### See our Research & Innovation Grant Schemes:

- i. Collaborative Research and Innovation Grant Scheme
- ii. Intellectual Property Promotion Scheme
- iii. Social Innovation Research Grant Scheme
- iv. National SME Incubator Scheme
- v. Proof of Concept Scheme
- vi. Pole of Innovation Grant Scheme
- vii. Research and Innovation Bridges

Details are available on: http://www.mrc.org.mu



### Mauritius Research Council

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### **Mauritius Research Council**

### WORKSHOP

# Introducing MIR-SAT1

The first Mauritian Infrared Satellite

## **DRAFT PROGRAMME**

Venue: Conference Hall Level 1

Atul Bihari Vajpayee Tower

(CyberTower 1)

Cybercity Ebène 72201

Date: Friday, 1st March 2019

*Time:* 09:00 hrs

# Introducing the - MIR-SAT1 The first Mauritian Infrared Satellite

#### **BACKGROUND**

Satellite technology has come a long way since the launch of Sputnik 1 in 1957. Since then, advances in technology have made satellites much more accessible, leading to thousands of artificial satellites orbiting the earth today. Satellites have become an important part of our everyday life, facilitating telecommunications, weather forecasting, oceanographic explorations, among others. Furthermore, Satellite/space Technology has led to major advancements in a number of fields including astronomy and surveillance amongst others. Mauritius, as a SIDS, currently benefits from numerous services provided by satellites.

In an attempt to start a 'Mauritian led' initiative in space technology, a team led by the Mauritius Research Council (MRC) submitted a proposal entitled the MIR-SAT 1 under the United Nations Office for Outer Space Affairs (UNOOSA) and the Japan Aerospace Exploration Agency (JAXA) KiboCUBE Programme 2018. The UNOOSA/JAXA KiboCube Program provides developing countries opportunities to embark into space activities with an ultimate objective to build national capacity in space technology.

The MIR-SAT 1 proposal was selected by the JAXA/UNOOSA as the best submission from a developing country in 2018 and consequently Mauritius will be offered the opportunity, for the first time in its history, to build and deploy into Space a Mauritian NanoSatellite from the International Space Station (ISS) Japanese Experiment Module (Kibo) "KiboCUBE". The MRC also benefited from the collaboration of AAC-Clyde (UK), expert in nanosatellite technologies. The MIR-SAT1 will collect images of Mauritius and surrounding regions using longwave infrared (LWIR) thermal camera, demonstrate technology of S-band high speed data transmission. The data from the satellite will be collected by a main ground station to be built in Mauritius. Secondary ground stations are planned to be built by university students at later stages. Data collected from the satellite will be used for capacity building, advanced research and innovation in areas pertinent to national problems. The expected deployment in space for the first Mauritian CubeSat is around December 2019. This will be done by JAXA via the KIBO arm of the International Space Station. It is envisaged that this first of its kind initiative will pave the way to future developments in space related activities in Mauritius in the coming years.

### **DRAFT PROGRAMME**

09:00 - 09:30	Registration of Participants
09:30 - 09:35	<b>Welcome Address</b> <i>Dr A Suddhoo, Executive Director Mauritius Research Council</i>
09:35-09:40	Address Dr M. Atchia, Chairman Mauritius Research Council
09:40 - 09:45	Address His Excellency MrYoshiharu Kato Embassy of Japan in Mauritius
09:45 - 10:00	Address The Hon Y Sawmynaden Minister of Technology, Communication and Innovation
10:00 - 10:15	TEA BREAK
10:15 - 10:45	<b>Presentation</b> Mr F Shamutally and Mr Z Soreefan Mauritius Research Council
10:45 - 12:00	<b>Presentation</b> Mr Hiroki Akagi Japan Aerospace Exploration Agency (JAXA)
12:00 - 12:40	LUNCH BREAK
12:40 - 13:25	<b>Presentation (To be confirmed)</b> Representative of AAC Clyde
13:25 - 14:05	<b>Presentation</b> Mr Jean Marc Momplé Mauritius Amateur Radio Society
14:05 - 14:20	Questions & Answers
14:20 - 14:30	Concluding Remarks