William G. Davids, Ph.D., P.E.

John C. Bridge Professor and Department Chair of Civil Engineering

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**Professional Preparation**

University of Maine, B.S. in Civil Engineering, 1989

University of Maine, M.S. in Civil (Structural) Engineering, 1991

University of Washington, Ph.D. in Civil (Structural) Engineering, 1998

**Appointments**

7/12 – present: Professor and Chair of Civil and Environmental Engineering, Orono, ME

9/09 – present: Professor of Civil/Structural Engineering, University of Maine, Orono, ME

9/04 – 8/09: Associate Professor of Civil/Structural Engineering, University of Maine, Orono, ME

9/98 – 8/04: Assistant Professor of Civil/Structural Engineering, University of Maine, Orono, ME

9/94 – 8/98: Graduate Research Assistant, University of Washington, Seattle, WA

4/91 – 9/94: Structural Engineer, Sverdrup Corporation (now Jacobs Engineering), Seattle, WA

9/89 – 1/91: Graduate Research Assistant, University of Maine, Orono, ME

**Recent Journal Publications**

Schanck A and Davids WG (2020). Capacity assessment of older T-beam bridges by nonlinear proxy finite-element analysis. Structures, 23: 267-278.

Albraheemi MJA, Davids WG, Schanck A and Tomlinson S (2019). Evaluation and rating of older non-composite steel girder bridges using field live-load testing and nonlinear finite-element analysis. Bridge Structures, 15(1-2): 27-41.

Young AC, Davids WG, Cheatwood FM and Lindell MC (2018). Structural analysis of hypersonic inflatable aerodynamic decelerator pressure tub testing. Thin-Walled Structures, 131(2018): 869-882.

Majeed HS, Davids WG, Lopez-Anido RA and Burns J (2018). Experimental and numerical investigation of splicing of concrete-filled fiber-reinforced polymer tubes. Construction and Building Materials, 173: 461-473.

Young, AC, Davids WG, Goupee AJ and Clapp JD (2017). Computationally efficient finite-element modeling of braided, inflated structural members with axial reinforcing. Journal of Engineering Mechanics, 143(6): 04017017.

**Recent Awards and Honors**

Distinguished Maine Professor, 2015

L.J. Markwardt Wood Engineering Award from the Forest Products Society, 2012

George Marra Award (1st place) from the Society of Wood Science and Technology, 2012

State of Maine Civil Engineer of the Year (awarded by the Maine Chapter of ASCE), 2010

**Synergistic Activities**

Management team member at the UMaine Advanced Structures and Composites Center. Help set the future direction of the Center, actively mentor students and staff, and collaborating on a wide range of research topics and industry projects.

Co-developer of the AASHTO LRFD Guide Specifications for Design of Concrete-Filled FRP Tubes for Flexural and Axial Members, published by AASHTO in fall 2012.

Primary developer of several finite-element software packages used in both industry and academia for pavement engineering (EverFE and EverStressFE) and bridge load rating (SlabRate)

Co-holder of four US patents.