

## Seminar series within the framework of the Graduate School GRK 2078

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Referee: **Professor Kamran Behdinan**  
Department of Mechanical & Industrial Engineering, University of Toronto

Dates: Friday, June 03, 2022

Time: 11:00am-12:00pm (optional Get-Together after the event)

Location: Building 10.23, 8<sup>th</sup> floor, room 805  
Please note that you can also participate in the event online

Title: **Advances in Design and Analysis of Lightweight Materials and Structures – Research conducted at University of Toronto ARL-MLS**

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### Abstract

In aerospace and automotive industry among others, innovative designs, which can simultaneously address concerns about safety and fuel efficiency, have created demands for novel materials and structures. These demands have persuaded researchers to propose and investigate advanced structures made of multifunctional lightweight materials. Some notable mentions include porous, composite, nanocomposite, ultra-high temperature ceramic, piezoelectric, and functionally graded materials.

This presentation delivers an extensive updated investigation and information to address the latest demands for the effective and efficient design and precise characterization of advanced multifunctional lightweight aero structures. It will focus on the research conducted at the University of Toronto Advance Research laboratory for Lightweight Structures.

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You are cordially invited to take part in the event.

Prof. Dr.-Ing. Thomas Böhlke  
(Spokesperson of the GRK 2078)