

## ***Judith Weiszmann Women in Engineering Champion Award***

*Dr. Christine Wu, P.Eng*



Christine Wu is a professor of the Department of Mechanical Engineering at the University of Manitoba. She received her B.Sc. degree from Beijing University in China, M.Sc. from the University of British Columbia and her Ph.D. from the University of Manitoba. She has been part of the Faculty of Engineering at the University of Manitoba since 1996.

Dr. Wu's fundamental research has been applied to the engineering areas of developing bipedal walking robotics and biomechanics. She has also been in collaboration with Motor Coach Industries Inc. since 2009 and has successfully applied her theory to developing accelerated durability testing.

Dr. Wu was awarded a Senior Research Chair jointly funded by NSERC, MCI and U of M in 2013. The chair program focuses on ride safety, structural integrity and weight reduction of coach structures with the long term goal of improving fuel efficiency and reducing greenhouse gases. "Dr. Wu's expertise and scientific knowledge will allow MCI to make exceptional new breakthroughs, improving the structure and riding comfort of its motor coaches," says Mr. Jim MacDonald, the MCI executive director of engineering. Noting that improving multi-passenger vehicles presents a key opportunity to transform transportation in North American cities, NSERC's acting vice president, research partnerships programs directorate, Pamela Moss said, "Working closely with Motor Coach Industries, the work of Dr. Wu and her team will lead to safer rides for passengers on buses and similar large vehicles and will strengthen Canada's reputation as a technical innovator in this field."

Dr. Wu's research has been featured in the Globe and Mail, Winnipeg Free Press, International Innovation, MITACS, UM Research, and the Manitoba Chinese Professor Association Newsletter. Her early work was also featured and aired on CTV and Global television. She was interviewed by CJOB radio on one of her projects related to the reduction of repetitive strain injuries. All these activities contributed to promoting university research, and raising the public awareness of the role of research in our society.

Dr. Wu is passionate about promoting and encouraging women to embark on engineering careers. She deeply believes in the power of the role model and has worked tirelessly to support women in male dominated professions. At the national and provincial levels, she organized symposia such as Women in Engineering (2014) inviting the top women leaders in industries and academia to share their insights on various issues. Dr. Wu has been involved in organizing the Manitoba Community of Women in Engineering, Science, Technology and Trades (MCWESTT) conference since 2012 and she was in charge of the conference program in 2015. Dr. Wu also developed a homepage as a part of CSME website for Women in ME (Mechanical Engineering) with the top Canadian women professors and engineers from industries sharing their career paths and providing inspiration and advice to others.

Locally, Dr. Wu helps female students at the Faculty of Engineering by encouraging and coaching them as they enter the engineering job market. She has organized workshops including communications, salary negotiations and networking to this end. She has also organized tours to companies and to speak to women engineers from these companies to get first-hand experience.

Dr. Wu has provided valuable service to the university, the profession and the society, and has acted as a role model for women in engineering. She has actively participated in research seminars and conferences discussing issues on attracting woman engineering students and retaining them in the profession. Dr. Wu has made significant contributions in inspiring young talented women to pursue engineering careers and in their intellectual growth.

In recognition of the outstanding advancement and support of women in engineering, Engineers Geoscientists Manitoba is pleased to present the Judith Weizmann Women in Engineering Champion Award to Dr. Christine Wu, P.Eng.