## International Conference on Science and Innovation for Land Power (ICSILP)

Adelaide Convention Centre, 5 and 6 September 2018

# Innovation through Technology Convergence for Land Power

### CALL FOR PAPERS

ICSILP, formerly known as Future Land Force Conference, is Australia's premier event for defence researchers, industry professionals, and academics interested in transforming the military land force through science and technology. In 2018, ICSILP will again be in Adelaide, Australia. It will address the question of how technology convergence, innovation and science can modernise land forces to become more agile and potent in the challenging environments of land operations, and survive and counter emerging physical, electronic and cyber threats. The conference will include invited and technical presentations, interactive sessions, and a panel discussion with well-regarded national and international defence science, industry and military representatives. You are invited to submit papers to either the innovation stream describing leading-edge technological advancements that will enhance future land power, or to the research stream covering novel concepts, validated models and potential solutions to the Australian Army's modernisation challenges. ICSILP 2018 accepts submissions that are up to four pages long (as of the ICSILP template) and are submitted via EasyChair by 11 May 2018 (https://easychair.org/conferences/?conf=icsilp18). Students can apply for registration sponsorship. In 2018, ICSILP likes to explore the following topics:

#### Topic 1 – Autonomy Enhancing Land Power

Robotics and autonomous systems have great potential to enhance Land Power through improved situational awareness and protection, reduced physical and cognitive workloads, and more effective movement, manouevre and sustainment. Areas of interest to ICDILP 2018 include but are not limited to: • Autonomous Logistics • Automated Data Fusion and Decision Support • Persistent Surveillance and Reconnaissance • Embodied Intelligence • Context-Aware Machines • 5<sup>th</sup> Generation Soldier Combat System • Autonomous Decoys and Signature Management • Robotics for "Dirty, Dull, Dangerous" Tasks • Unmanned and Optionally Crewed Vehicles • Unattended Ground Systems • Reasoning and Learning Machines • Self-Aware Computing

#### **Topic 2 – Technology Convergence Innovation**

Technology convergence describes the close integration and cohabitation of different technologies, each contributing something unique, to create new functionality and utility. Areas of interest to ICSILP 2018 include but are not limited to: • Land Capability Enabled by Technology Convergence • Land Combat System • Human-Machine and Machine-Machine Teaming • Collaborating Technologies • Device Miniaturisation • Technology Appropriation • Multi-functional Sensors and Effectors • NBIC – Nanotechnology, Biotechnology, Information Technology and Cognitive Science • Digitisation Exploitation • Architectural Innovation • Networking of "Things" • Technology Exaptation • Strategic ISR at the Tactical Edge

All submissions will be reviewed by at least two independent referees. Submissions to the *innovation stream* will be assessed for novelty and impact on transforming land power of the technology/innovation presented. *Research stream* submissions will be assessed against originality, relevance and scientific quality criteria. Based on the referees' recommendations, the Technical Program Committee will either assign papers to plenary or interactive sessions, or reject the submission. *A best paper award will be given to the highest quality contribution.* To be published in the ICSILP 2018 Conference Proceedings, the author of an accepted paper is required to register for the conference and must present the paper, as assigned by the Technical Program Committee. Non-refundable registration fees must be paid prior to submitting the final, publication-ready version of the paper. Only accepted papers will be published in the Conference Proceedings.

#### IMPORTANT DATES

Paper Submission Deadline: 11 May 2018 Notification of Acceptance: 31 May 2018 Final Papers Due: 30 Jun 2018

### REGISTRATION FEE Early Bird Special \$430

Standard: \$535 if registered after 15 July 2018 Late: \$645 if registered after 19 August 2018

General Chair: Dr Peter Shoubridge, Chief Land Division, DST Group

#### For more information visit

http://www.landforces.com.au/conferences/conferences.asp