16 March 2017   SIA Ref: 17/CFP/0315

SIA 4th Submarine Science, Technology and Engineering Conference (SubSTEC4) - 13-16 November 2017

CALL FOR PAPERS

Work on the Design Partnership between the Commonwealth of Australia and DCNS Australia, and Lockheed Martin Australia, for Australia's Future Submarine Program (FSP), is now well under way. Much of this work will focus on the technical challenges of how to manage the risk of incorporating innovation into the design.

The Committee of the Submarine Institute of Australia (SIA) will convene the Fourth Submarine Science, Technology and Engineering Conference of the SIA in Adelaide, SA from Monday 13th to Thursday 16th November 2017.

The Institute is seeking conference participation from Australian and overseas government, academic and industry representatives, together with other involved organisations.

The program includes a reception on 13th November and a Conference Dinner on 14th November. A Poster Paper event will be held on the evening of Wednesday 15th November. Further details will be made available under 'Conferences' on the SIA website: http://www.submarineinstitute.com/

The theme for the Conference is:

'The Australian Submarine Capability – Consolidating Emerging Technologies and Developing the Submarine Workforce'

The conference focuses on the multi-national considerations of sovereignty, Intellectual Property (IP) management, transfer of sensitive technology, applied research, development, test and evaluation, systems integration and team/individual training and development.

Monday 13th Nov will focus in visits to Industry and academia in the greater Adelaide area, followed by the Opening Reception. Tuesday 14th Nov will include invited speakers from major stakeholder organisations. The conference dinner will be held that evening. Wednesday 15th and Thursday 16th Nov will comprise technical papers from open call presented in thematic streams, plus plenary sessions to address overall programmatic issues. A Poster Paper event will be held on the Wednesday evening for presentation of selected papers from students of the submarine design course being held at the University of Adelaide and for papers that might not be allocated a programmed speaking spot.

The SIA is seeking papers for formal 'peer-reviewed' publication and oral presentations of 20 minutes in length plus 10 minutes for questions or possibly for poster presentation during the conference on Wednesday 15th and Thursday 16th November.

Tel: 02 6282 1437
Fax: 02 8076 3262
email: conference@submarineinstitute.com

Submarine Institute of Australia Incorporated
Postal Address: PO Box 241 Deakin West ACT 2600
www.submarineinstitute.com

Suggested topics include (but not limited to) the following:

Sovereignty, IP Protection, Transfer of Sensitive Technology including the following
- Stealth Technology
- Combat and platform systems integration, test, evaluation and software development.
- Sensors and Weapon Systems
- General approaches for management of IP rights

Research and Development, Test and Evaluation Policy and Management
- Scientific research and development strategy and management;
- Network design and evolution for submarines in theatre-wide command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR);
- Acoustic communications and signal processing research and education programs;
- Life-cycle approaches to submarine research, development, test and evaluation.
- Long term consideration of future adoption of nuclear propulsion

Engineering Design
- Hydrostatic and hydrodynamics programs relevant to submarines and other undersea technology applications;
- Naval architecture challenges for integration of unmanned underwater vehicles [UUV] in submarines;
- Submarine safety, escape, survival, and rescue systems
- Developments in integrated design and development environments [IDDE]

Workforce Skills Development
- National and regional engineering and technical skill training development, demand and supply relevant to submarine design, construction, operation and sustainment;
- Education programs for advanced systems engineering and systems integration for submarines;
- Materials science and technology education and workforce development.

Integrating Multi-National Technology
- Computer-based tools and training and their use for submarine design, development and integration;
- Extension of computer-based design tools to estimate cost of ownership contributions
- Research, development, education and training associated with air-independent propulsion for submarines;
- Advances in battery technology and electric propulsion.
- Game-changing developments in undersea warfare technology

Complex Program Management
- Workforce planning for co-ordinating submarine design, construction and sustainment both overseas and in Australia;
- Acquisition management principles applicable to design construction and sustainment of submarines in a multi-national context;
- Principles of, and case studies for managing cost-of-ownership and life-cycle sustainment of complex platforms in a multi-national context;

Submission Timetable:
- Abstracts of proposed papers in MS Word format (limit 250 words) should be submitted by Friday 21st April using the form available at https://form.jotformpro.com/frankowen/substec4-call-for-papers
- Acceptance of abstracts will be notified by Friday 30th June.
- Full papers in PDF and MS Word (A4 paper format) required by Friday 15th September.
- Acceptance of paper and draft conference program notified by Monday 25th September.
- Full presentation registration and presentation slides will be required by three weeks before the conference – that is by Monday 23rd October

SPONSORSHIP

Marketing opportunities for sponsorship are initially being offered to companies who supported the 2016 SIA Conference. They are available via the SIA Website. Opportunities will be fully opened up to the market at the end of April.2017

For further information please consult the conference website at:
http://www.submarineinstitute.com/sia-conferences/General-Information.html

Or contact the Submarine Institute of Australia Executive Director as follows:
David Nicholls
Executive Director, Submarine Institute of Australia
+61 413 133 391
email: conference@submarineinstitute.com