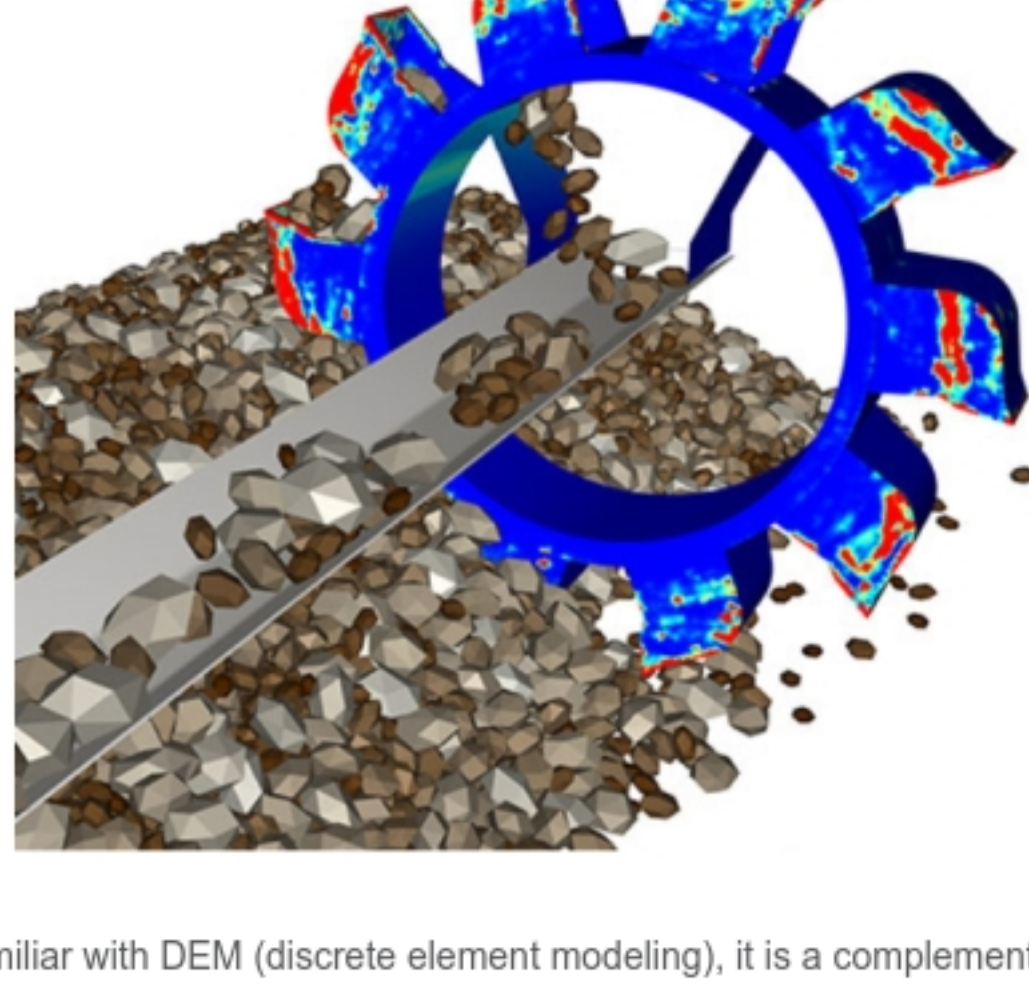


## Rocky DEM (Discrete Element Modeling)

### Webinar Series



If you are not familiar with DEM (discrete element modeling), it is a complementary technology to FEA and CFD. Overall, DEM provides **advanced particle simulation software** for better and faster results, especially important in industries such as food processing, pharmaceutical & biotech, agriculture equipment, heavy equipment and many others.

#### Bulk Material Simulation

Rocky DEM quickly and accurately simulates the flow behavior of bulk materials with complex particle shapes and size distributions.

#### Multiple Particle Shapes

Rocky DEM allows modeling of accurate particle shapes which includes custom 3D bodies, 2D shells and fibers which can be made rigid or flexible.

#### Multibody Dynamics

Enable your equipment components to move freely in response to forces such as particle contacts, gravity, and more.

#### Breakage Modeling

Currently, two kinds of breakage models are available in Rocky DEM: The Ab-T10 model and the Tavares model. Both models preserve both mass and volume.

#### Ansys Integration

Fully integrated with Ansys Workbench (Fluent, Mechanical, Optislang and DesignXplorer). Includes both one-way and two-way coupling abilities with Ansys Fluent providing physically consistent and accurate results.

To learn more about Rocky DEM, please join us for one of the following 15-minute webinars.

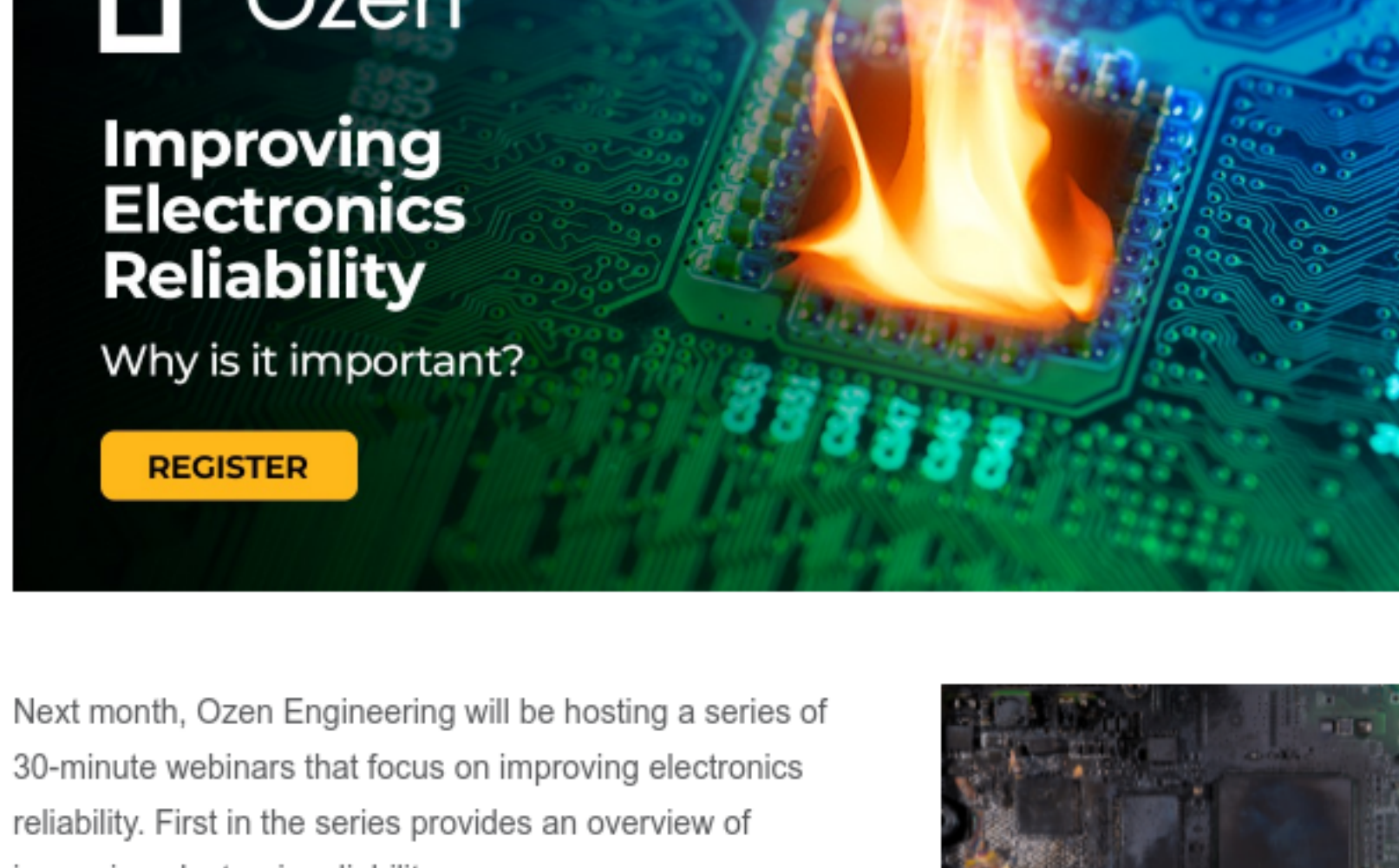
[DEM in 15 Minutes: Setting Up and Solving Your DEM Simulation](#), May 20, 7:30 AM PT

[DEM in 15 Minutes: CFD-DEM Coupling](#), May 25, 7:30 AM PT

[DEM in 15 Minutes: FEA-DEM Coupling](#), May 27, 7:30 AM PT

## Improving Electronics Reliability

### Webinar Series



Next month, Ozen Engineering will be hosting a series of 30-minute webinars that focus on improving electronics reliability. First in the series provides an overview of improving electronic reliability.

#### Why?

One of the biggest barriers to getting a product to market is unexpected failures during prototype or physical testing. This can result in numerous design cycles, increased costs, delays, and loss of market share.

Businesses that manufacture printed circuit boards (PCBs) can solve these issues by introducing simulation early in the design cycle to determine and predict reliability before physical testing.

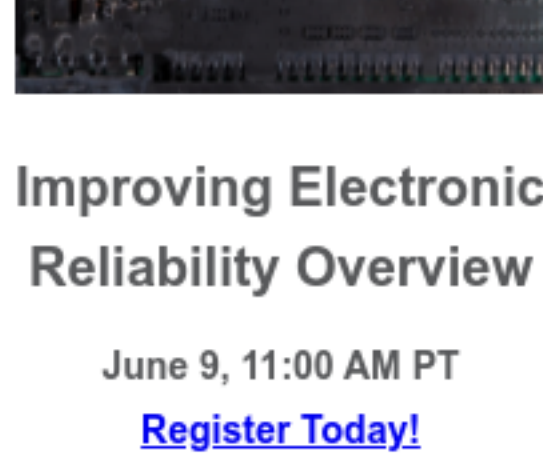
Future webinars will focus on specific aspects of electronic reliability such as:

- Thermal
- Mechanical
- Electrical stressors

Overall, the primary questions to be addressed are:

- How do I meet urgent market demands faster than my competition AND be confident that my product is reliable?
- How does simulation save me money and expedite the design cycle?
- What are the current drivers of electronics reliability?
- What kinds of analysis and testing can I perform using simulation software?

Please plan to join us for one or more of these informative, 30-minute webinars. If you happen to miss a live webinar, we will be making the video recordings available. Just let us know by contacting us at [info@ozeninc.com](mailto:info@ozeninc.com).



### Improving Electronic Reliability Overview

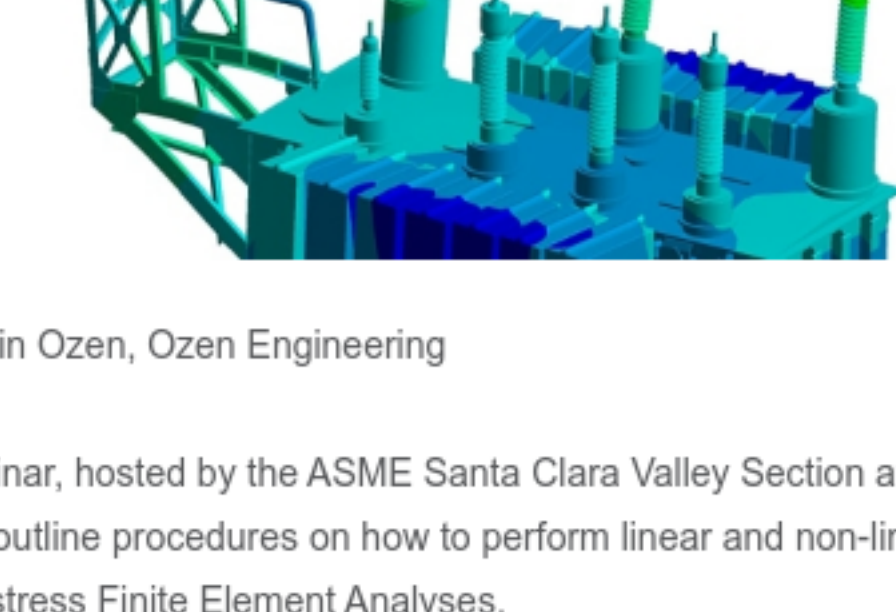
June 9, 11:00 AM PT

[Register Today!](#)

## Structures under Thermal Stress

### Linear & Non-Linear FEA Applications

Saturday, June 5, 9:00 AM - 4:00 PM PDT



**Speaker:** Dr. Metin Ozen, Ozen Engineering

This training seminar, hosted by the ASME Santa Clara Valley Section and presented by Ozen Engineering, will outline procedures on how to perform linear and non-linear thermal and coupled thermal-stress Finite Element Analyses.

There will be specific examples on what a linear structural analysis is and what makes a structural analysis non-linear. Similarly, on heat transfer (thermal) simulations, there will be specific examples on linear simulations and the characteristics of a non-linear heat transfer simulation. There will also be an example on covering theory and application of coupled thermal-stress analysis.

During the seminar, application problems will be set up and run live. Use of the software is not required for this seminar. No experience with ANSYS is needed for this seminar.

[Register](#)

You will learn:

- Linear Structural & Heat Transfer FEA
- Non-Linear Structural & Heat Transfer FEA
- FEA Meshing Considerations
- Material Properties for FEA
- Boundary conditions for Structural & Thermal FEA
- Thermal-Stress Analysis
- Static (Steady-State) versus Time-Dependent Problems

Cost:

- Non-Member: \$109
- ASME Member or Engineering Society affiliation\*: \$69
- ASME Student, Unemployed, or Retired Member: \$49

### Did you know?

A bit of trivia to hopefully enlighten your day and amaze your family and fellow engineers.

Did you know:

- bats are the only mammals that fly
- elephants are the only mammal that can't jump
- Australia is the only country that is also a continent
- the only thing that can destroy a diamond is intense heat
- Mercury is the only metal that is liquid at room temperature

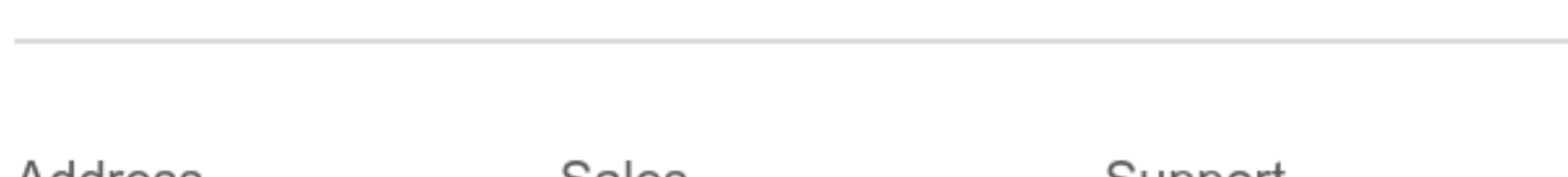
### Upcoming Ansys Webinars

You can also view all of the upcoming webinars by visiting our [Training Calendar](#).

### [Ansys AI Filter Optimization, Multiphysics & Automation](#)

May 26, 2021 - 6:00 AM PDT

This webinar introduces the SynMatrix filter synthesis and optimization tool, which can be used to drive Ansys HFSS full-wave simulation and filter tuning. It also introduces the Ansys optiSLang general purpose optimizer and its application for filter optimization.



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