



HISTRATE

*Advanced Composites under High Strain Rates Loading:
A Route to Certification-by-Analysis*

Advanced Testing and Instrumentation for Composites Under High Strain Rates

Training School

Participation to the Training School is free of charge. A limited number of participants can receive reimbursement of travel and subsistence costs according to the COST Rules for Reimbursement.

PROGRAMME

14TH - 17TH APRIL 2026

DAY 1 14 April

TUESDAY

08:30 - 09:00 Arranging access to JRC

Marco Peroni

09:00 - 09:30 Registration & Welcome Coffee

09:30 - 10:30 Introduction to HISTRATE
Introduction to Composites Testing

Michele Meo
Mauro Zarrelli

10:30 - 11:00 COFFEE BREAK

11:00 - 12:00 Fundamentals of high strain behaviour of polymers and
composites

Patricia Verleysen

12:00 - 13:00 Hopkinson Bar testing - elementary

Marco Peroni

13:00 - 14:00 LUNCH (SELF PAID)

14:00 - 15:00 Presentations by Students

Students

15:00 - 15:30 Lab Tour

Marco Peroni

15:30 - 16:00 COFFEE BREAK

16:00 - 17:30 Practice: Compression tests with split Hopkinson pressure bar
(SHPB)

Marco Peroni

END of DAY 1



European Commission, Joint Research Centre (JRC)
Via E. Fermi 2749, 21027 Ispra, Italy

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Funded by
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14TH - 17TH APRIL 2026

DAY 2 15 April

WEDNESDAY

08:30 - 09:00 Registration & Welcome Coffee

09:00 - 10:30 Split Hopkinson pressure bar (SHPB) data analysis and processing

Marco Peroni

10:30 - 11:00 COFFEE BREAK

11:00 - 13:00 From basic material characterisation to advanced coupled numerical-experimental techniques

Patricia Verleysen

13:00 - 14:00 LUNCH (SELF PAID)

14:00 - 15:30 Practice: tension tests with split Hopkinson pressure bar (SHPB)

Marco Peroni

15:30 - 16:00 COFFEE BREAK

16:00 - 18:00 Cultural and networking event

Marco Peroni

18:00 END of DAY 2

19:00 TRAINING SCHOOL DINNER (SELF PAID)



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14TH - 17TH APRIL 2026

DAY 3 16 April

THURSDAY

08:30 - 09:00 Registration & Welcome Coffee

09:00 - 10:30 Instrumentation and sensors

Marco Peroni
Andreas Hornig

10:30 - 11:00 COFFEE BREAK

11:00 - 12:30 High strain rate testing techniques and material behaviour:
from slow to ultrafast

Dayou Ma

12:30 - 13:00 Full field techniques and digital image correlation -
Introduction

Andrei Anisimov

13:00 - 14:00 LUNCH (SELF PAID)

14:00 - 15:30 Practice: Digital Image Correlation

Andrei Anisimov

15:30 - 16:00 COFFEE BREAK

16:00 - 17:30 Practice: Compression structural tests with split Hopkinson
pressure bar (SHPB)

Marco Peroni

17:30 END of DAY 3

19:00 TRAINING SCHOOL DINNER (SELF PAID)



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14TH - 17TH APRIL 2026

DAY 4 17 April

FRIDAY

08:30 - 09:00 Registration & Welcome Coffee

09:00 - 10:30 Experimental - numerical validation: crash and impact

Andreas Hornig

10:30 - 11:00

COFFEE BREAK

11:00 - 13:00 Work in groups: Data Processing

Marco Peroni
Andrei Anisimov
Dayou Ma

13:00 - 14:00

LUNCH (SELF PAID)

14:00 - 15:00 Presentations by Student groups: Results of data processing

Students

15:00 - 15:30

Q&A

15:30 - 16:00

COFFEE BREAK

16:00 - 17:30 Quiz

Andrei Anisimov

Conclusions & Summary of the School

Michele Meo
Mauro Zarrelli

17:30

END of the 4th Training School



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