



HISTRATE

Training School

SIMULATION METHODS AND BEST PRACTICES FOR
COMPOSITES UNDER HIGH STRAIN RATES

5TH - 7TH OF MARCH 2024

Participation to the Training School will be free of charge. Registration for participation in person is closed.

If you wish to join the event online, please register via our online registration form: <https://histrate.eu/registration-training-school/>

(Please indicate "online participation" in the message box.)

05

TUESDAY

Welcome
Introduction on HISTRATE

Delivered by:
Dr. Nenad Djordjevic
Brunel University London

09:00 - 09:15

Introduction on Composites and the
Simulation Methods Used for
Composites

Delivered by:
Prof Rade Vignjevic
Brunel University London

09:15 - 10:45



10:45 - 11:15
Coffee Break

Constitutive Models
(Online)

Delivered by:
Dr Dayou Ma
Politecnico di Milano

11:15 - 12:15

Constitutive Models for Self-Healing
Composites; Case Study: Numerical
Verification and High Velocity Impact

Delivered by:
Prof Ivica Smojver
University of Zagreb

12:15 - 13:00



13:00 - 14:00
Lunch Break

Modelling of Manufacturing
Processes and Probabilistic FEM
(Online)

Delivered by:
Dr Hatice Sas
Sabanci University Istanbul

14:00 - 15:00

Machine Learning and Artificial
Intelligence Applied to Modelling
Composites

Delivered by:
Dr Tijana Geroski
University of Kragujevac

15:00 - 16:00

Lessons Learned
Discussion

Moderated by:
TBC

16:00 - 16:30



End of Day 1



UNIVERSITY OF BELGRADE,
STUDENTSKI TRG 1, 11 000 BELGRADE,
SERBIA

Queries about the training school should be addressed to:
Nenad Djordjevic (nenad.djordjevic@brunel.ac.uk)



Funded by
the European Union

This training school is within the scope of COST Action HISTRATE, CA-21155, supported by
COST (European Cooperation in Science and Technology).



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06

WEDNESDAY

Spatial Discretisation for
Modelling Composites

Delivered by:
Dr Tom De Vuyst
University of Hertfordshire

09:00 - 10:45



10:45 - 11:15
Coffee Break

Crash & Impact Modelling of Fibre-
Reinforced Materials – From Material
Characterization to Predictive
Modelling of Components

Delivered by:
Dr Andreas Hornig
Dresden University of Technology

11:15 - 13:00



13:00 - 14:00
Lunch Break

LS Dyna Practical Tutorial
Hands On

Delivered by:
Dr André Haufe
DYNAmore GmbH
Dr Nenad Djordjevic
Brunel University London

14:00 - 16:00

Lessons Learned
Discussion

Moderated by:
TBC

16:00 - 16:30



End of Day 2



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07

THURSDAY

High Velocity Impact on
Composites

Delivered by:

Dr Nenad Djordjevic
Brunel University London

09:00 - 10:45



10:45 - 11:15
Coffee Break

Introduction to Model Verification and
Validation, Standardisation and
Certification by Analysis
(On-Line)

Delivered by:

Dr Fabio Santandrea
RISE - Research Institutes of Sweden -
Materials and Production Gothenburg

11:15 - 13:00



13:00 - 14:00
Lunch Break

LS Dyna Practical Tutorial
Hands On

Delivered by:

Dr Andre Haufe
DYNAmore GmbH
Dr Nenad Djordjevic
Brunel University London

14:00 - 16:00

Panel Discussion - Lessons
Learned

Chaired by:

Prof Rade Vignjevic
Brunel University London

16:00 - 16:30



End of Day 3



UNIVERSITY OF BELGRADE,
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