

## Agenda

Time	Session	Speaker
08:45	<i>Networking Breakfast and Registration</i>	
09:15	Welcoming Remarks	Laura Rovira Crespo Oasys LS-DYNA team
09:30	LS-DYNA Navigating around Short-Circuits: Exploring Ansys LS-DYNA's Battery Modeling Capabilities	Raphael Heiniger Ansys
10:00	Oasys Suite 21.0 – Part 1	Gavin Newlands and Miles Thornton Oasys LS-DYNA team
10:30	<i>Morning Networking Break</i>	
11:00	Battery System Design with Oasys LS-DYNA Environment	Simon Hart Arup and Sarah Chams Bacha Oasys LS-DYNA team
11:20	Customer Talk: Lotus Engineering and the Oasys LS-DYNA Environment	Matt Smolka Lotus Cars Limited
11:40	Interactive Session: Learning Labs and Table Discussions	
12:45	<i>Networking Lunch</i>	
13:50	Customer Talk: Numerical Noise in LS-DYNA	Richard Young Jaguar Land Rover
14:10	Oasys Suite 21.0 – Part 2	Andrew White and Gavin Newlands Oasys LS-DYNA team
14:40	Interactive Session: Learning Labs and Table Discussions	
15:40	<i>Afternoon Networking Break</i>	
16:00	Overview of key LS-DYNA new features	Katie Lampl Arup
16:15	Latest trends in LS-DYNA user community	Lavendra Singh Oasys LS-DYNA team
16:25	Closing Remarks	Laura Rovira Crespo Oasys LS-DYNA team
17:00 onwards	<i>Complimentary drinks and hot &amp; cold canapes style refreshments</i>	

### Learning Lab Topics:

- Beyond the basics in post-processing
- Virtual Testing – What challenges is/will Virtual Testing bring to your CAE teams?
- LS-DYNA – Battery Modelling

### Table Discussion Topics:

- AI/ML in Oasys LS-DYNA Environment
- LS-DYNA – what would you like to see next?
- Oasys PRIMER – what do you want to see next?
- Oasys D3PLOT/T/HIS/REPORTER – what do you want to see next?
- Oasys Web Viewers – Communication of results/data? What do you want to see next? Have you tried it?
- Automation, scripting and Python in the Oasys LS-DYNA Environment

**Learning Labs – Enhance your knowledge and understanding of these topics!  
(You will have the opportunity to attend two of these sessions)**

**Beyond the basics in post-processing**

Learn about some of the useful functionality in D3PLOT and T/HIS that can take you beyond the basics of simple contour plotting and animating. We'll take a look at some of the ways you can use D3PLOT and T/HIS to help with model comparison, linking graphs and model views and using bookmarks in your work. This session will particularly suit those who have less experience in our post-processing software and are interested to find out more about what it can do. If you use PRIMER and not the Oasys post-processing tools this is also for you – the post-processing tools can also be accessed via a PRIMER license.

**Virtual Testing – What challenges is/will Virtual Testing bring to your CAE teams?**

In this learning lab we will give an overview of the new Workflow tools in Oasys 21 that have been created to help you meet the requirements of the Euro NCAP Virtual Testing Crashworthiness Protocol. You will have an opportunity to ask specific questions about the tools as well as request additional features and tools that will help you overcome any hurdles that you may be facing in your Virtual Testing workflow.

**LS-DYNA – Battery Modelling**

Discover the intricacies of an electro-thermo-mechanical coupled homogenized cylindrical cell model in this comprehensive deep dive. The model addresses mechanical failure caused by indentation and temperature increases due to short circuits, ultimately leading to thermal events. Gain valuable insights into the modelling strategy and learn about essential LS-DYNA keywords. Get a glimpse of pre- and post-processing LS-DYNA multi-physics battery models through a live demonstration using Oasys PRIMER.

**Table Discussions – Discuss with your peers on these pertinent subjects. Here are questions to get you started!  
(You will have the opportunity to attend three of these sessions)**

**AI/ML in Oasys LS-DYNA Environment**

- Where do you see potential for a data driven solutions to current problems in your simulation workflow?
- Do Generative AI models such as ChatGPT prove beneficial in your everyday tasks?
- How can Oasys help you to unleash the power of AI in your projects?

**Oasys PRIMER – what do you want to see next?**

- What features or functionalities would you like to see incorporated to better support your simulation workflows?
- Where do you believe improvements can be made to the Oasys pre-processing tools/workflows to improve efficiency?
- Are there any specific industry trends or emerging technologies that you believe Oasys should align with or leverage in its future development?

**Oasys D3PLOT/T/HIS/REPORTER – what do you want to see next?**

- What changes would you like to see to make your post-processing workflow smoother?
- What's the biggest challenge or bugbear you encounter when post-processing your LS-DYNA results?
- Are there any specific industry trends or emerging technologies that you believe Oasys should align with or leverage in our future development?

**Oasys Web Viewers – Communication of results/data? What do you want to see next? Have you tried it?**

- Have you used the web viewers? If yes, what feedback do you have?
- If you have not used the web viewers, what is preventing you from using them?
- What would you like to see developed in the viewers in the future?

**LS-DYNA – what would you like to see next?**

- What types of problems do you solve using LS-DYNA?
- What is your main challenge with using LS-DYNA?
- What types of problems do you use alternative solvers for and why? What are the obstacles that have prevented you from using LS-DYNA for these types of analysis? Do you use the implicit solver in LS-DYNA?
- Do you use any of the Multi-Physics solvers in LS-DYNA (fluid flow, electromagnetics, chemistry etc)?
- What features would you like to see in LS-DYNA in the future?

**Automation, scripting and Python in the Oasys LS-DYNA Environment**

- Are you currently using the JavaScript API?
- Do you need to use Python? If so, why?
- Is there anything you couldn't do with JavaScript that you will be able to do with Python?
- Are you planning to integrate Oasys with other software via Python?
- Are you planning to use external Python libraries in your scripts?