participation) in several T.V programs (interviews, talk shows, live performances, reality TV, cultural shows, events, trainings etc.) broadcasted on NHK National T.V Channel of Tokyo, BS2 and BS hi Vision TV channels in Japan under the series name of Cool Japan during the years 2006-2008.

#### **Radio Riyadh, Saudi Arabia:**

Invited by Radio-Riyadh, FM radio frequency: 97.0 for discussions, personal interviews, auto biographies, talk shows and my expert opinion on the topics of recent technology & scientific developments, research and research centres, infrastructure economy, my life, education, experiences, my achievements etc. which went on air Live from time to time under the program names 'The open hour, Lets Connect and Economy report' during the years 2012-2014.

## **RESEARCH & PUBLICATIONS**

### **PhD COURSE RESEARCH THESIS:**

*Title: Modeling of Steel Corrosion in Concrete Coupled with Mass and Energy Transport in Porous Media and its Experimental Verification.*

Advisor: Prof. T. Ishida (Civil Engineering Department)

Institution: University of Tokyo, Japan (Ranked among Top 20 in the world and Top10 in Civil Engineering)

Year: 2006-2008.

Note: **Completed Ph.D in a record short period of just 2 years.**

### **POSTGRADUATE(MASTER) RESEARCH THESIS:(Medal and prize from University of Tokyo)**

*Title: Coupling of the Effect of Chloride and Temperature on the Corrosion of Reinforcement in Concrete Structures based on Thermodynamic Approach.*

Advisor: Prof. T. Ishida (Civil Engineering Department)

Institution: University of Tokyo, Japan (Ranked among Top 20 in the World and Top 10 in Civil Engineering)

Year: 2004-2006.

**Award: Furuichi prize, award & medal for best research thesis from the University of Tokyo.**  
(This is highest award in the college of engineering at the University of Tokyo)

**UNDER GRADUATE RESEARCH THESIS:**

*Title: Effect of various aggregates on shrinkage & strength of concrete.*

Advisor: Prof. Yahya Chaudhry, University of Engineering & Technology, Lahore, 2000.

Research element of the degree: 50 percent of work required for that year.

Year: 2000

**LIST OF PUBLICATIONS:**

Total (157), ISI Journal Papers (49), International Conference Papers (31), International Patents (5), Books, Editorials, Expos, Invention Exhibitions, Technical Reports, Monographs, other Journal Papers etc. (54), R&D Government and Private Funded Research Grant Projects (18)

**ISI Journal Papers**

**Year 2015:**

1. Raja Rizwan Hussain, Abdulrahman Alhozaimy, Abdulaziz Al Negheimish, Rajeh Al-Zaid and D.D.N Singh (2015), Mechanism of nucleation and growth of passive film on steel rebar at different durations of its exposure in concrete pore solution at the nanoscale, *ACI Materials Journal*, ISI, paper accepted, in press, Manuscript ID M-2014-042.R2. (ISI Impact Factor: 0.826)
2. Muhammad Wasim, Raja Rizwan Hussain and Muhammad Ali Baloch (2015), Investigation of Long Term Coupled Effect of High Temperature and Constant High Humidity on Corrosion Rehabilitated Patches of Reinforced Concrete Structures, *International Journal of Civil Engineering*, ISI, Vol. 13, No.1, 3-2015, pp. 68-75 (ISI Impact Factor: 0.695)
3. Muhammad Wasim and Raja Rizwan Hussain (2015), Passive Film formation and Corrosion Initiation in Lightweight Concrete Structures compared to Self compacting and Ordinary Concrete Structures at Elevated Temperature in Chloride Rich Environment, *Construction and Building Materials Journal*, Elsevier, ISI, Volume 78, March 2015, pp. 144-152. (ISI Impact Factor: 2.293)

**Year 2014:**

4. Raja Rizwan Hussain, Abdulrahman Alhozaimy, Abdulaziz Al-Negheimish and DDN Singh (2014), Time-dependent variation of the electrochemical impedance for thermo-mechanically treated versus plain low alloy steel rebars in contact with simulated concrete pore solution, *Construction and Building Materials Journal*, Elsevier, ISI, Vol. 73, pp. 283–288. (ISI Impact Factor: 2.293)
5. Abdulrahman Alhozaimy, Raja Rizwan HUSSAIN, Abdulaziz Al-negheimish, Rajeh Al-zaid and DDN Singh (2014), Effect of Simulated Concrete Pore Solution Chemistry, Chloride Ions, and Temperature on the Passive Layer Formed on Steel Reinforcement, *ACI Materials Journal*, ISI, MS Paper No. M-2012-309, Vol. 111-M37, Issue 4, No. 1-6, pp. 411-421. (ISI Impact Factor: 0.826)

6. Raja Rizwan Hussain, Abdulrahman Alhozaimy and Abdulaziz Al Negheimish (2014), Investigation of the Effect of Fineness Dependent Volume of Fine aggregate on the Passive Layer Formation and Corresponding Corrosion of Steel Reinforced Concrete using Electrochemical Approach, *Corrosion Engineering Science & Technology Journal*, ISI, DOI: <http://dx.doi.org/10.1179/1743278214Y.0000000153>, Volume 49, Issue 8 (December 2014), pp. 736-742 (ISI Impact Factor: 0.658)
7. Ahmed K. El-Sayed, Raja Rizwan Hussain and Ahmed B. Shuraim (2014), Effect of Stirrup Corrosion on the Shear Strength of Reinforced Concrete Short Beams, *Journal of Civil Engineering and Management*, Manuscript ID SCEM-2013-0132.R2, ISI, (accepted, in press). (ISI Impact Factor: 3.711)
8. Fahid Aslam, Zahid Ahamd Siddiqi, Wasim Abbas and Raja Rizwan Hussain (2014), Economical-Structural Performance of Steel Moment Resisting Building Frames Using the Section Variation Technique, *Revista de la Construcción Journal of Construction*, ISI, Vol. 13, Issue 1, pp. 41 – 46. (ISI Impact Factor: 0.229)
9. M. Rizwan, M. T. A. Chaudhary, M. Ilyas, Raja Rizwan Hussain and T. R. Stacey (2014), “Computer Based Estimation of Backbone Curves for Hysteretic Response of Reinforced Concrete Columns Under Static Cyclic Lateral Loads”, *International Journal of Computers and Concrete*, ISI, Vol. 14, Number 2, pp. 193-209. (ISI Impact Factor: 1.015)
10. A.B.M. Saiful Islam, Mohd Zamin Jumaat, Raja Rizwan Hussain and Md. Nazmul Huda (2014) Incorporation Preference for Rubber-Steel Bearing Isolation in Retrofitted Existing Multi storied Building, *International Journal of Computers and Concrete*, accepted-In press. (ISI Impact Factor: 1.015)
11. Muhammad Wasim, Raja Rizwan Hussain and Ali Baloch (2014), Repair Vulnerability of Corrosion Patch Repairs at the Steel Intersection Areas of Reinforced Concrete Slabs Influenced by Harsh Weather, *Industrial & Engineering Chemistry Research Journal*, ISI, DOI: 10.1021/ie402901y, Vol. 53, Issue 7, pp. 2656-2660. (ISI Impact Factor: 2.461)
12. Abdulaziz Al- Negheimish, Abdulrahman Alhozaimy, Raja Rizwan Hussain, Rajeh Al-Zaid, J.K.Singh and D.D.N.Singh (2014), The role of manganese sulfide inclusions in steel rebar in the formation and breakdown of passive films in concrete pore solutions, *NACE Corrosion Journal*, ISI, Vol. 70, Issue 1, pp. 74-86. (ISI Impact Factor: 1.772)
13. Sarfraz Munir, Raja Rizwan Hussain and A.B.M. Saiful Islam, Parallel Framework for Earthquake Induced Response Computation of SDOF Structure, *Journal of Civil Engineering and Management*, ISI, DOI:10.3846/13923730.2013.801917, Vol. 20, pp. 1-8, published 12 March, 2014. (ISI Impact Factor: 3.711)
14. A.B.M. Saiful Islam, Raja Rizwan Hussain, Mohammed Zamin Jumaat and Kh Mahfuz ud Darain, (2014), Implications of Rubber-Steel Bearing Nonlinear Models of Soft Storey Structures, *International Journal of Computers and Concrete*, ISI, Vol. 13, Number 5, pp. 603-619. (ISI Impact Factor: 1.015)

15. Mahboob Alam, Raja Rizwan Hussain and A.B.M. Saiful Islam (2014), Impact assessment of rainfall-vegetation on sedimentation and predicting erosion-prone region by GIS and RS, *Geomatics, Natural Hazards and Risk Journal*, DOI:10.1080/19475705.2014.942387 (ISI Impact Factor: 0.977).
16. A.B.M Saiful Islam, Syed Ishtiaq Ahmad, Mohd. Zamin Jumaat, Raja Rizwan Hussain, Mohammed Ashiqur Rehman and Kh Muhafiz ud Darain (2014), Efficient Design in Building Construction with Rubber Bearing in Medium Risk Seismicity: Case Study & Assessment, *Journal of Civil Engineering and Management, ISI*, Vol. 20, Issue 5, pp. 621-631. (ISI Impact Factor: 3.711)

### **Year 2013:**

17. Raja Rizwan Hussain (2013), Computer Based FEM Stabilization of Oxygen Transport Model for Material and Energy Simulation in Corroding Reinforced Concrete, *International Journal of Computers and Concrete*, ISI, Vol. 12, No. 5, pp. 669-680. (ISI Impact Factor: 1.015)
18. A.B.M. Saiful Islam, Raja Rizwan Hussain and Mohd Zamin Jumaat (2013), Nonlinear Dynamically Automated Excursions for Rubber-Steel Bearing Isolation in Multi-storey Construction, *Automation in Construction Journal, Elsevier, ISI*, Vol. 30, pp. 265-275. (ISI Impact Factor: 1.820)
19. M. Wasim and Raja Rizwan Hussain (2013), Comparative Study on Induced Macrocell Corrosion Phenomenon in Repaired Ordinary Reinforced and Self-compacting Concrete Structures, *Corrosion Engineering Science and Technology Journal*, ISI, Vol. 48, Issue 5, pp. 370-379. (ISI Impact Factor: 0.658)
20. Mohammed Jameel, A.B.M. Saiful Islam, Raja Rizwan Hussain, Syed Danish Hasan and M. Khaleel (2013), Non-linear FEM Analysis of seismic induced pounding between neighboring Multi-storey Structures, *Latin American Journal of Solids and Structures*, ISI, Vol. 10, 2013, pp. 921 – 939. (ISI Impact Factor: 1.240)
21. M. Wasim and Raja Rizwan Hussain (2013), Experimental Investigation of Re-Corrosion Phenomenon in Simulated Repaired Steel Reinforced Self Consolidating Concrete Structures, *International Journal of Electrochemical Science*, ISI, Vol. 8, pp. 1678-1690. (ISI Impact Factor: 3.729)
22. A.B.M. Saiful Islam, Raja Rizwan Hussain, Mohd Zamin Jumaat and Md Ashraful Alam, Incorporation of Rubber-steel Bearing Isolation in a Multi-storey Building, *Journal of Civil Engineering and Management, ISI*, Volume 19, Issue sup1 pp. S33-S49. Published 09 Jan 2013. (ISI Impact Factor: 3.711)
23. Wasim Abbas, Fahid Aslam, Zahid A. Siddiqi, Raja Rizwan Hussain and Sheraz Ahmed (2013), Bond Behaviour of High Strength Concrete Flexural Member under Low Cyclic Fatigue Loading, *Fatigue & Fracture of Engineering Materials & Structures (FFEMS) journal*, ISI, Vol. 36, Issue 7, pp. 602–613. (ISI Impact Factor: 1.002)



### **Year 2012:**

24. Hussain Raja Rizwan, Ishida T and Wasim M., Oxygen Transport and Corrosion of Steel in Concrete Under Varying Concrete Cover, W/C and Moisture, *ACI Materials Journal*, ISI, Paper No. 109-M01, Vol. 109, No. 1, 2012. (ISI Impact Factor: 0.826)
25. Abdulrahman Alhozaimy, Raja Rizwan Hussain, Abdulaziz Al- Negheimish and Rajeh Al-Zaid (2012), “Investigation of Severe Corrosion Observed at Intersection Points of Steel Rebar Mesh in Reinforced Concrete Construction”, *Construction and Building Materials Journal*, Elsevier, ISI, Vol. 37, pp. 67–81. (ISI Impact Factor: 2.293)
26. Raja Rizwan Hussain, Electrochemical Behavior and Dependency of Anodic Current Density on Chloride Concentration and Temperature Based on Reverse Corrosion Modeling Approach for Steel Reinforced Concrete, *International Journal of Electrochemical Science*, ISI, Vol. 7, Issue 4 (2012) pp. 3638-3645. (ISI Impact Factor: 3.729)
27. Mohammed Jameel, A.B.M. Saiful Islam, Raja Rizwan Hussain, M. Khaleel, M. M. Zaheer (2012) “Optimized Structural Modelling for Tall Buildings”, *The Structural Design of Tall and Special Buildings Journal*, ISI, DOI: 10.1002/tal.1004. (ISI Impact Factor: 0.952)
28. A.B.M. Saiful Islam, Raja Rizwan Hussain, M. Jameel and M. Z. Jumaat (2012) Non-linear Time Domain Analysis of Base Isolated Multi-storey Building under Site Specific Bi-directional Seismic Loading, *Automation in construction*, Elsevier, ISI, Vol. 22, pp. 554-566. (ISI Impact Factor: 1.820)
29. Syed Mazharul Islam, Raja Rizwan Hussain and Md. Abu Zakir Morshed, “Fiber-reinforced concrete incorporating locally available natural fibers in normal- and high-strength concrete and a performance analysis with steel fiber-reinforced composite concrete”, *Journal of Composite Materials*, ISI, Vol. 46, Issue 1, January 2012, U.K. (ISI Impact Factor: 1.060)
30. M. Wasim and Hussain Raja Rizwan (2012), Unique Declining Electrochemical Trend of Macro-Cell Half-Cell Potential with Increase in Temperature at Constant High Humidity for Corroding Steel Bars in Repaired Concrete Patches, *International Journal of Electrochemical Science*, ISI, Vol. 7, Issue 2, pp. 1412-1423. (ISI Impact Factor: 3.729)
31. Hussain Raja Rizwan (2012), Time Dependent Electrochemical Effect of Saturated Area in Capillary and Gel Pores of Concrete on the Corrosion Rate of Embedded Steel Reinforcement, *International Journal of Electrochemical Science*, ISI, Vol. 7, Issue 2, pp. 1402-1411. (ISI Impact Factor: 3.729)
32. Hussain Raja Rizwan and Tetsuya Ishida (2012), Multi-Variable Empirical Analysis of Coupled Oxygen and Moisture for Potential and Rate of Quantitative Corrosion in Concrete, *Journal of Materials in Civil Engineering*, ASCE (American Society of Civil Engineering), ISI, Vol. 24, No. 7, pp. 950-958, July 2012. (ISI Impact Factor: 0.959)
33. Raja Rizwan Hussain, Groundbreaking Electrochemical Computation of Dispersed Individual Activation Energies and Development of Activation Energy Model for Chloride Induced Corrosion of RC Structures under Ambient Temperature, *International Journal of Electrochemical Science*, ISI, Vol. 7, Issue 4 (2012) pp. 3656-3671. (ISI Impact Factor: 3.729)

### **Year 2011:**

34. Hussain Raja Rizwan, Effect of moisture variation on oxygen consumption rate of corroding steel in chloride contaminated concrete, *Cement & Concrete Composites*, Vol. 33, Issue 1 (January 2011) pp. 154–161, *Elsevier*, ISI. (ISI Impact Factor: 2.523)
35. Raja Rizwan Hussain and Tetsuya Ishida (2011) Computer-Aided Oxygen Transport Model of Mass and Energy Simulation for Corrosion of Reinforced Steel, *Automation in Construction Journal*, Vol. 20, Issue 5, pp. 559-570, *Elsevier*, ISI. (ISI Impact Factor: 1.820)
36. Mohammad Wasim and Raja Rizwan Hussain, Novel Method for Preventing Macro-Cell Chloride Induced Corrosion in the Simulated Repaired Reinforced Concrete Patch and Its Electrochemical Verification, *International Journal of Electrochemical Science*, ISI, Vol. 7, Issue 4 (2012) pp. 3646-3655. (ISI Impact Factor: 3.729)
37. Raja Rizwan Hussain (2011) Influence of Chloride Ions and Hot Weather on Isolated Rusting Steel Bar in Concrete Based on NDT and Electro-Chemical Model Evaluation, *NDT & E International Journal*, Vol. 44, Issue 2, pp. 158-162, *Elsevier*, ISI. (ISI Impact Factor: 1.744)
38. Raja Rizwan Hussain (2011) Electrochemical Experimental Measurement of Macrocell Corrosion Half-cell Potential Replicating the Re-corrosion of Actual Refurbished Works in RC Structures, *International Journal of Electrochemical Science*, ISI, Vol. 6, Issue 1, pp. 199-205. (ISI Impact Factor: 3.729)
39. Hussain Raja Rizwan, Tetsuya Ishida and M. Wasim (2011) Experimental Investigation of Time Dependent Non Linear 3D Relationship Between Critical Carbonation Depth and Corrosion of Steel in Carbonated Concrete, *Journal of Corrosion Engineering, Science and Technology*, ISI, Vol. 46, No. 5, pp. 657-660 (4), U.K. (ISI Impact Factor: 0.658)
40. Hussain Raja Rizwan and Tetsuya Ishida (2011) Enhanced electro-chemical corrosion model for reinforced concrete under severe coupled actions of chloride and temperature, *Construction and Building Materials Journal*, Vol. 25, Issue 3, pp. 1305-1315, *Elsevier*, ISI. (ISI Impact Factor: 2.293)
41. Hussain Raja Rizwan and Tetsuya Ishida (2011) Investigation of Volumetric Effect of Coarse Aggregate on Corroding Steel Reinforcement at the Interfacial Transition Zone of Concrete, *KSCE Journal of Civil Engineering*, Vol. 15, Issue 1, pp. 153-160, *Springer*, ISI. (ISI Impact Factor: 0.450)
42. Hussain Raja Rizwan, Enhanced Mass Balance Electrochemical Computational Model for Corrosion Rate of Steel coupled with CO<sub>2</sub> Transport Model in Extremely Carbonated Concrete, *International Journal of Computers and Concrete*, ISI, Vol. 8, No.2, April 2011, pp. 177-192, U.K. (ISI Impact Factor: 1.015)
43. Raja Rizwan Hussain (2011) Underwater Half-Cell Corrosion Potential Bench Mark Measurements of Corroding Steel in Concrete influenced by a Variety of Material Science and Environmental Engineering Variables, *Measurement Journal*, ISI, Vol. 44, pp. 274-280, *Elsevier*. (ISI Impact Factor: 1.138)

44. Abdulrahman Alhozaimy, Raja Rizwan Hussain, Rajeh Al-Zaid and Abdulaziz Al- Negheimish (2011) “Coupled Effect of Ambient High Relative Humidity and Varying Temperature Marine Environment on Corrosion of Reinforced Concrete”, *Construction and Building Materials Journal*, ISI, Vol. 28, Issue 1, pp. 670–679, *Elsevier*. (ISI Impact Factor: 2.293)
45. M. Wasim and Raja Rizwan Hussain (2011) Three Dimentional Computer Aided FEM Retrofitting Modeling and NDT Technique for Assessment of Actual Exiting High Rise Fire Damaged RC Building, *Structural Design of Tall and Special Buildings Journal*, ISI, DOI: 10.1002/tal.734, Vol. 22, Issue 12, pp. 927-940. (ISI Impact Factor: 0.952)

#### **Year 2010:**

46. Hussain Raja Rizwan, Tetsuya Ishida (2010) Influence of Connectivity of Concrete Pores and Associated Diffusion of Oxygen on Corrosion of Steel under High Humidity, *Construction and Building Materials Journal*, ISI, Vol. 24, Issue 6, pp.1014–1019, *Elsevier*. (ISI Impact Factor: 2.293)
47. Hussain Raja Rizwan and Tetsuya Ishida (2010) Development of Numerical Model for FEM Computation of Oxygen Transport through Porous Media Coupled with Micro-Cell Corrosion Model of Steel in Concrete Structures, *Computers and Structures Journal*, ISI, Vol. 88, Issues 9-10, pp.639–647, *Elsevier*. (ISI Impact Factor: 1.440)
48. Hussain Raja Rizwan, Tetsuya Ishida (2010) Novel Approach Towards Calculation of Averaged Activation Energy Based on Arrhenius Plot for Modeling of the Effect of Temperature on Chloride Induced Corrosion of Steel in Concrete, *Journal of ASTM International*, ISI, Vol. 7, Issue 5, pp. 1-8, doi: 10.1520/JAI102667, USA.

#### **Year 2009:**

49. Hussain Raja Rizwan and Tetsuya Ishida (2009) Critical Carbonation Depth for Initiation of Steel Corrosion in Fully Carbonated Concrete and the Development of Electrochemical Carbonation Induced Corrosion Model, *International Journal of Electrochemical Science*, ISI, Vol. 4, Issue 8, pp. 1178-1195. (ISI Impact Factor: 3.729)

### **International Conference Proceedings**

#### **Year 2015:**

50. Hussain Raja Rizwan, Alhozaimy, A., Al-Negheimish, A., Al-Zaid, R. (2015). “Nano-scale Investigation of Passive Layer for Corroding Steel Bars in Concrete under Severe Environmental Conditions”. *International Conference on Architectural and Civil Engineering (ACE)*, 13-14 April, 2015, Singapore (accepted, in press).

#### **Year 2014:**

51. Raja Rizwan Hussain, Abdulrahman Alhozaimy and Abdulaziz Al Negheimish (2014), Influence of Sand Particles on the Half-Cell Corrosion Potential of Steel in Concrete, *3<sup>rd</sup> all Russian International Conference on Concrete and Reinforced Concrete – Glance at the Future*, paper # 95520, pp. 456-463, 12-16 May, Moscow, Russia.

52. El-Sayed, A. K., Hussain Raja Rizwan and Shuraim, A. B., "CFRP Strengthening of RC Beams with Corrosion-Damaged Stirrups," Proceedings of the *Second International Conference on Advances in Structural Health Management and Composite Structures* (ASHMCS 2014), Vol. I, P44, pp.1-6, Jeonju, Jeonbuk, South Korea, 27-29 August, 2014.
53. Ahmed B. Shuraim, Abdulrahman Alhozaimy and Raja Rizwan Hussain, Effect of Aggregate and Silica Fume on Time-Development of Concrete Compressive Strength, Proceedings of the Second International Conference on Advances in Civil and Structural Engineering - CSE 2014, Malaysia, 20-21 December, 2014.
54. El-Sayed, A., Raja Rizwan Hussain and Shuraim A., (2014) "Shear Behavior of RC Slender Beams with Corrosion-Damaged Stirrups" Athens: ATINER'S Conference Paper Series, No: CIV2014-0967, Athens Institute for Education and Research, Valaoritou Street, Kolonaki, 10671 Athens, Greece.

#### **Year 2013:**

55. Ahmed B. Shuraim, Raja Rizwan Hussain, Fahid Aslam, Abdulrahman Alhozaimy and Mohammad Mousa Al-humaiqani (2013), Effect of Local Aggregate and Silica Fume on the Creep of High Performance Concrete – A Comparison with ACI and LRFD Models, Proceedings of 22<sup>nd</sup> International Conference on Structural Mechanics in Reactor Technology, Transactions, SMiRT-22, August 18-23, San Francisco, California, USA.
56. Mohammed M. Al-Humaiqani, Ahmed B. Shuraim and Raja Rizwan Hussain (2013), Effect of Compressive Strength on the  $\gamma$ -Radiation Attenuation Coefficients for High Performance Concretes, paper # C037, 2<sup>nd</sup> International Conference on Civil Engineering and Materials (ICCEM 2013), July 06-07, Hong Kong.
57. Abdulrahman Alhozaimy, Raja Rizwan Hussain and Abdulaziz Al Negheimish (2013), Effect of Steel Rebar Composition and Surface Condition on the Corrosion Rate of RC Structures, paper # 187, Proceedings of International Conference on Concrete Sustainability (ICCS13), 27th to 29th May, Tokyo, Japan.
58. El-Sayed, A. K., Hussain Raja Rizwan and Shuraim, A. B., (2013) "Shear Performance of Short RC Beams with Corroded Stirrups" Proceedings of the Annual Conference of the Canadian Society for Civil Engineering (CSCE), Proceedings on CD-Rom, Montreal, Quebec, Canada, May 29 - June 1, 2013, GEN 369, 1-10 p.

#### **Year 2012:**

59. Raja Rizwan Hussain, Abdulrahman Al Hozaimy, Abdulaziz Al Negheimish and Rajeh Al-Zaid (2012), Influence of Surface Finish and Elemental Structure on the Corrosion Properties of Reinforced Concrete, IJAS Conference, paper # RHS74, 02-07 December, Gottenheim, Germany.
60. Raja Rizwan Hussain, Effect of Concrete Microstructure Saturation on the Corrosion Rate of Embedded Steel Reinforcement, Proceedings of 2<sup>nd</sup> International Conference on Microstructural-related Durability of Cementitious Composites, paper # 215, 11-13 April 2012, Amsterdam, The Netherlands, pp. 1132-1142, RILEM.

61. Raja Rizwan Hussain, Process for Inhibiting Macro-Cell Corrosion during RC Construction Maintenance, 2<sup>nd</sup> Annual International Conference on Construction, 18-21 June 2012, Athens, Greece, ATINER'S Conference Paper Series, No: CON2012-0040.

**Year 2011:**

62. Hussain Raja Rizwan, Abdulrahman Alhozaimy, Abdulaziz Al Negheimish and Rjeh Al Zaid (2011) Factors Affecting the Corrosion Rate at Intersection Points of Steel Rebar Mat in Reinforced Concrete Structures, Proceedings of *NACE International, My Corrosion-My Prevention-My Solutions*, Paper # 11015, Houston, Texas, USA.
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### **Year 2013:**

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157. Development of a new class of corrosion inhibitors for steel reinforced concrete structures; Abdulrahman Alhozaimy, Raja Rizwan Hussain, Abdulaziz Al-Negheimish and Rajeh Al-Zaid, King Abdulaziz City for Science and Technology (KACST), Project No. 13-BUI1866-02, KACST, *Long Term Comprehensive National Plan for Science, Technology and Innovation*, Riyadh, KSA, 2015.

#### **Scholarly Information:**

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- Google Scholar h-index: 12
- Scopus Author ID: 35203575600

#### **Citations:**

ISI Web of Science: 127  
 Scopus: 180  
 Google Scholar: 235

### **TEACHING EXPERIENCE:**

**\* Universities:**

University of Engineering and Technology, Lahore.  
University of Tokyo, Japan.  
King Saud University, KSA.

**\* Teaching Statement:**

My Five Step Approach: 1. Encouraging student atmosphere 2. Balancing between explaining and engaging the students 3. Making sure that the students stay with the lesson 4. Keeping the students motivated & 5. Keeping the courses updated.

**\* Subjects Taught to Undergraduate Students:**

Engineering Mechanics  
Mechanics of Solids (I&II)  
Plain and Reinforced Concrete Design (I&II)  
Steel Structures  
Construction Materials  
Project Management  
Theory of Structures (I & II)

**\*Subjects Taught to Graduate Students (M.S and Ph.D):**

Concrete Technology (CE-577)  
Non-linear Analysis and Design of RC Structures  
Sustainable Infrastructure and Urban Regeneration  
Advanced Concrete Technology