



# **WELCOME to NAFEMS 2020**

## **A 2020 Vision of Engineering Analysis & Simulation**

Brought to you by:  
The North American (NA) Regional  
NAFEMS Steering Committee

# North American Steering Committee



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EPI: Engineering  
Products Inc.



Mr. Matthew Ladzinski  
NAFEMS





# NA NAFEMS Steering Committee Charter

- Goal
  - Support the Mission of the International NAFEMS Organization
    - Facilitate International Industry, Academia, and Government Collaboration Leveraging Unbiased Multidisciplinary Engineering Expertise with a Focus on USA and Canada
    - Improve Product and Process Simulation
    - Have a Positive Impact on Quality, Profitability, Schedules, and Safety
- Objectives
  - Promote **COLLABORATION** within the international engineering analysis and simulation community,
  - Stimulate **INNOVATION** via transfer of knowledge in the use of advanced scientific, engineering and computing technologies,
  - Maximize **PRODUCTIVITY** through improved best practices used in product development engineering processes,
  - Implant **QUALITY** in the methods and techniques exploited by virtual product development processes.



# Theme of the NAFEMS NA Regional Summit

- A Vision of CAE's Potential in 2020, by exploring:
  - **Business Developments** for Increased Financial Impact of CAE Investments
    - Roadmaps for CAE Developments & Deployments
    - Roles of CAE Software & Hardware Developers
  - **Technical Developments** for Improved Speed, Accuracy, Reliability, Accessibility, and Applicability of Results
    - Relevant Physics Integrated for Multifunctional & Multiphysics Simulation
    - Multiscale Material Modeling from Atoms to Products
    - Common Rapid Product Knowledge Management
    - Smart Real-Time Simulations
  - **Human Issues**
    - Immersive Virtual Design Environments
    - Shared Man-Machine Intelligence



# Activities During the Summit

- **Venue**

- Training Course Preceding the Summit
- 6 Keynotes
- 39 breakout Presentations
- 2 Forums
  - PLASVEE with 8 Vendors
  - Vendor Forum with 12 Vendors (Open Discussion)
- Tour of the Center for Advanced Engineering Environments (CAEE)
- Exhibits

- **Expectations**

- Network – Industry, Government, Academia, Vendors, Visionaries
- Learn About the Transformation of CAE for the Future!
- Have Fun!



**Enjoy the NAFEMS 2020 Summit!**



# Pathway to Future CAE Technologies and Their Role in Ambient Intelligent Environments



## Prof. Ahmed K. Noor

- William E. Lobeck Professor of Aerospace Engineering, Old Dominion University
- Director of ODU's CAEE
- NAFEMS North American Steering Committee