

## SEMINAR

## **APPLIED MATHEMATICS AND MECHANICS**

FS988 15 September 2023

A DCAMM seminar No. 768 will be presented by

Ercan M. Dede, Ph.D. **Director, Electronics Research Department** Toyota Research Institute North of America, Ann Abor, USA

The title of the lecture is

Bioinspired Flow Field Design with Porous Media Optimization and Dehomogenization

## **Abstract:**

Microchannel reactors are critical in biological plus energy-related applications and require meticulous design of hundreds-to-thousands of fluid flow channels. Such systems commonly comprise intricate space-filling microstructures to control the fluid flow distribution for the reaction process. Traditional flow channel design schemes are heuristic or exploit analytical rule-based optimization strategies that are challenging to adopt for large-scale domains of arbitrary geometry.

> DATE: Monday, 25 September 2023

TIME: 13:00 - 13:45

PLACE: Building 414, Room 061B

DTU, Technical University of Denmark

For virtual participation please use the following link:

https://dtudk.zoom.us/j/63108849054?pwd=bWFHbWlJbk0zSlRiYStKSVZQQWJzZz09

Danish pastry, coffee and tea will be served 15 minutes before the seminar starts.

All interested persons are invited.

Niels Leergaard Pedersen

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