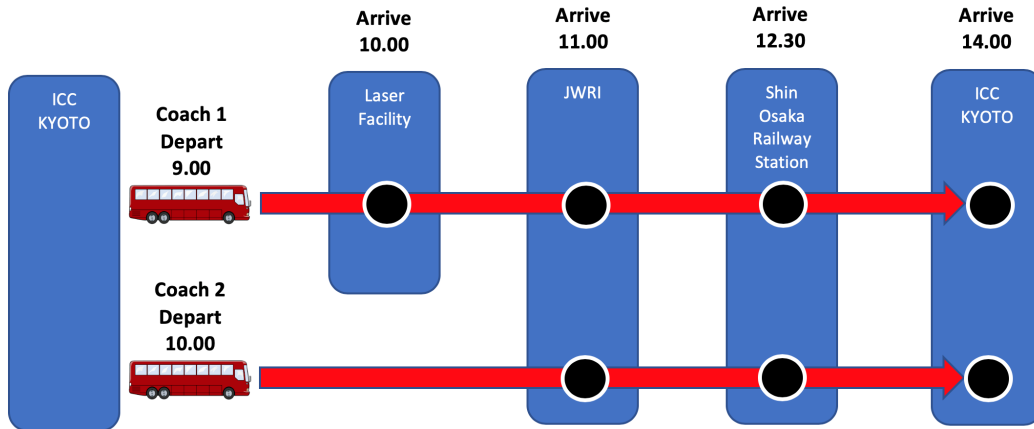


# Industrial Visit

Osaka University are offering the opportunity to visit two world class facilities.

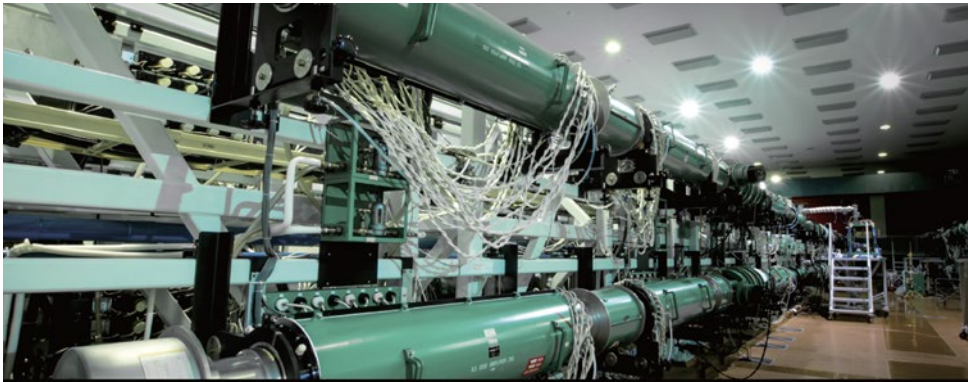
- The Laser facility: for this visit pre-vetting is required and will be limited to a maximum of 45 people on a first come first served basis.
- The Welding and Joining Research Institute (JWRI)

The schedule for these visits are shown below. A drop off at Shin Osaka Railway Station is offered. Space is available on the coach for your cases.



# Institute of Laser Engineering

Institute of laser engineering is leading the world in the development and application of laser technologies since its foundation. In particular, the institute is placed as a global leader in laser fusion research, which is an interdisciplinary field that will respond to societal demands, especially in the pursuit of realizing the 'ultimate' energy source, nuclear fusion. The institute is also acknowledged as a world leader in laser science research, and it has developed some unique academic fields, such as laser astrophysics and plasma photonics. Furthermore, the Institute has independently developed one of the world's largest power laser facilities, and takes full advantage of this equipment in its research endeavours.



GEKKO XII Laser

Source of photo: <http://www.ile.osaka-u.ac.jp/eng/index.html>

# Joining and Welding Research Institute

Joining and Welding Research Institute (JWRI) is the only institute focusing on the welding techniques in Japan. The major objectives of JWRI are to better understand the fundamental mechanisms of joining and welding processes and develop industrial applications using such technologies. Using various heat sources such as arc, plasma, laser, electron, ion and friction, and highly advanced systems for visualization, analysis, evaluation and simulation, JWRI has improved the efficiency, quality and performance of welding and joining, created advanced materials and composites, provided high-performance surface modifications, and developed new technologies such as welding and joining in space or under adaptive control.

- Friction stir welding
- Linear friction stir welding
- Three-dimensional visualization system for FSW using X-ray radiography

