Professor Kauser Jahan remembers the first Rowan Engineering Commencement ceremony

Professor Kauser Jahan was born in Dhaka, Bangladesh but grew up in Pakistan, Nepal and Bangladesh. Her mother was a Mathematics Professor while her father had an MA in economics and served in the Intelligence Bureau of Pakistan and then Bangladesh. She was the first female in Bangladesh to take the top rank in 1976 for her Secondary School Certificate Exam (this is equivalent to a standardized national exam after 10th grade). She was also the National debate Champion in the country in 1977 when she was in her eleventh grade. She completed her Bachelors at Bangladesh University of Engineering and Technology, Dhaka, Bangladesh, in 1983 and worked for Harza International until 1986. She came to the USA in 1986 to complete a Masters (University of Arkansas, Fayetteville) and PhD (University of Minnesota, Twin Cities). After the completion of her PhD Kauser worked for the Nevada Division of Environmental Protection in the Surface Water Quality Division.

Kauser arrived at Rowan in 1996, the second Civil and Environmental Engineering (CEE) professor. She currently serves as the Department Head, overseeing faculty/staff and students (undergrad and graduate). She is heavily invested in recruiting outstanding students and ensuring that all CEE students have a joyful quality experience that leads to success after graduation.

I come from a family of engineers especially famous bridge builders. My maternal grandfather was a civil engineer (famous for the Dawki suspension bridge in Gawhati, India). I wanted to follow in his footsteps. I also come from a family of educators. My maternal uncle JRC (A CEE Medallion award is named after him) was instrumental in inspiring me to become a professor. JRC is also a famous bridge builder (Padma and Jamuna Bridges in Bangladesh). While I did not become a bridge engineer, these family members taught me the lasting impressions a civil engineer can have on society. As a professor you get to change lives. I live by “Teaching today touches tomorrow”.

I came to Rowan because we wanted to move to the East Coast where we had family and friends. I also wanted a teaching career. I arrived four months pregnant at Rowan in 1996. It was hard but also exhilarating to work on a brand-new program. I loved the fact that I was able to setup my environmental lab single handedly and was a major part of recruiting all the faculty and students to build the program. I also learned that engineering lacked diversity both in faculty and students. As such, I secured funding to establish the Attracting Women into Engineering program.2

There were some harsh realities also--work life balance was very difficult due to lack of childcare on campus. No lactation rooms or stopping your tenure clock because you gave birth. Teaching engineering clinics at 8 AM when my children were young was challenging. Yet, I was
able to manage my career successfully by working almost three shifts a day (seems like I am still at it as department head now!). This was a direct result of family support. My husband Tariq, has a PhD and is an environmental engineer. We have been married for almost 40 years and his support has been instrumental through-out my career. He has always understood the demands of my job. My daughters were also very understanding of my job demands and spent a good amount of their childhood at Rowan Hall watching me run the AWE workshops, the NSF REU\(^3\) and Engineers on Wheels\(^4\) programs. This calling to help and mentor others is engrained in their own careers (Sajaa is a lawyer and Mahaa is pursuing a career in medicine).

Our founding department chair Dr. Ralph Dusseau made a difference during my time here. Ralph was a great mentor and taught us to teach with love and compassion. My students are my greatest influencers. Over the years all of them have taught me to live my life with grace and humility and stay current to serve them well. My favorite course is teaching Environmental Engineering to all our CEE juniors. This course makes tremendous impacts on shaping our students in understanding the politics of pollution, social and racial injustices and corporate greed to make a profit at the expense of public health.

I am completing my 27\(^{th}\) year at Rowan while serving as department head for seven years straight, since 2017. Time has flown by fast and I am content to see the tremendous growth of the institution. We are a vital force in developing the future of our South Jersey residents (especially first generation students) and beyond. It is a great feeling. The growth in number of diverse students especially in the graduate student body and faculty is amazing. In 2024, I am able to converse in Bengali (my native language) with many students/faculty. I bump into someone daily.

The changes that I have loved watching in my department is the increasing diversity of our student body. Our transfer student numbers have increased and we see increases in other demographics. We also have outstanding alumni who are now spearheading leadership roles in the region. Employers continue to seek out Rowan CEE students. The growth in the graduate program and the excellent research centers housed in our department that have shaped the future of our students has been remarkable. This is the culmination of the hard work and dedication of our CEE faculty.

I have so many great memories of my years at Rowan! The best memories are when a student randomly walks up to you or writes to you on how you impacted them as an educator. Especially, when they tell you that the environmental engineering course they took with me shaped their careers and personal interests in preventing pollution. Receiving a Fulbright Scholar Award in 2015 was a career highlight.\(^5\) Watching my younger daughter graduate in 2019 from Rowan from 4 different colleges was a special treat!!

One student comment that will always stay with me is the comment made by Michael Jensen, (Mechanical Engineering Class of 2000) during his graduation speech for the College –“And Dr. Jahan is one teacher that you want to take one more class with”. I was extremely humbled by Mike’s comment and the fact that the students outside my own department note my sincere efforts in effective teaching.
1. “The medallion award is the highest honor a graduating senior can receive to acknowledge superior performance in a particular field. The medallion distinguishes the student as exceptional, placing them in the ranks of Rowan University's finest graduates.”

2. AWE (Attracting Women into Engineering) is a four-day, non-residential summer workshop igniting a passion for STEM in middle school girls through hands-on projects, exciting demos and tours of real engineering labs. Professor Jahan founded AWE and Margaret was one of the first mentors.

3. The US National Science Foundation “funds a large number of research opportunities for undergraduate students through its REU Sites program. An REU Site consists of a group of ten or so undergraduates who work in the research programs of the host institution. Each student is associated with a specific research project, where he/she works closely with the faculty and other researchers. Students are granted stipends and, in many cases, assistance with housing and travel.”

4. “The goal of [Engineers on Wheels] is to get K-12 students interested in engineering at an early age and keep them interested. Through the projects they work on with Engineers on Wheels, students in area schools learn not only what engineering is but also how it can be fun and creative...Students and professors from the College of Engineering use their colorful, specially outfitted vans to provide students with that interactive experience.”

5. Fulbright Awards are “the most widely recognized and prestigious international exchange program in the world, supported for more than half a century by the American people through an annual appropriation from the U.S. Congress and by the people of partner nations.”