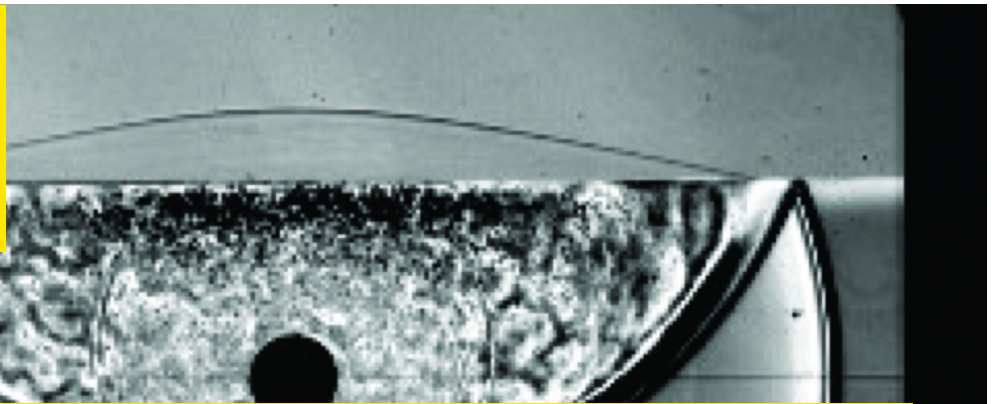




**UNSW**  
SYDNEY



## Underwater Blast Wave Facility

### The study of blast behaviour in liquids at high pressures.

#### Competitive advantage

- The ability to study blast waves under water at very high pressures that, unlike most facilities that use explosive pellets to generate the blast wave, uses the spark generated by a high-powered pulsed laser focused into the water
- The only facility of its kind that is capable of operation at pressures of up to 50 MPa

#### Impact

- This unique facility has a number of potential applications to personnel safety, protection of platforms and the design of future equipment, including:
- Study of the behaviour of blast waves in water at depth
- Investigation of the effects of blast on human/animal tissue

#### Successful applications

- Non-thermal sterilisation of meat, Australian Meat Processing Corporation

#### Capabilities and facilities

- High-speed visualisation and high-speed, high-pressure measurement technologies to investigate the transient processes

#### Our partners

- Australian Meat Processing Corporation

### More Information

Associate Professor Sean O'Byrne

School of Engineering and Information Technology

T: +61 (0) 2 6268 8353

E: [s.obyrne@unsw.edu.au](mailto:s.obyrne@unsw.edu.au)

UNSW Knowledge Exchange

[knowledge.exchange@unsw.edu.au](mailto:knowledge.exchange@unsw.edu.au)

[www.capabilities.unsw.edu.au](http://www.capabilities.unsw.edu.au)

+61(2) 9385 5008