



Dr. Waleed Alkandari

Assistant Professor at
PAAET

- Date of Birth:** July. 23, 1985
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Interests

- Automotive Engineering
- Tire Development
- Mathematical Modeling
- Advanced material (Viscoelastic)
- Design using Optimization Techniques

Skills

Programming:

- MATLAB
- Python Subroutine
- LaTeX
- Fortran
- C++
- R

Tools:

- Multiscale Modeling
- Physics Based Modeling
- Analytic Math
- Optimization

CAD Tools:

- ABAQUS FEA
- AutoCAD

Working Experience

- March, 2022 – ongoing **Assistant Professor** PAAET., Kuwait
Assistant Professor of Automotive Engineering at Automotive and Marine Mechanics Technology department, Faculty of Engineering in College of Technological Studies, PAAET.
- Sep, 2016 – March, 2022 **Member at CenTiRe** Virginia Tech., USA
Joined the Center for Tire Research as a member. Conducted a project about tire aging phenomena.
- Jan, 2013 – Aug, 2016 **Teaching Assistant** PAAET., Kuwait
Worked as a full-time Teaching Assistant (Faculty member) at the Automotive Engineering Department, instructed several automotive courses, and participated in numerous departmental committees.
- Feb, 2009 – Aug, 2011 **Rotating Equipment Engineer** KNPC Co., Kuwait
Worked as a maintenance engineer on a full-time basis in the rotating equipment department of the Mina Al Ahmadi Refinery.

Education

Postgraduate Studies

- 2016 – 2022 **Ph.D. in Mechanical Engineering** Virginia Tech, USA
Title: Multi-Scale Physics Based Modeling of Tire Rolling Resistance Considering Aging.
Grade: CGPA: 3.88
Rolling Resistance Viscoelastic Gaussian Function
Surface Roughness Damage Mechanics (CDM)
- 2011 – 2013 **M.Sc. in Automotive Engineering** Lawrence University, USA
Grade: CGPA: 3.97
Powertrain Systems Automotive Electrical Systems
Vehicle Dynamics Body and Chassis Systems

Undergraduate Study

- 2003 – 2008 **B.Sc. in Mechanical Engineering** Kuwait Univ., Kuwait
Project Title: Design and improve the stability of a three-wheeled car.

Other Training

- 2009-2022 **Training courses and conferences**
Attended numerous training courses and conferences

Short Bio

Waleed Alkandari is an assistant professor in the department of Automotive and Marine department at PAAET. In 2022, he received his Ph.D. in the mechanical engineering from Virginia Tech. In 2012, he earned a master's degree in automotive engineering from Lawrence Technological University, and in 2008, he earned a bachelor's degree in mechanical engineering from Kuwait University. He has researched on a variety of complex problems, including the modeling of nonlinear viscoelastic materials, friction physics, rolling resistance, and contact mechanics. Multiscale methods, Fourier transformation, Tire dynamics, Theoretical physics, and ABAQUS user subroutine development are among his many areas of expertise.