

**CARLETON UNIVERSITY**  
**Department of Mechanical and Aerospace Engineering**  
**PhD Comprehensive Exam and Thesis Proposal Defense**

**CANDIDATE:** Basim Al Tlua

**DATE:** Wednesday, December 2, 2019, 1:30 p.m. Room 3124, Mackenzie Building

**THESIS TITLE:** **Optimization and Testing of Flat-Plate Trailing Edge Serration Geometry for Reducing Broadband Airfoil Self-Noise**

**EXAMINATION BOARD:**

**Member of Department** T. Kaya, Dept. of Mechanical & Aerospace Engineering

**Member of Department** F. Khouli, Dept. of Mechanical & Aerospace Engineering

**Co-Supervisor**

**Thesis Supervisor** J. Rocha, Dept. of Mechanical & Aerospace Engineering

**Chair of Department** R. Miller, Chair, Dept. of Mechanical & Aerospace Engineering (*Ex-officio*)

**Dean of Faculty** F. Afagh, Dean, Faculty of Engineering (*Ex-officio*)

**Dean, Faculty of Graduate & Postdoctoral Affairs** P. Smith, Dean, Faculty of Graduate Studies and Research (*Ex-officio*)



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