

CURRICULUM VITAE

DR. KHANJI HARIJAN

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PERSONAL BIO DATA

- **Date of Birth:** August 13, 1970
- **Marital Status:** Married (05)
- **Languages:** Sindhi, English, Urdu

QUALIFICATIONS

- **PhD. (Mechanical Engineering)**, Department of Mechanical Engineering, Mehran University of Engineering and Technology, Jamshoro, Pakistan. 2008. (January 2003 to May 2008; M.Phil leading to PhD Degree Program)
Thesis Title: “*Modelling and Analysis of the Potential Demand for Renewable Sources of Energy in Pakistan*”.
- **B.E. (Mechanical)**, Mehran University of Engineering and Technology, Jamshoro, Pakistan, 1994-95, with 1st Class 1st Position.

EMPLOYMENT HISTORY

- **Professor (BPS-21)**: December 2010 to Present, Department of Mechanical Engineering, Mehran University of Engineering and Technology, Jamshoro, Pakistan
- **Associate Professor (BPS-20)**: October 2009 to December 2010, Department of Mechanical Engineering, Mehran University of Engineering and Technology, Jamshoro, Pakistan

- **Lecturer (BPS-17&18):** August 1996 – September 2009, Department of Mechanical Engineering, Mehran University of Engineering and Technology, Jamshoro, Pakistan

TEACHING/RESEARCH EXPERIENCE

- **Teaching Experience: 20 Years**
 - Teaching Refrigeration and Air Conditioning, Energy Technology, Thermal Power Plants, Renewable & Emerging Energy Technologies, Environmental Engineering, Thermodynamics, Mechanics of Machines, Engineering Mechanics, and Strength of Materials Subjects to Undergraduate Students.
 - Teaching Hydrogen Technologies & Fuel Cells, Renewable Energy Systems, Energy Management, Clean Energy Technologies, Energy & Environment, and Natural Resources Conservation Subjects to Postgraduate (M.E.) Students.
 - Teaching Mathematical Modelling & Simulation, Energy Resources, Economics & Environment, Biomass Energy Technology, Exergy Analysis, and Advanced Thermal Power Cycles Subjects to PhD Students.
- **Post PhD Experience: 8 Years**
- **Research Experience: 14 Years**
- **Postgraduate Research Student:** January 2003 – May 2008
- **HEC Approved PhD Supervisor (Registration ID: 1-ASA-2040)**
- **Research Supervisor of**
 - Four (04) PhD Student (In Progress)
 - Ten (10) ME Students (In Progress)
 - Ten (10) ME Student (Completed)
 - 1-2 Groups, Final Year Undergraduate Students, Every Year
- **Internal Examiner**
 - One PhD Student (Mr. Hassan Ali Khan Durani)
 - ME Students

- **Member Editorial Board**
 - Science Journal of Energy Engineering
 - International Journal of Chemical and Environmental Engineering
 - Technical Journal, UET Taxila, Pakistan

- **International/National Journal Articles Reviewer**
 - Applied Energy
 - Energy
 - Energy Policy
 - International Journal of Hydrogen Energy
 - Renewable Energy
 - Renewable and Sustainable Energy Reviews
 - Mehran University Research Journal of Engineering and Technology

- **Research Papers Published**
 - Twelve (12) Research Papers Published in *ISI Indexed Impact Factor International Journals (Impact Factor = 50.007)*
 - Seven (07) Research Paper Published in International Journal
 - Eighteen (18) Research Papers Published in National Journals of International Repute
 - Twenty Two (22) Research Papers Published in Proceedings of International Conferences Held Abroad
 - Sixteen (16) Research Papers Published in Proceedings of International Conferences Held in Pakistan
 - Five (05) Research Papers Published in Proceedings of National Conferences
 - Four (04) Research Papers Presented in National and International Conferences/Seminars/Workshops/Symposia etc., but not Published in the Proceedings

- **Books Authored/Edited**
 - One (01) Book Edited Published by International Publisher
 - Six (06) Book Chapters Authored Published by International Publisher

- **Administrative and Other Experience**
 - Director, Directorate of Postgraduate Studies (March 2011 to Present), MUET, Jamshoro
 - Member/Secretary, Advanced Studies and Research Board (AS&RB), MUET Jamshoro
 - Member, Academic Council, MUET Jamshoro
 - Member, Senate, MUET Jamshoro
 - Member, Examination Vigilance Committee (EVC), MUET, Jamshoro
 - Member, Board of Faculty, Faculty of Engineering, MUET Jamshoro

- Member, Board of Studies, Department of Mechanical Engineering, MUET Jamshoro
- Convener/Focal Person, Board of Studies, Energy Systems Engineering Postgraduate Programs, MUET Jamshoro
- Member, Board of Studies, Department of Energy and Environment Engineering, Dawood University of Engineering and Technology, Karachi
- In-charge, Energy Technology Laboratory
- Member, Steering and other Committees, 3rd International Conference on “Energy, Environment and Sustainable Development” MUET Jamshoro, Pakistan, held on October 22-24, 2014.
- Organizing Secretary 2nd International Conference on “Energy, Environment and Sustainable Development” MUET Jamshoro, Pakistan, held on February 27-29, 2012
- Member, Steering and other Committees, International Conference on “Energy, Environment and Sustainable Development for Growing Economies” MUET Jamshoro, Pakistan, held on May 4-6, 2009
- Member/Secretary, Energy and Environmental Engineering Research Group, MUET, Jamshoro
- Member, Innovative Technology Research Group (ITRG), MUET, Jamshoro

- **Research Interests**

- Renewable Energy Resources and Technologies
- Socio-Economical and Environmental Aspects of Energy
- Modelling and Forecasting Energy Demand
- Diffusion of Renewable Energy Systems
- Hydrogen and Fuel Cell Applications
- Combustion and Emissions of IC Engines
- Energy Policy and Planning
- Energy Conservation and Management

RESEARCH/CONSULTANCY PROJECTS

- **Biomass Resource Utilization for Clean Energy Production and Socio-Economic Development in Rural Areas**, funded under HEC-BC Knowledge Economy Partnership Program, October 2014 (PI).
- **Sustainable Energy System: An Integrated Model and Decision Aid Framework for Electricity Generation to Support Policy Making Decisions** (Project ID No831) funded by USAID under the Competitive Grants Program (CGP) of the Pakistan Strategy Support Program (PSSP), July 2014 (PI).

COUNTRIES VISITED

- Australia
- Italy
- Malaysia
- North Cyprus
- UAE
- UK

MEMBERSHIP

- World Society of Sustainable Energy Technologies (WSSET)
- International Association of Hydrogen Energy (IAHE)
- Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEES)
- Global Village Energy Partnership (GVEP) International
- International Association of Computer Science and Information Technology (IACSIT)
- Pakistan Engineering Council, Islamabad, Pakistan
- Institute of Engineers Pakistan (IEP)
- Pakistan Renewable Energy Society (PRES)
- National Academy of Young Scientists (NAYS) Pakistan
- Mehran University Alumni Association, Jamshoro, Pakistan
- Alternate Energy Committee, IEP Karachi, Pakistan

MERIT AWARDS/DISTINCTIONS

- Received *BEST UNIVERSITY TEACHER AWARD (BUTA)* 2012-2013, HEC, Government of Pakistan, Islamabad, Pakistan, December 23, 2014.
- Received *BEST RESEARCH PAPER AWARD*, Under 3RD HEC Outstanding Research Awards, 2010-2011, HEC, Government of Pakistan, Islamabad, Pakistan, September 25, 2013.
- Received *BEST RESEARCH PAPER AWARD*, Under 2ND HEC Outstanding Research Awards, 2008-2009, HEC, Government of Pakistan, Islamabad, Pakistan, October 17, 2011.
- Received Mehran University Alumni Association (MUAA) *Excellence Achievement Award 2011*

COMPUTER LITERACY

- MS Word, MS Excel, MS PowerPoint, Minitab, MATLAB, LEAP, RETScreen, HOMER, EES etc.

TRAINING/COURSES/LECTURERS ATTENDED

1. Four Days Workshop on “Capacity Building for Doctoral Programs”, HEC, BC 12-14 May 2015, HEC, Islamabad, Pakistan.
2. One Day Short Course on “Ore Body Modelling & Computer Aided Mine Design”, Organized by Mining Engineering Department, Mehran University of Engineering and Technology, Jamshoro, Pakistan in Collaboration with Hacettepe University, Ankara, Turkey, January 18, 2012.

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED

INTERNATIONAL CONFERENCES HELD ABROAD

1. Two Days “4th International Conference on Environmental Science and Development (ICESD)”, **Dubai, UAE**, January 19-20, 2013.
2. Three Days “10th International Conference on Clean Energy (ICCE-2010)”, **Famagusta, North Cyprus**, September 15-17, 2010.
3. One Week Congress “*World Renewable Energy Congress and Exhibition X*”, Organized by World Renewable Energy Congress/Network UK, Scottish Exhibition & Conference Centre, **Glasgow, Scotland, UK**, July 19-25, 2008.
4. Five Days International Conference “*Renewable Energy for Sustainable Development in the Asia Pacific Region*”, Esplanade Hotel Fremantle, Western Australia, Organized by Environmental Technology Center, Murdoch University, **Perth, Western Australia**, February 4-8, 2007.
5. One Week Congress “*World Renewable Energy Congress and Exhibition IX*”, Organized by World Renewable Energy Congress/Network UK, Host Organization, ABITA Interuniversity and Research Center, University of Florence, **Florence, Italy**, August 19-25, 2006.

INTERNATIONAL CONFERENCES/SEMINARS/WORKSHOPS HELD IN PAKISTAN (Last 05 Years)

1. Two Days Workshop on “*Enabling Frameworks for Deploying Micro-grids: Lessons from Pakistan*”, organized by Smart Villages Initiative (SVI) with the support of Rural Support Programmes Network (RSPN) and the Pakistan

Academy of Sciences, Pakistan Academy of Sciences, G-5/2, **Islamabad**, Pakistan, 6 October 2015.

2. Three Days Workshop on “Doctoral Capacity Building Program”, British Council (BC) Pakistan and Higher Education Commission (HEC), Higher Education Commission, **Islamabad**, Pakistan, 12-14 May 2015.
3. Three Days 3rd International Conference on “Energy and Environment: Innovation, Research & Sustainability 2015” (ICEE’15), Department of Energy and Environment Engineering, Quaid-E-Awam University of Engineering, Sciences and Technology, Nawabshah, March 12-14, 2015.
4. One Day Researcher Partners Event on “*The UK and Pakistan: Increasing Investment in Research for Higher Education*”, British Council (BC) Pakistan and Higher Education Commission (HEC) Pakistan, Higher Education Commission, **Islamabad**, Pakistan, 27 January 2015.
5. Two Days Workshop on “*Integrated Energy Modeling*”, Jointly Organized by the Energy Wing (Planning Commission) and PSSP, Serena Hotel, **Islamabad**, Pakistan, January 28-29, 2015.
6. Three Days 3rd International Conference on “Energy, Environment and Sustainable Development”, organized by Mehran University of Engineering & Technology, **Jamshoro**, Pakistan, October 22-24, 2014.
7. Three Days *Second International Multi Topic Conference (IMTIC '12)*, Mehran University of Engineering & Technology, **Jamshoro**, Pakistan, February 11-13, 2014.
8. Three Days *Third International Multi Topic Conference (IMTIC '13)*, Mehran University of Engineering & Technology, **Jamshoro**, Pakistan, December 18-20, 2013.
9. Three Days 1st International Coal Conference (ICC2013), Mehran University of Engineering & Technology, **Jamshoro**, Pakistan, November 07-09, 2013.
10. Three Days *Second International Multi Topic Conference (IMTIC '12)* Jointly Organized By Mehran University of Engineering & Technology, Pakistan and Aalborg University Esbjerg, Denmark, at Mehran University of Engineering & Technology, **Jamshoro**, Pakistan, March 28-30, 2012.
11. Three Days 2nd International Conference on “Energy, Environment and Sustainable Development”, organized by Mehran University of Engineering & Technology, **Jamshoro**, Pakistan, February 27-29, 2012.
12. Three Days 2nd International Conference on “Energy and Environment – Role of Energy Resources in Sustainability of Environment”, Department of Energy and

Environment Engineering, Quaid-E-Awam University of Engineering, Sciences and Technology, **Nawabshah**, January 16-18, 2012.

NATIONAL CONFERENCES/SEMINARS/WORKSHOPS (Last 05 years)

1. One Day Pre Conference Symposium on “Thar Coal: Utilization Issues and Possible Solutions” organised by the Mehran University of Engineering and Technology and University of Sindh, at Mehran University of Engineering and Technology, **Jamshoro**, Pakistan, July 09, 2013.
2. Two Days National Conference on “Solutions for Energy Crisis in Pakistan”, Islamabad Policy Research Institute, and Hanns Seidel Foundation (HSF), **Islamabad**, Pakistan, May 15-16, 2013.
3. One Day Seminar on “Coal Gasification”, Mehran University of Engineering and Technology, Jamshoro, Pakistan under INSPIRE Project, British Council & HEC, March 01, 2013.
4. Three Days Third National Conference on “*Energy Resources of Pakistan: Potential, Utilization, Conservation and Impact on Environment*”, Department of Energy and Environment Engineering, Quaid-E-Awam University of Engineering, Sciences and Technology, **Nawabshah**, March 18-20, 2010.
5. One Day Seminar on “*Energy Management*”, organized by the Department of Electrical Engineering, Mehran University of Engineering and Technology, **Jamshoro**, Pakistan, April 2010.
6. One Day Seminar on “*Finite Element Method (FEM) & Computational Fluid Dynamics (CFD)*”, ASME students chapter, Department of Mechanical Engineering, MUET **Jamshoro**, April 03, 2010.
7. One Day Workshop on *Nanotechnology* Organized by Department of Electrical Engineering, MUET, **Jamshoro**, November 02, 2010.

RESEARCH PAPERS/PUBLICATIONS

INTERNATIONAL JOURNAL PUBLICATIONS

1. Bhutto, A. W., **Harijan, K.**, Qureshi, K., Bazmi, A. A., and Bahadori, A., “Perspectives for the production of ethanol from Lignocellulosic feedstock – A case study”, *Journal of Cleaner Production*, Vol. 95, pp. 184-193, 15 May 2015 (**IF = 3.590**).

2. Memon, A. G., Memon, R. A., **Harijan, K.**, and Uqaili, M. A., “ Parametric Based Thermos-environmental and Exergeoeconomic Analyses of a Combined Cycle Power Plant with Regression Analysis and Optimization” *Energy Conversion and Management*, Vol. 92, pp. 19-35, March 2015 (**IF = 3.590**).
3. **Harijan, K.**, and Uqaili, M. A., and Mirza, U. K., “Assessment of Solar PV Power Generation Potential in Pakistan”, *Journal of Clean Energy Technologies*, Vol. 3, No. 1, pp.54-56, 2015.
4. Mengal, A., Uqaili, M. A., Harijan, K., and Memon, A. G., (2014), “Competitiveness of Wind Power with the Conventional Thermal Power Plants Using Oil and Natural Gas as Fuel in Pakistan”, *Energy Procedia*, Vol. 52, pp. 59-67.
5. Memon, A. G., Memon, R. A., **Harijan, K.**, and Uqaili, M. A., Thermo-Environmental Analysis of an Open Cycle Gas Turbine Power Plant with Regression Modeling and Optimization”, *Journal of the Energy Institute*, Vol. 87, Issue 2, pp. 81-88, May 2014 (**IF = 0.469**).
6. Bhutto, A. W., Qureshi, K., **Harijan, K.**, Zahedi, G., and Bahadori, A., “Strategies for the Consolidation of Biologically Mediated Events in the Conversion of Pre-treated Lignocellulose into Ethanol”, *RSC Adv.*, Vol. 4, pp. 3392-3412, DOI: 10.1039/C3RA44020F, 2014 (**IF = 3.708**).
7. Abro, R., Chen, X., **Harijan, K.**, Dhakan, Z. A., and Ammar, M., “A Comparative Study of Recycling of Used Engine Oil Using Extraction by Composite Solvent, Single Solvent, and Acid Treatment Methods”, *ISRN Chemical Engineering*, Vol. 2013, Article ID 952589, 5 pages, 2013.
8. Memon, A. G., **Harijan, K.**, Uqaili, M. A., and Memon, R. A., “Thermo-Environmental and Economic Analysis of Simple and Regenerative Gas Turbine Cycles with Regression Modeling and Optimization”, *Energy Conversion and Management*, Vol. 76, pp. 852-864, 2013 (**IF = 3.590**).
9. **Harijan, K.**, and Uqaili, M. A., “Potential of Biomass Conservation through Dissemination of Efficient Cook Stoves in Pakistan”, *APCBEE Procedia*, Vol. 5, pp. 358-362, 2013.
10. Soomro, M.I., Memon, R. A., and **Harijan, K.**, “Energy Savings and CO₂ Reduction through Solar Water Heater Technology in Sindh Pakistan”, *Applied Mechanics and Materials* (ISSN 1660-9336), pp. 330-333, 2013.
11. **Harijan, K.**, Uqaili, M. A., Memon, M. D. and Mirza, U.K., “Forecasting the Diffusion of Wind Power in Pakistan”, *Energy*, Vol. 36, Issue 10, pp. 6068-6073, October 2011 (**IF = 4.149**).

12. Leghari, R. H., **Harijan, K.**, and Baloch, M. U., “Utilization Prospects of Ocean Energy in Balochistan”, *International Journal of Chemical and Environmental Engineering*, Vol. 2, No. 4, pp. 292-294, August 2011.
13. **Harijan, K.**, Uqaili, M. A., Memon, M. D. and Mirza, U.K., “Potential of On-Shore Wind Power in the Coastal Areas of Balochistan, Pakistan”, *Wind Engineering*, Vol. 34, No. 2, pp. 167-179, 2010.
14. Mirza, U.K., Ahmad, N., **Harijan, K.**, and Majeed, T., “A Vision of Hydrogen Economy in Pakistan”, *Renewable and Sustainable Energy Reviews*, Vol. 13, Issue 5, pp. 1111-1115, June 2009 (**IF = 5.510**).
15. Mirza, U.K., Ahmad, N., **Harijan, K.**, and Majeed, T., “Identifying and Addressing Barriers to Renewable Energy Development in Pakistan”, *Renewable and Sustainable Energy Reviews*, Vol. 13, Issue 4, pp. 927-931, May 2009 (**IF = 5.510**).
16. **Harijan, K.**, Uqaili, M. A., Memon, M. D., and Mirza, U.K., “Assessment of Centralized Grid Connected Wind Power Cost in Coastal Area of Pakistan”, *Renewable Energy*, Vol. 34, Issue 2, pp. 369-373, February 2009 (**IF = 3.361**).
17. **Harijan, K.**, Memon, M.D., Uqaili, M.A., and Mirza, U.K., “Potential Contribution of Ethanol Fuel to the Transport Sector of Pakistan”, *Renewable and Sustainable Energy Reviews*, Vol. 13, Issue 1, pp. 291-295, January 2009 (**IF = 5.510**).
18. Mirza, U.K., Ahmad, N., Majeed, T., and **Harijan, K.**, “Hydropower Use in Pakistan: Past, Present and Future”, *Renewable and Sustainable Energy Reviews*, Volume 12, Issue 6, pp. 1641-1651, August 2008 (**IF = 5.510**).
19. Mirza, U.K., Ahmad, N., Majeed, T., and **Harijan, K.**, “Wind Energy Development in Pakistan”, *Renewable and Sustainable Energy Reviews*, Vol. 11, Issue 9, pp. 2179–2190, August 2007 (**IF = 5.510**).

NATIONAL JOURNAL PUBLICATIONS (Last 05 years)

1. Rajper, M. A., Memon, A. G. and **Harijan, K.** Energy and Exergy Analysis of 210 MW Jamshoro Thermal Power Plant”, *Mehran University Research Journal of Engineering and Technology*, Vol. 35, No. 2, pp.265-274, Jamshoro, Pakistan, April, 2016.
2. Memon, A. G., Memon, R. A., and **Harijan, K.**, “Thermodynamic Analysis of Simple Gas Turbine Cycle with Multiple Regression Modeling and Optimization”, *Mehran University Research Journal of Engineering and Technology*, Vol. 33, No. 3, pp.294-303, Jamshoro, Pakistan, July, 2014.

3. Memon, A.G., **Harijan, K.**, Shah, S.F., Memon, R.A., and Uqaili, M.A., “Exergy Analysis of 144 MW Combined Cycle Power Plant Kotri Pakistan”, *Sindh University Research Journal (Science Series)*, Vol. 45, No. 1, pp. 107-112, Jamshoro, Pakistan, March 2013.
4. Abbasi, A. F., Pathan, D. M., Memon, A. A., Memon, M., and **Harijan, K.**, “Modelling and Simulation of Fluid Flow and Heat Transfer in Roto-Stator Disc System”, *Sindh University Research Journal (Science Series)*, Vol. 44, No. 4, pp. 745-752, Jamshoro, Pakistan, December 2012.
5. Shah, A. K., Syed, F. S., Memon, A. R., Shah, F. A., **Harijan, K.**, “Efficient Coupling Optimization of Coagulants with the Adsorbent for Depollution of Dyes Manufacturing Effluent”, *Sindh University Research Journal (Science Series)*, Vol. 44, No. 4, pp. 605-608, Jamshoro, Pakistan, December 2012.
6. Tunio, A. H., **Harijan, K.**, and Soomro, S. A., “Air Injection Low Temperature Oxidation Process for Enhanced Oil Recovery from Light Oil Reservoirs”, *Mehran University Research Journal of Engineering and Technology*, Vol. 29, No. 2, pp.337-346, Jamshoro, Pakistan, April, 2010.

INTERNATIONAL CONFERENCE (HELD ABROAD) PROCEEDINGS (Last 05 years)

1. Uqaili, M. A., Hussain, N., **Harijan, K.**, and Mengal, A. “Supply Side Initiatives for Overcoming Electricity Crisis in Pakistan”, in 14th International Conference on Sustainable Energy Technologies - SET2015. 2015. Nottingham, UK.
2. Hussain, N., Uqaili, M. A., **Harijan, K.**, and Valasai, G. “Pakistan's Energy System: Integrated Energy Modeling and Formulation of National Energy Policies’, in 14th International Conference on Sustainable Energy Technologies - SET2015. 2015. Nottingham, UK.
3. Mengal, A., Uqaili, M. A., and **Harijan, K.**, “Competitiveness of Wind Power with the Conventional Thermal Power Plants Using Oil and Natural Gas as Fuel in Pakistan”, *Proceedings, 2013 International Conference on Alternative Energy in Developing Countries and Emerging Economies (2013 AEDCEE)*, Selected for publication in *Energy Procedia*.
4. **Harijan, K.**, and Uqaili, M. A., "Potential of Biomass Conservation Through Dissemination of Efficient Cook Stoves in Pakistan", *Proceedings, 4th International Conference on Environmental Science & Development (ICESD)*, Dubai, UAE, January 19-20, 2013.

5. Shah, S. F. A., Shah, A. K., Mehdi, A., Memon, A. A., **Harijan, K.**, and Ali, Z.M., “Analysis and treatment of industrial wastewater through chemical coagulation-adsorption process-A case study of Clariant Pakistan limited”, American Institute of Physics (AIP) Conference Proceedings 1453, 353 (2012); doi: 10.1063/1.4711199.
6. **Harijan, K.**, and Uqaili, M. A., “Estimation of Hydrogen Production from Wind Energy in Pakistan”, Proceedings, 10th International Conference on Clean Energy (ICCE-2010), Famagusta, North Cyprus, September 15-17, 2010.
7. Leghari, R. H., Uqaili, M. A., and **Harijan, K.**, “Exploiting the Potential of Tidal Energy in Pakistan”, Proceedings, 10th International Conference on Clean Energy (ICCE-2010), Famagusta, North Cyprus, September 15-17, 2010.

INTERNATIONAL CONFERENCE (HELD IN PAKISTAN) PROCEEDINGS
(Last 05 years)

1. **Harijan, K.**, “*Developing an Enabling Framework for Decentralised Micro-grids – Lessons from Pakistan*”, Paper presented in the Workshop on Enabling Frameworks for Deploying Micro-grids: Lessons from Pakistan, organized by Smart Villages Initiative (SVI) with the support of Rural Support Programmes Network (RSPN) and the Pakistan Academy of Sciences, Pakistan Academy of Sciences, G-5/2, **Islamabad**, Pakistan, 6 October 2015.
2. **Harijan, K.**, “*LEAP Overview and Comparison to TIMES/MARKAL*”, Paper presented in Workshop on *Integrated Energy Modeling*, Jointly Organized by the Energy Wing (Planning Commission) Government of Pakistan and Pakistan Strategy Support Program (PSSP), Serena Hotel, **Islamabad**, Pakistan, January 28-29, 2015.
3. Mengal, A., **Harijan, K.**, Uqaili, M. A., and Husain, N.,” Electricity Demand and Emissions under Different Policy Scenarios for Pakistan”, in 3rd International Conference on Energy, Environment and Sustainable Development, Mehran University of Engineering and Technology, Jamshoro, Pakistan, October 22-24, 2014.
4. Uqaili, M A, **Harijan, K.**, and Soomro, M I., “Forecasting the Diffusion of Solar Water Heating Systems in Residential Sector of Pakistan”, Proceedings, *Second International Conference on Energy, Environment and Sustainable Development*, Mehran University of Engineering & Technology, Jamshoro, Pakistan, February 27-29, 2012.
5. **Harijan, K.**, Uqaili, M A and Mirza, U. K., “Potential of Hydrogen Production from Solar Energy in Pakistan – A Preliminary Investigation”, Proceedings,

Second International Conference on Energy, Environment and Sustainable Development, Mehran University of Engineering & Technology, Jamshoro, Pakistan, February 27-29, 2012.

6. Leghari, R. H., Uqaili, M. A., Baloch, M.U., and **Harijan, K.**, “Economics of Pilot Tidal Power Plant in Pakistan”, Proceedings, *Second International Conference on Energy, Environment and Sustainable Development*, Mehran University of Engineering & Technology, Jamshoro, Pakistan, February 27-29, 2012.

NATIONAL CONFERENCE PROCEEDINGS (Last 05 years)

1. Uqaili, M. A., and **Harijan, K.**, “Energy Crises in Pakistan: Consequences and Solutions”, Presented at Pre Conference Symposium on “Thar Coal: Utilization Issues and Possible Solutions” organised by the Mehran University of Engineering and Technology and University of Sindh, at Mehran University of Engineering and Technology, **Jamshoro**, Pakistan, July 09, 2013.
2. **Harijan, K.**, “Renewable Energy in Pakistan: Potential and Prospects”, National Conference on “Solutions for Energy Crisis in Pakistan”, Islamabad Policy Research Institute, and Hanns Seidel Foundation (HSF), **Islamabad**, Pakistan, May 15-16, 2013, pp. 21-38.
3. Leghari, R H., Uqaili, M. A., and **Harijan, K.**, “Potential of Tidal Power in Pakistan”, Proceedings, Third National Conference on “*Energy Resources of Pakistan: Potential, Utilization, Conservation and Impact on Environment*”, Quaid-E-Awam University of Engineering, Sciences and Technology, **Nawabshah**, March 18-20, 2010.

BOOKS AUTHORED/EDITED (Last 05 years)

1. Uqaili, M. A., and **Harijan, K.** (Eds.), “*Energy, Environment and Sustainable Development*”, Springer-Verlag Berlin Heidelberg, ISBN 978-3-7091-0108-7, 2012.
2. Uqaili, M. A., and **Harijan, K.**, “*Renewable Energy Resources and Utilization- A Developing Country Perspective*”, Springer Verlag, Hamburg, Germany (In Press). ISBN: 978-3-211-99428-3.
3. Mirza, U. K., **Harijan, K.**, and Majeed, T., “Status and Need of Energy Education: The Case of Pakistan”, Book Chapter in Uqaili and Harijan (Eds.), *Energy, Environment and Sustainable Development*, Springer-Verlag/Wien, 2012, pp.39-47.
4. Leghari, R. H., Uqaili, M. A., and **Harijan, K.**, “Technologies for Harnessing

Tidal Power in Pakistan”, Book Chapter in Uqaili and Harijan (Eds.), *Energy, Environment and Sustainable Development*, Springer-Verlag/Wien, 2012, pp.111-119.

5. Abro, R. S., Uqaili, M. A., Kumar, S., **Harijan, K.**, and Yaseen, M., “Practical Applications of Solar Energy at Desert of Tharparkar District”, Book Chapter in Uqaili and Harijan (Eds.), *Energy, Environment and Sustainable Development*, Springer-Verlag/Wien, 2012, pp.141-146.
6. Valasai, G., Uqaili, M.A., Memon, H.R. and **Harijan, K.**, “Forecasting Electricity demand for Agricultural and Services Sector of Pakistan”, Book Chapter in Uqaili and Harijan (Eds.), *Energy, Environment and Sustainable Development*, Springer-Verlag/Wien, 2012, pp.59-67.
7. Mahmood A and **Harijan K.**, “Utilizing Solar Thermal Energy in Textile Processing Units”. Book Chapter in Uqaili and Harijan (Eds.), *Energy, Environment and Sustainable Development*, Springer-Verlag/Wien, 2012, pp.121-130.