## Paper ID: 136-Peer to Peer Energy Trading Demonstrator Using Blockchain

Dr. Ameni is a Scientist at Qatar Environment and Energy Research Institute (QEERI) since 2020 where she leads Energy Demand & Trade project. She has led several innovative and market-driven projects. She is pioneering the development of a Community Solar Ecosystem for Qatar based on Blockchain technology. In 2023, she received "the Innovative Entrepreneurship Program Award for Startup Funding Program" and will launch a startup "Q-Green" to foster the development of AI-based technologies for the energy sector. She served as PI for many QNRF funded projects. Her primary research interests are in solar energy management and artificial intelligence-based smart systems. She has completed several studies on solar PV adoption, techno-economic modeling of energy systems, and Blockchain-based energy trading applications. These studies have generated operational software prototypes, publications in high impact journals, several book chapters, and patent applications.

Recently, she has been nominated for the "UNESCO-Al Forzan International Prize for the Promotion of Young Scientists, cycle 1". She has been elected as IEEE YP Chair for Qatar section and is an active member of the Qatar Women in Engineering Association in Qatar (QWEA) as well as for the Alumni association. Dr. Ameni Boumaiza received a Full Engineer, Master and Ph.D. scholarship award from the French and Tunisian Ministry of Higher Education and Research prior to joining HBKU/QEERI. She earned her Ph.D. in Computer Science and Artificial Intelligence in 2013 funded by the EUROPEAN SCANPLAN Project as a joint collaboration between the French Institute for Research in Computer Science and Automation INRIA, the University of Lorrain, Nancy 2 in France and the Computer Vision Center CVC, University of Barcelona, Spain. In France, she has held various positions in academia and industry. She continued to work at the CEA-LIST Institute of the French Alternative Energies and Atomic Energy Commission and the Vision and Content Engineering Lab LVIC in Saclay, Paris, France. She has a strong background in artificial intelligence, renewable energy systems, computer vision, machine learning and robotics and has worked closely with laboratories and companies such as CEA-LVIC, INRIA, and Thales. She supervised complex technical BI projects and worked directly with global engineering and research teams to develop business intelligence solutions. She also identified and assessed new technologies prior to software implementation. "Dr. Ameni is a self-motivated, reliable, and hard-working Women, Scientist, Engineer and Entrepreneur, whose focus is to keep her entrepreneurial spirit alive as the organization she works for grows".