

SPEAKING ENDURICAN **Endurica** Get Durability Right

WINNING ON DURABILITY

Endurica User SPOTLIGHT

In their final year of studies at the University of Calgary Schulich School of Engineering, all students pursuing their bachelor's degrees complete an immersive team assignment known as the capstone design project. These projects enable students to put all they have learned into practice while engaging with the professional engineering community to solve challenges faced by industry.

A six-student team entitled their project High Inertia Impact Damping Tire for In-Wheel Hub Motors and set out to develop a tire that is durable, puncture-proof and adaptable for various environments. The tire is to be used in small vehicles compatible with the sponsor's proprietary in-wheel hub motor. Using Endurica's workflows, the students simulated the life expectancy of their 3D printed pneumatic tire designs with realistic material behavior and with realistic load cases. They also met all design requirements of the sponsor on time and on budget.

The theory behind rubber durability was the hardest part — there's so much more to it than metal durability.

Actually using the software was easy because the manual was straightforward, very clear, and easy to use.

— Jared Schellenberg
Capstone Project Hardware Lead, B.S.M.E.
University of Calgary

Without the software the students would have achieved something but not to the extent and to the level that

215 words | 2 minute read
You made it through YOUR capstone project — now it's time to check out how Endurica's software helped a group of students through theirs. Don't miss the "second page" which is the project's poster. [READ THE CASE STUDY](#)



ECLIPSE WITH ENDURICA

Endurica
Get Durability Right

SAVE THE DATE

FIRST EVER
ENDURICA USERS MEETING
APRIL 8-9, 2024

177 words | 1 minute read

Mark your calendar and get your travel request in to the boss for Endurica's first **Users Meeting**. Enjoy two days of insights on Endurica's software, characterization / testing methods, partner presentations and special training sessions as well as time to share success stories and learn from other users. You are already eclipsing the competition by using Endurica's methods and this meeting will keep you on the forefront of rubber fatigue simulation.

A total solar eclipse will be one of the highlights of our Users Meeting. Endurica's home city of Findlay, Ohio is so close to the center of the path of totality that our experience of the eclipse will be among the longest possible — nearly four minutes. Only 21 total solar eclipses have crossed the lower 48 states in the entire existence of the United States and we're hoping you'll join us for this amazing opportunity.

Details will follow with our agenda and great locked-in lodging rates at the Hancock Hotel, Findlay's premier event space. **We're looking forward to having you with us April 8-9, 2024.**

NOW is the time to order testing services and instruments for 2023 budget completion

Time is running out to order testing instruments and services in 2023. Email Tom Ebbott, Vice President, at tgebbott@endurica.com

Coming Events - 4th Quarter 2023

I Speak Endurica

Get Durability Right

FATIGUE NINJA FRIDAY
IT IS TIME TO MIGRATE

FRIDAY, OCT. 6, 2023 @ 9:00 AM EDT



Fatigue Ninja Friday events are deep-dive training sessions on new features in our software codes. These webinars are presented at no charge to our users. If you are a client and are not receiving invitations to join us please email [Pauline Glaza](mailto:Pauline.Glaza).

silicone EXPO

USA

October 4-5, 2023
Huntington Place, Detroit, Michigan, USA



International Elastomer Conference

October 16-19, 2023 • Cleveland, OH

IRCO INTERNATIONAL RUBBER CONFERENCE 2023

Intelligence and Low Carbon. Create a Better Future

Nov. 7-9, 2023 - Hilton Haikou Meilan, Haikou, China

Dr. Mars is a Keynote Speaker at the IEC



WINNING ON DURABILITY

GET BIG JOBS DONE FAST


ENDURICA AT SCALE

LIVE WEBINAR: endurica.com/workflow

FRI, NOVEMBER 17, 2023 at 9am EST (EST/ET)

Featuring: Dr. Tom Ebbott, Endurica, Vice President and Jesse Sater, Endurica, Development Manager





Characterizing Elastomer Fatigue Behavior for Analysis and Engineering

Live, Online: October 30 - November 3, 2023 | 3 hrs/day + Office Hours
Last chance for this workshop in 2023




WELCOME TO FATIGUE 2022¹¹

13th International Fatigue Congress
November 6-10, 2023
International Conference Center - Hiroshima, Japan



Application of Rubber Fatigue Analysis with Endurica Software

Live, Online: December 5-8, 2023 | 3 hrs/day + Office Hours
Last chance for this workshop in 2023



Rubbernecking is an interesting thing that makes us look twice

Dr. Sidney M. Caldwell was the first scientist to study the fatigue of rubber. He earned his Ph.D. in 1917 from the University of Chicago, served in the U.S. military in World War I, joined United States Rubber Company in 1919 as a research chemist and rose to the rank of Director of the R&D Department. Dr. Caldwell holds 69 patents, and served as the director of the Institute of Applied Chemistry and Physics. Check out his many achievements and listen to an interview with him by clicking here. [Check it out](#)