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## Editorial

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**Biographical notes:** Pierre Larochelle serves as the Department Head and Professor of Mechanical Engineering at the South Dakota School of Mines and Technology. His research focuses on the design of complex robotic mechanical systems and enabling creativity and innovation in design. He currently serves as the Chair of the US Committee on the Theory of Mechanisms and Machine Science and represents the USA in the International Federation for the Promotion of Mechanism & Machine Science (IFTOMM), in 2016–2022. He serves as a Founding Associate Editor for the *ASME Journal of Autonomous Vehicles and Systems*, in 2020–2023. He is a Fellow of the American Society of Mechanical Engineers (ASME), senior member of IEEE, and member of Tau Beta Pi, Pi Tau Sigma, ASEE and Order of the Engineer.

Andrew P. Murray received his BS in Mechanical Engineering from the Rose-Hulman Institute of Technology in 1989, and MS and PhD in Mechanical Engineering from University of California, Irvine, in 1993 and 1996, respectively. In 1997, he joined the Department of Mechanical and Aerospace Engineering at University of Dayton as an Assistant Professor, became Associate Professor in 2003, and Professor in 2011. He directs the Design

of Innovative Machines Lab (DIMLab) where the research in kinematic synthesis theory and machine design includes shape-changing mechanisms with applications in variable geometry extrusion dies, novel devices that utilise strain-energy in automobiles, and accurate estimation and tracking of the centre of mass of complex systems. He is a Fellow of the ASME and won the highest teaching award offered by University of Dayton, in 2013.

Carl Nelson is a Professor in the Department of Mechanical and Materials Engineering at University of Nebraska - Lincoln, where he has worked since 2005. Prior to that, he received his MS and PhD in Mechanical Engineering from the Purdue University and BS in Mechanical Engineering from University of Oklahoma. His professional interests include mechanisms, robotics and medical applications thereof.

Nina Robson obtained her PhD in Mechanical and Aerospace Engineering from the University of California, Irvine (UCI), in 2008. Prior to joining the California State University, Fullerton (CSUF) in 2012, she was an Assistant Professor at Texas A&M University, in 2009–2011. She is the Director of the Human Interactive Robotics (HIR) Lab at CSUF. Her research is in the areas of kinematics, mechanism design and robotics/bio-robotics. She is an elected general member of the International Federation for Promotion of Mechanisms and Machine Science (IFTToMM), Computational Kinematics Technical Committee and American Society of Mechanical Engineers (ASME) Mechanisms and Robotics Committee. She received honours and awards including Women in Robotics Ambassador (*International Journal of Advanced Robotic Systems*) in 2014, Outstanding Engineering Educator (Orange County Engineering Council) in 2015, and the National Science Foundation Faculty Early Career Development (CAREER) in 2018.

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This special issue constitutes selected papers from the refereed conference proceedings of the 1st Mechanical Systems and Robotics Symposium, MSR 2020, scheduled to be held in Rapid City South Dakota, USA, in May 2020. MSR is a series of international conferences hosted in North America that focuses on specialised robotic systems, soft, wearable and origami robotic systems, applications to walking, flying, climbing, ground, underground, swimming, and space systems, human rehabilitation and performance augmentation, design and analysis of mechanisms and machines, human-robot collaborative systems, service robotics, mechanical systems and robotics education, commercialisation of mechanical systems and robotics, and related topics.

MSR 2020 was organised under the patronage of the US Committee for the Theory of Machines and Mechanisms (USCToMM) and is co-sponsored by the Canadian Committee for the Theory of Machines and Mechanisms (CCToMM). USCToMM is the USA's member organisation of the International Federation for the Promotion of Mechanism and Machine Science (IFTToMM).

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