



CRADLΣ: New Research & Learning Hub to Nurture and Equip Students for a Future in Science & Technology

17 May 2012, Singapore – Students now have more avenues to learn about science through inquiry-based experimentation and research.

They can design their own science experiments and conduct research projects at the Centre for Research and Applied Learning in Science (CRADLΣ), a new open learning and research lab at the Science Centre Singapore. CRADLΣ will also develop teacher-mentors and enhance the capacity of teachers and schools in science research and innovation. CRADLΣ is a collaboration amongst Science Centre, A*STAR, DSO and MOE.

Associate Professor Lim Tit Meng, Chief Executive of SCS said: “This initiative is part of the Youth Science Movement championed by the Science Centre. CRADLΣ is about bringing new and innovative ways of learning science to students, beyond what is taught in the schools. Unlike traditional learning where they are taught facts and conduct experiments to confirm the factual evidence, students here approach experiments from the ground-up organically. They get the opportunity to explore and strengthen their spirit of self-discovery – just like real scientists – by pursuing their own experimental ideas.”

He continued: “To ensure CRADLΣ’s success and growth, at its core must be a strong partnership that brings different expertise and resources to the table. The Science Centre, Agency for Science, Technology and Research (A*STAR), DSO National Laboratories and the Ministry of Education thus came

together to bring this initiative to fruition. CRADL Σ will provide the infrastructural support for science projects and provide students with access to equipment and expertise that may not be readily available in schools. It will also help extend the limited research attachment opportunities for students to conduct real-world research.”

CRADL Σ research programmes are designed to encourage independent learning and places emphasis on engineering, design and innovation projects. Upper secondary/JC students between the ages of 14 and 18 can participate in the programmes, which are aligned to science education and research in the scientific community, thereby providing inter-disciplinary research opportunities for students to engage in advanced research and innovation.

Workshops are also conducted for teachers to encourage and inspire them to bring more hands-on activities to the classroom, develop project ideas and manage research projects at the school level. They also provide teachers an avenue to access the scientific community to help their students gain access to special lab resources and support.

Additionally, CRADL Σ offers research project consultation, electronics design and small scale PCB, mechanical and digital fabrication services.

MOE provides the support for teachers to be attached to CRADL Σ for two years. These teachers, known as Educator Researcher Mentors, bring their classroom experience to CRADL Σ by making links between CRADL Σ programmes and school syllabi, thus bridging the gap between classroom learning and laboratory research and/or enrichment.

Mr Sin Kim Ho, Deputy Director, Sciences, Ministry of Education said, “We are delighted that CRADL Σ provides more opportunities for students to be

engaged in structured experimentation, innovation and research. We applaud the work of schools and teachers in science education, and hope that they will make full use of the opportunities afforded by CRADLΣ to further enrich our students' learning of science.”

He continued, “Science Centre, with their experience in organising science enrichment activities, is well-positioned to work with partners like A*STAR, DSO and other agencies to support the growth of CRADLΣ. We will continue to work with the CRADLΣ partners to provide students with meaningful learning experiences as they participate in CRADLΣ programmes.”

More information on CRADLΣ, workshops and registration details can be found at www.science.edu.sg/schoolprogrammes/pages/cradle.aspx.

###

About CRADLΣ

The Centre for Research and Applied Learning in Science (CRADLΣ) is a new research and learning hub at the Science Centre for pre-university (upper secondary/JC) students and teachers. Equipped with research labs and interaction spaces, CRADLΣ is staffed by experienced scientists and educators who facilitate programmes in the area of integrated science and engineering.

For students, CRADLΣ provides an avenue for conducting experiments, as well as learning more about the experimental setups. This helps them reinforce their understanding of applied science concepts. By the practical use of real-world scientific tools and techniques, participants are enabled to build on and go beyond canned experiments, ultimately leading to the competence and skills to make use of CRADLΣ's resources for independent research projects.

CRADLΣ also functions as a training and development platform for teachers who want to gain more confidence and skills in bringing hands-on science and research capabilities to their classrooms and school labs with a minimum of resources.

About Science Centre Singapore

The Science Centre Singapore is a non-formal educational institution dedicated to the promotion of science and technology among students and members of the public. As a leading Science Centre in the



Ministry of Education
SINGAPORE



region, the Science Centre Singapore has 12 exhibition galleries with more than 1,000 exhibits, and another 18,000 sq metres of outdoor space showcasing the Waterworks, Ecogarden and the Kinetic Garden exhibits. The Centre also houses the Omni-Theatre — Singapore's only dome-shaped, 5-storey high theatre with a capacity of 248 seats. The Science Centre, with Omni-Theatre and Snow City, received 1.42 million visitors for FY2011/2012. For more information, please visit www.science.edu.sg.

About Agency for Science, Technology and Research (A*STAR)

The Agency for Science, Technology and Research (A*STAR) is the lead agency for fostering world-class scientific research and talent for a vibrant knowledge-based and innovation-driven Singapore. A*STAR oversees 14 biomedical sciences and physical sciences and engineering research institutes, and six consortia & centres, located in Biopolis and Fusionopolis as well as their immediate vicinity. A*STAR supports Singapore's key economic clusters by providing intellectual, human and industrial capital to its partners in industry. It also supports extramural research in the universities, hospitals, research centres, and with other local and international partners. For more information about A*STAR, please visit www.a-star.edu.sg.

About DSO National Laboratories

DSO National Laboratories (DSO) is Singapore's national defence research and development organisation. It undertakes indigenous development of advanced defence and weapon systems that provide the Singapore Armed Forces (SAF) with the superior technological edge in the battlefield. With more than 1,000 research scientists and engineers, DSO researches into emerging technologies, matures promising ones and integrates them into innovative system concepts to meet Singapore's defence and security needs. For more information, please visit www.dso.org.sg.

About Ministry of Education

The Singapore Ministry of Education (MOE) formulates and implements education policies and programmes in consultation with its stakeholders. These policies and programmes aim to help all students discover their talents, realise their potential, and develop a passion for learning that lasts through life. MOE also oversees the development and management of Government and Government-aided primary schools, secondary schools and junior colleges. Please visit www.moe.gov.sg for more information.

For media information, please contact:

Shouvik Mukherjee
+65 6551 5449
smukherjee@golinharris.com

Eunice Choy
Science Centre Singapore
+65 6425 2372
ekm_choy@science.edu.sg