# Addressing Societal Challenges using Advanced Laser Light Sources

The European Cluster of Advanced Laser Light Sources (EUCALL) invites you to join the open EUCALL Workshop "Addressing Societal Challenges using Advanced Laser Light Sources". The workshop highlights research using synchrotron, free-electron laser and optical laser light sources in areas of high relevance to societal needs. Requests for research driven by these needs and the challenges in addressing these requests will be introduced. Examples of experiments using light sources will demonstrate the contributions light sources already provide.

A special topic will be to discuss how a combined use of **synchro-tron**, **free-electron laser** and **optical laser** light sources opens a route to obtaining additional information in these research fields. Invited speakers will describe research needs and applications using x-ray and ultraviolet radiation techniques in the fields of:

#### Energy

Solar energy / photovoltaics

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Battery research

#### Health

- Treatment of disease in humans
- Ultrafast spectroscopy on biomolecules

#### Materials and Information Technology

- Engineering in transport and aviation
- Surface science
- Ultrafast magnetism for information technology



## International Workshop: 26 – 27 April 2018 / DESY, Hamburg, Germany

#### Workshop website:

http://indico.desy.de/indico/e/societal\_challenges

Registration open: 15 February – 01 April 2018

- Registration is free for all participants
- Places are limited to approximately 100 (first-come, first-served)

#### Local Organizers:

- Dr. Graham Appleby (European XFEL, Germany)
- Dr. Thomas Tschentscher (European XFEL, Germany)
- Mr. Matthias Kreuzeder (DESY, Germany)

#### Scientific Program Committee:

- Prof. Dimitris Charalampidis (ELI-ALPS, Hungary)
- Prof. Mike Dunne (LCLS, USA)
- Prof. Jon Marangos (Imperial College, UK)
- Dr. Kazuo Tanaka (ELI-NP, Romania)
- Prof. Kiyoshi Ueda (Tohoku University, Japan)
- Prof. Wilfried Wurth (DESY, Germany)

#### www.eucall.eu / contact@eucall.eu



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### Confirmed invited speakers:

- Prof. Martin Aeschlimann (Uni. Kaiserslauten, Germany)
- Dr. Andrew Barrow (Rolls-Royce plc, UK)
- Prof. Francesca Calegari (DESY, Germany)
- Prof. Majed Chergui (EPFLausanne, Switzerland)
- Prof. James Durrant (Imperial College, UK)
- Prof. Michael Henning (leadXpro, Switzerland)
- Prof. Jan Lüning (Université Pierre et Marie Curie, France)
- Prof. Henning-Friis Poulsen (Technical Uni. Denmark, Denmark)
- Prof. Claus Michael Schneider (FZ Jülich, Germany)
- Prof. Jasper van Thor (Imperial College, UK)
- Prof. Joachim von Zanthier (Uni. Erlangen-Nuremburg, Germany)
- Dr. Philippe Wernet (HZB, Germany)

EUCALL is a network between leading large-scale user facilities for free-electron laser, synchrotron and optical laser radiation and their users. Under EUCALL, they work together on their common methodologies and research opportunities, and develop tools to sustain this interaction in the future.

