

PhotoDyn partner meeting and industrial engagement event

Programme¹

Day 1 - September 5th 2017 (Room 3011, building 19)²

9.00 Welcome and refreshments

- 9.30 Introduction to the PhotoDyn project (Prof Fabrice Pierron)
- 10.00 Inertial impact on composites (Dr Lloyd Fletcher)
- 11.00 Coffee break
 - 11.30 Image-based DMTA (Dr Rian Seghir)
- 12.30 Lunch
 - 13.30 Inertial impact on PMMA and metals (Dr Frances Davis)

14.30 Design of a new test for visco-plasticity identification (Mr Pascal Bouda, ONERA, France)

- 15.00 Coffee break
 - 15.30 Brittle materials (carbide, glass Dr Lloyd Fletcher)
 - 16.00 Adhesives (Dr Lloyd Fletcher, Dr Rian Seghir)
 - 16.30 Future work, perspectives and discussion
- 17.00 End of meeting

18.00 Reception – drinks and nibbles then dinner at Ceno's 119 Highfield Lane, Highfield, Southampton, S017 1AQ <u>http://www.cenorestaurant.com/</u>



¹ To get a feel for the type of work presented, please look at the presentations on <u>http://photodyn.org/projects</u>

² Plan of the campus available at

https://www.southampton.ac.uk/assets/sharepoint/groupsite/Administration/SitePublisher-documentstore/Documents/About/visit/highfield_campus.pdf



Day 2 - September 6th 2017 (Room 3011, building 19)

This day is dedicated to presentations from participants outside the PhotoDyn group, aimed at understanding the main existing challenges and needs and how the PhotoDyn project can help address them.

The day's schedule is as follows:

9.00 Welcome and refreshments

- **9.15** Olesya Khafizova (Shimadzu Europa GmbH, Germany) European Innovation Centre - Composites
- **9.30** Anne Goldberg (Solvay, Belgium) Challenges of damage and failure analysis in (reinforced) thermoplastics: a few case studies
- **10.00** Ian Softley (DSTL, UK) Material response at high strain rates - Requirements for military and security applications
- **10.30** Peter Gould (QinetiQ, UK) QinetiQ needs: input to PhotoDyn

11.00 Coffee break

- **11.30** Brady Aydelotte (US Army Research Laboratory, USA) Current work at ARL in dynamic material behaviour
- 12.00 Jason Foley (EOARD, US Air Force, USA) Characterization of materials for extreme applications: an overview of U.S. Air Force research challenges
- **12.30** Michael Evans (MDBA, UK) Elastomers in high strain rate applications

13.00 Lunch

- **13.45** Andy Smith (Gordon Murray Design, UK) High Strain Rate Testing for iStream Applications
- **14.15** Marwan Alkhalil (Airbus Operations Ltd, UK) Impact/crash simulations of aircraft structures and the potential need for associated strain rate properties

14.45 Participants will be split into groups for laboratory visits and demos

- Inertial impact
- Ultrasonic testing
- X-ray tomography centre

The meeting is scheduled to end at 16.30.

