



Collaborate to innovate Collaborate to market



About SIIRD

The Singapore-Israel Industrial R&D Foundation (SIIRD) promotes, facilitates and supports joint industrial R&D projects, between Singapore-based companies and Israeli high-tech companies, with the goal of successful commercialisation. For more information, visit http://www.siird.com.

Call for Proposal Submission

SIIRD is calling for a new round of Joint R&D Project Proposals and invites Singapore and Israeli companies that are keen to collaborate on joint R&D projects to submit their proposals. Interested companies can contact the SIIRD Managers in the respective countries.

New Projects Approved

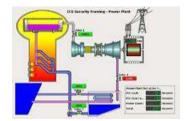
The Singapore-Israel Industrial R&D Foundation (SIIRD) has recently approved joint industrial R&D projects with total research investment of ~US\$8.1M. Some of the approved projects are described below:



In this project, the collaborators are working together to develop a low cost, portable and self-powered smart agriculture solution which would allow crop farmers to harness the capabilities of IoT to increase the yield and quality of their crops. The Israeli partner's role in the project is the development of the enhanced optics, photovoltaic panels, hydro energy harvesting and communications modules. The Singapore partner would be responsible for development of application servers, APIs, web portal and analytics engine as well as the mobile app on Android and iOS.



The aim of this project is to develop a new robot control system, based on both companies' proprietary motion control topology, to serve the automation needs of the niche market comprising of small and medium sized manufacturing companies that are currently using standard off-the-shelf motion controllers. The Israeli company will be responsible for the development of the robot master controller hardware and software while the Singapore company will be responsible for the development of the robot test platform and its motion control and kinematics transformation algorithms.



The collaborators in this project intend to develop an Industrial Control Systems (ICS) testing and simulation platform for the evaluation of clients' Operational Technology (OT) environment's defense against cybersecurity vulnerabilities. The Israeli partner will be responsible for the prototyping of the process functional design for various industries and the integration of PLC modules to the platform. The Singapore partner will be responsible for the development and integration of the SCADA components, ICS protocols, communications modules and data analytics engine.



In this project, the collaborators are working together to develop a biometric camera and platform for facial and iris recognition of customers at point of sale (POS), thereby providing a cardless customer loyalty programme for engaging customers and allowing them to make payments. The Israeli partner's role in the project is the development of the POS software and the deep learning network and algorithms for iris and facial recognition. The Singapore partner will be responsible for development of the camera optics and electronics, iris pre-processing and image extraction algorithms as well as camera design for mass production.

Enhancements to SIIRD's Funding Benefits

The Singapore-Israel Industrial R&D Foundation (SIIRD) has updated its funding policies and introduced new benefits to its funding schemes to help companies more comprehensively during their R&D and commercialization phases. Some of the key enhancements are described below. To better reflect the enhanced support from SIIRD, the Full Scale R&D Project Grant has been renamed Full Scale R&D & Commercialization Grant.

NEW GRANT SUPPORT FOR JOINT COMMERCIALIZATION:

- Scope of funding expanded to include joint commercialization activities e.g. joint participation in trade exhibitions, joint marketing collaterals
- Up to US\$30,000 grant support per project for joint commercialization activities
- Qualifying period for joint commercialization activities extends from project start till 12 months after project completion
- Support for consultants for development of marketing/commercialization plan



ENHANCEMENTS TO IMPROVE COMPANIES' CASHFLOW:

Full Scale R&D & Commercialization Project Grants

Applicable co-funding percentages increased to 40%, 45% & 50%

ENHANCEMENTS TO DISBURSEMENTS:

- Up to 4 disbursements per project
- Disbursements in local currencies

DETAILS ON ENHANCEMENTS:

- For more details on the various enhancements to SIIRD's funding schemes, please get in touch with the <u>SIIRD team.</u>
- The SIIRD team is also open to discussions with interested companies whose proposal ideas may not initially fit SIIRD's funding framework.

Arcstone Pte Ltd (Singapore)

Arcstone prepares manufacturers for Industry 4.0 with its advanced Manufacturing Execution System (MES) solution to control the factory floor. Arcstone believes that manufacturing processes and equipment management can be monitored, maintained and controlled by fully operationalizing and unlocking the value of data. Arcstone's MES solution allows firms to visualize and integrate data in a virtual factory floor, which enhances the ability to control the physical factory floor. Arcstone's other key advantages lies in the modularity, integration and comprehensiveness of its solution. Arcstone is keen to work with an Israel company to co-develop a solution that integrates its advanced MES with data analytics software that is catered towards labour-intensive manufacturing processes. Arcstone's expertise lies in providing visibility and control to all aspects of the manufacturing process, while the Israel company should have expertise in data analytics and optimisation using machine-learning tools, with a focus on labour-intensive manufacturing processes.

ARCSTONE

Nodis Pte Ltd (Singapore)

Nodis' technology transforms how we use sunlight in lighting and heating buildings and creating comfortable, energy efficient environments. Nodis' TruTint smart glass technology transforms windows, giving people the ability to change the tint, colour and temperature characteristics of windows instantly. Controlling natural light reduces glare and sets the right lighting level for comfort while controlling infrared rays and light lowers energy consumption for heating, cooling and lighting. At the same time, changing the colour sets the mood and aesthetics of a room. Nodis is working on implementing a smart glass film display. This film will contain Nodis' nanoparticles that are oriented to block or allow light based on an applied voltage. This film will be sold to various smart glass manufacturers in the architectural, automotive, aircraft and consumer markets. Nodis is keen to work with an Israel company that has capabilities in nanoprinting/nanofabrication of plastic film as well capabilities to productize the display film via validation, reliability and environmental testing.



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