

INTRODUCTION TO THE SPECIAL ISSUE HONORING W.E. OLMSTEAD

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In December 2016, W.E. Olmstead retired from the Department of Engineering Sciences and Applied Mathematics at Northwestern University, where he joined the faculty in 1964. This special issue honors Professor Olmstead and his contributions to the field of integral equations, which are documented by almost 100 publications. Over the course of his career, Professor Olmstead explored mathematical problems found at the intersection of physics and engineering. He developed novel integral equation formulations to elucidate phenomena such as blow-up behavior in a variety of physical applications. He also developed new analytical techniques that provide for a deeper understanding of the properties of solutions of integral equations. Professor Olmstead has 16 doctoral descendants and is well regarded for his attentive mentorship and excellent teaching. Two of his most recent PhD students authored a retrospective article for this special issue describing his major research contributions in the field of integral equations. This special issue also contains ten papers with new results in integral equations offered by researchers from across the globe.

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