

CV

SHAHBAZ ABBAS

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Google Scholar:

<https://scholar.google.com/citations?user=vio1EPwAAAAJ&hl=en&authuser=1>



OBJECTIVE

I am a researcher in sustainable development, emphasizing on modelling techniques in terms of environmental, economic, industrial, social and policy context. Recently, I have accomplished a joint PhD degree in Civil Engineering and Sustainable Energy Management. I have acquired the abilities to serve as a researcher, academician and a consultant at any institution focusing environmental and energy sustainability. Currently, I am looking for a position at an international institution offering a conducive research environment particularly addressing sustainability challenges.

SKILLS AND STRENGTHS

Research Skills: Systems Dynamics, Life Cycle Assessment, Econometrics, Circular Economy, Sustainable Energy Systems

Software Skills: Vensim, Simapro, Brightway, Aspen, R, AIMMS, SMILE, HOMER, MATLAB, Python

Organizational Skills: Task Perseverance, Adaptive

EDUCATION

Doctor of Philosophy – 2021

Civil Engineering – Sustainable Energy Management

Chung Yuan Christian University, Taiwan – Prince of Songkla University, Thailand

Master of Science – 2015

Engineering Management

Capital University of Science and Technology, Islamabad, Pakistan

Bachelor of Science - 2008

Engineering Sciences

Mohammad Ali Jinnah University, Karachi, Pakistan

PROFESSIONAL EXPERIENCE

- ✓ Worked as a **Lecturer** at Capital University of Science & Technology, Islamabad, Pakistan from Sep 2011 – Jan 2018.

Roles and Responsibilities:

- ✓ Preparing and delivering lectures for the given courses at the college of engineering
- ✓ I used to prepare and grade student's assignments, quiz and term examinations according to program and course learning objectives
- ✓ I planned, organized and conducted research activities in the area of sustainable development management
- ✓ I also served for administrative activities such as semester wise courses allocation, time table formation, batch advisory sessions, board of faculty meetings, board of studies meetings and program curriculum review committee meetings
- ✓ I participated in preparing plan, structure and curriculum for the new graduate programs along with their promotional materials
- ✓ I used to perform outdoor activities with my students such as field visits in order to experience the applied research
- ✓ I developed research plans for the research projects to outline research procedures to be followed
- ✓ I conducted research utilizing institution library, archives and collections and other sources of information to collect, record, analyze and evaluate facts
- ✓ I prepared reports of the completed research projects for publication in technical journals, for presentation to agency requesting project, or for use in further applied theoretical research activities
- ✓ I used to liaison and coordinate with the registered post graduate scholars of the faculty in managing their research dissertations and publications.

2. Worked as **Internee** at Ministry of Information Technology, Islamabad, Pakistan
May 2009 – May 2010

Roles and Responsibilities:

To plan & execute activities as internee with Director (International Coordination Unit), delivering presentations on Green Telecom Policies based on the standards developed by ITU Headquarters, Geneva, Switzerland

3. Working as a **Reviewer** with the journal of **Renewable and Sustainable Energy Reviews**
Sep 2016 – Present

Roles and Responsibilities:

Reviewing relevant articles focusing interdisciplinary issues on energy systems.

VOLUNTEER WORK

- ✓ Participated voluntarily in the University Social Responsibility, Mini Camp, Dec 19-20, 2020, organized by the Office of International Association (OIA), Chung Yuan Christian University, Taiwan
- ✓ Participated voluntarily 3 times in the Annual Charity Day, 2018, 19, 20, as a country representative and as a member of International Student Association (ISA)
- ✓ During my stay at the Capital University of Science and Technology during 2011 -2017, I was involved in the following volunteer activities:
 - Served as a convener of Volunteer in Service (VIS) Program at the university. With the permission of competent authorities, I get it approved that every graduating has to participate in at least one volunteer activity in order to get graduated. Under the platform of VIS, I organized annual university cleaning day, blood donation camps with the collaborations of NGOs, distribution of brochures at the traffic signals by the students on traffic management and noise pollution awareness, charity and donation activities, gender issues.
 - I used to organize and conduct a number of on hand trainings on SPSS, Python, M plus, R, MATLAB, how to write an impressive research proposal and publish in the reputed journals, national and international conferences such as IEEE international conference on emerging technologies 2013, Entrepreneurship in the European perspective 2014, International conference on emerging trends in management 2015, CUST business research conference 2016, International CUST business research conference 2017 in collaboration with the institute of logistics management, Bremen University Germany. Water for Future 2019, Taipei, Taiwan. In addition, career counseling session comprising of 8 modules for the graduating students, job expos and alumni reunions. Consistently, I organized 5 annual music concerts at the university.

SEMINARS, WORKSHOPS & CONFERENCES

Date	Event
Oct 28-29, 2020	Participated in the 2 days' workshop titled, " Get in the loop ", organized by the Center of Green Economy, Chung-Hua Institution of Economic Research, Taiwan
Oct 20, 2020	Attended a seminar on, " Sustainability and circularity in the textiles value chain " organized by UNEP (UN environment program)
March 21-25, 2018	Training on Global warming mitigation and adaptation by balancing sustainable energy management - 2018 , organized by Thailand International Development Cooperation agency, Ministry of Foreign Affairs,
February 23, 2017	Attended a seminar on " Energy efficiency initiatives "
September 26, 2012	Attended a short course (0.5 Credit) on " Energy audit tools and techniques "
June 20-21, 2012	Attended a two days' workshop (0.5 Credit) on " Working with People of different behaviors and cultures & personal leadership "
April 09, 2011	Attended a one day workshop on " Research Methodology "

RESEARCH THESES AND PROJECTS

PhD Thesis

Sustainable production and supply chain optimization using resource-energy-water nexus for the textile industry

Master's Thesis

Analysis of consumer attitudes towards renewable energy operated backup systems in Pakistan

Undergraduate Final Year Project

Face recognition systems using digital image processing

Outsource Thesis

Significance of relational values in order to sustain ecosystem services and biodiversity

PUBLICATIONS

Journal

- ✓ Shahbaz Abbas, Lin Han Chiang Hsieh, Kuaanan Techato, Supply chain integrated model in order to synergize the energy system of textile industry from its resource waste, *Energy*, 229 (2021), p. 120754, <https://doi.org/10.1016/j.energy.2021.120754>
- ✓ Shahbaz Abbas, Lin Han Chiang Hsieh, Kuaanan Techato, Juntakan Taweekun, Sustainable production using a resource-energy-water nexus for the Pakistani textile industry, *Journal of Cleaner Production*, 271 (2020), p. 122633, <https://doi.org/10.1016/j.jclepro.2020.122633>
- ✓ Shahbaz Abbas, Dr. Abdul Baseer Qazi, Adoption of PV energy storage system: A consumer's perspective, *Journal of Technology Management*, Sep 30, 2018

Conference

- ✓ Shahbaz Abbas, Analysis of experimental models for circular economy in order to optimize sustainable manufacturing, 25th Annual Green Chemistry & Engineering Conference, 2021 theme Sustainable Production to Advance the Circular Economy, June 14 – 18, 2021, Washington DC, USA
- ✓ Shahbaz Abbas, Chiang Hsieh, "A material flow perspective in the context of urban metabolism and Sustainability", International symposium on developments in civil engineering, Chung Yuan Christian University, Taiwan, November 30, 2020.
- ✓ Shahbaz Abbas, Circular economy and supply chain optimization for sustainable production, 4th Sustainable Process Integration Laboratory Scientific Conference: Energy, Water, Emission & Waste in Industry and Cities, organized by SPIIL, NETME Centre, Faculty of Mechanical Engineering, Brno University of Technology, November 18-20, 2020 at Brno, Czech Republic
- ✓ Shahbaz Abbas, Dr. Kuaanan Techato, Hybrid renewable energy model and the industrial wastewater management: A study on the Textile Industries of Pakistan, Paper Published in Proceedings, International Conference on Assuring Sustainability with University Research, January 23-25, 2018, Hat Yai, Thailand

- ✓ Shahbaz Abbas, Urban metabolism using life cycle approach incorporating renewable energy resources in the city of Gwadar: The context of CPEC, Paper Published in Proceedings Vol 1, International Conference on Sustainable Development in Civil Engineering, organized by Mehran University of Engineering and Technology, November 23-25, 2017, Jamshoro, Pakistan.

Book Chapters

- ✓ **Shahbaz Abbas, Anthony Halog (2021)**
Analysis of Pakistani textile industry: Recommendations towards circular and sustainable production, Circular Economy –Assessments and case studies, edited by Subramanian Senthilkannan Muthu, Springer-Nature Publications, https://link.springer.com/chapter/10.1007/978-981-16-3698-1_3
- ✓ **Shahbaz Abbas (2015)**
Creativity and innovation paradigm, Venture Creation: Business success secrets revealed (pp. 19-21), edited by Entrepreneurship Development Institute – EDI Publishers Pakistan

HONORS & AWARDS

Dr. Calvin Wang International Scholarship 2019: Recipient of Dr. Calvin Wang Scholarship for the international students' worth of 50,000 NTD based on the outstanding performance in the first year of PhD degree, Chung Yuan Christian University, Taoyuan, Taiwan. 2019

PhD Scholarship: Recipient of PhD scholarship including tuition fee waiver, accommodation and monthly stipend offered by the Department of Environmental Engineering, Chung Yuan Christian University, Taoyuan, Taiwan 2018 - 2020

Postgraduate Research Fund: Recipient of research fund of 500 US\$ for the execution of research thesis by CUST Postgraduate Research Scholarship in collaboration with Higher Education Commission of Pakistan. 2014

Graduate Scholarship: Recipient of 100% scholarship by the Capital University of Science and Technology for the completion of Master Degree under the faculty development program in 2012

Undergraduate Scholarship: Recipient of a scholarship of amount 1000US\$ by the local government of Punjab, Pakistan for the completion of Bachelor of Science Degree Final Year Project in 2007

Sustainable Ecosystem and Green Circular Economy Competition 2018 Thailand: Runner-up in the sustainable supply chain and green circular economy competition in Thailand by proposing a model for the reuse of vehicle rubber tires (a major source of dengue larva production) to transform them into labor shoes

LANGUAGES

Urdu, Arabic, English (Valid IELTS Score: 7.0), Mandarin

PROFESSIONAL MEMBERSHIP

Pakistan Engineering Council

American Chemical Society

International Society for Industrial Ecology

INTERSTS/HOBBIES

Travelling, Cooking, Netflix, Blogging, Fitness, Reading