



Theme:

“Promoting Sustainability and Resilience through Interdisciplinary Research and Innovation”



Promoting
**Sustainability
& Resilience**
through Interdisciplinary
**Research
& Innovation**

UNIVERSITY OF MAURITIUS

INNOVATION DAYS

Wednesday 29 November to Friday 01 December 2023

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| DAY 1 | Student Competition: Tech-Driven Agriculture |
| DAY 2 and 3 | Formal Presentations by Researchers and Other Innovative Activities |
| DAY 3 | Exhibits/Poster Presentation/ Prototype Presentation by Researchers on Innovation Projects |



Student Competition Tech-Driven Agriculture

Organised by:



Sponsored by:



DAY 1

PROGRAMME – Wednesday, 29th November 2023, Raised Plaza, University of Mauritius

08 00 - 08 45 Participating Teams Setup

OPENING CEREMONY

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| 09 10 - 09 15 | Welcome address by Professor Ponnadurai Ramasami, Chairperson, UoM Research and Innovation Week 2023 |
| 09 15 - 09 20 | Address by Associate Professor Maleika Heenaye Mamode Khan, Dean, Faculty of Information, Communication and Digital Technologies |
| 09 20 - 09 30 | Address by Representative of Ceridian Mauritius, Main Sponsor for the Competition |
| 09 30 - 09 45 | Address by Professor Sanjeev Kumar Sobhee, Vice-Chancellor |
| 09 45 - 09 55 | Address by Professor Theesan BAHORUN, GOSK, Executive Director, Mauritius Research and Innovation Council (MRIC) |
| 09 55 - 10 00 | Launching of Innovation Days and the Competition's Opening by Professor Theesan BAHORUN, GOSK, Executive Director, Mauritius Research and Innovation Council (MRIC) |
| 10 00 - 10 30 | Visit of Stands by the Guests |
| 10 30 | REFRESHMENTS |
| 11 00 - 12 00 | Participants to finalise and fine-tune their demos |
| 12 00 | LUNCH |
| 13 00 - 14 30 | Demo of Prototype to Jury Panel (5 Minutes for each team) |
| 14 30 | COFFEE BREAK |
| 14 45 - 15 45 | Pitching by Selected teams to Audience and Jury Panel |
| 15 45 - 16 15 | Jury Deliberation on Pitches |
| 16 15 - 16 45 | Winner Announcement and Award Ceremony |
| 16 45 | Student Competition Closes and Vote of Thanks |

Other Sponsors and Collaborators:





DAY 2

Thursday 30 November 2023 - Morning Session

Venue: Lecture Theatre 2

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| 09.00 – 09.15 hrs | Registration |
| 09.15 – 09.25 hrs | Welcome and Introduction of Keynote Speaker by Professor Ponnadurai Ramasami <i>Chairperson of Innovation Sub-Committee</i> |
| 09.25 – 10.10 hrs <i>(incl. 15 minutes discussions)</i> | <p>Keynote Address by Professor (Dr) Xiaotian Zhang <i>Associate Deputy Director Global Curtin University, Australia</i></p> <p>Title: Developing An Entrepreneurial University: A Global Perspective</p>  <p>Professor Xiaotian Zhang is the Associate Deputy Vice-Chancellor Global and a member of the Senior Leadership Team at Curtin University in Australia.</p> <p>He is an expert in the internationalization of higher education and has held several senior management positions at the world's leading universities in Asia, Europe, and Oceania, including Deputy Vice-President (International) of Shanghai University, Vice-Rector of EBSH in Helsinki, and Vice-Rector for Research of UIB in Central Asia. As an academic, Professor Zhang is the SHU Distinguished Professor of International Business and EU Jean Monnet Professor of International Entrepreneurship. He has held academic positions at the University of Southern Denmark, Stockholm University, University of Oulu, and the University of Tartu. He is also a former Rajawali Fellow of Harvard Kenney School, Harvard University; a Visiting Fellow of Said Business School, University of Oxford; and a Principal Advisor of CIA at St. John's Innovation Centre of the University of Cambridge. Professor Zhang is passionate about the strategic development of global entrepreneurial universities.</p> |
| 10.10 – 10.25 hrs | Launching of the 7th Edition of the UoM SDGs eNewsletter |
| 10.25 – 10.40 hrs | <i>Tea/ Coffee Break</i> |
| 10.40 – 11.40 hrs | <p>Showcasing of Innovative Projects in the field of AI by UoM Research Assistants of Faculty of Information, Communication and Digital Technologies</p> <p>Name: Muhammad Muzzammil Auzine Title: Explainable AI for Colorectal Lesion Classification using Deep Learning Model with Attention Mechanism</p> <p>Name: Mohammad Shoaib Ibne Saleem Casseem Title: Precision Face Verification with Alignment Enhancement</p> <p>Name: Jhumka Muhammad Cheik-Al-Khadiime Title: Predicting Kidney Diseases using Explainable AI</p> |



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| 11.40 – 12.30 hrs | <p>Presentation by Dr Viv Padayatchy <i>Managing Director, Cybernaptics Ltd</i></p> <p>Title: From the Lab to the Market: Developing a Model for Sustainable Innovation in Mauritius.</p> |
| 12.30– 13.15 hrs | <p>Networking Lunch driven by Professor Sanjeev K Sobhee, <i>Vice-Chancellor</i> and Assoc Prof (Dr) Maleika Heenaye Mamode-Khan, <i>Dean FoICDT</i></p> <ul style="list-style-type: none"> • Lessons drawn from Presentation of the Keynote Speaker • Prospects for Commercialisation of Innovative Projects <p>Venue: UoM Cafeteria</p> |
| | <p>Rapporteur: Mr Dassen Sathan <i>Senior Lecturer, Faculty of Engineering</i></p> |
| <p>Thursday 30 November 2023 – Afternoon Session Venue: Lecture Theatre 2</p> | |
| 13.15 – 13.30 hrs | <p>Registration</p> |
| | <p>Session Chair: Assoc Prof (Dr) Viraiyan Teeroovengadam <i>Faculty of Law and Management</i></p> |
| 13.30 – 14.30 hrs | <p>Presentation from Human Resource Development Council</p> <ul style="list-style-type: none"> • Dr Harris Neeliah, <i>Manager – Research & Projects</i> <p>Title: The Innovation and Skills Nexus</p> <ul style="list-style-type: none"> • Leena Ramtohol, <i>Senior Research & Development Officer,</i> Ravisha Subramanyan , <i>Research and Development Officer</i> & Dr Harris Neeliah <p>Title: The HRDC Graduate Training for Employment Scheme, as a Skills Intermediation Instrument</p> |
| 14.30 – 14.45 hrs | <p><i>Tea/ Coffee Break</i></p> |
| 14.45 – 15.15 hrs | <p>Presentation by Professor Robin Nunkoo <i>Head, International Centre for Sustainable Tourism and Hospitality</i></p> <p>Title: A Framework for Understanding the Metaverstic Experiences of Consumers</p> |
| 15.15-15.45 hrs | <p>Presentation by Mr Tahir Wahab <i>Director, Shared Services</i> <i>JTC Group</i></p> <p>Title: Fin tech and other Emerging Technologies within Financial Services</p> |
| | <p>Rapporteur: Mr J Narsoo <i>Senior Lecturer</i> <i>Faculty of Social Sciences and Humanities</i></p> |



DAY 3

Friday 01 December 2023 – Morning Session

Venue: Lecture Theatre 2

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|-------------------|--|
| 09.00 – 09.30 hrs | Registration |
| | Session Chair: Assoc Prof (Dr) Mussawir Hosany <i>Faculty of Engineering</i> |
| 09.30 – 10.30 hrs | Presentation by Dr Nitin Gopaul <i>Research Coordinator, Mauritius Research and Innovation Council</i> & Miss Karuna Lakheeram <i>Research Assistant, Mauritius Research and Innovation Council</i> |
| | Title: MRIC-TTO: Promoting Innovation and IP |
| 10.30 – 10.45 hrs | <i>Tea/Coffee Break</i> |
| 10.45 – 11.40 hrs | Presentation/Exhibition of Innovative Projects led by UoM Academics & Students |
| 10.45 – 10.55 hrs | Presentation by Assoc Prof (Dr) Brinda Ramasawmy Molaye, Dr Deena Ramful-Baboolall, <i>Senior Lecturer and Dr Hudaa Neetoo, Senior Lecturer</i> |
| | Faculty: Faculty of Agriculture |
| | Title: Ecopec Food Freshness Retainer (A natural coating to enhance the shelf-life of fresh fruits and vegetables) |
| 10.55 – 11.10 hrs | Presentation by Mr Leshvin Noruttun <i>Student of BSc (Hons) Actuarial Studies</i> <i>Faculty of Social Sciences and Humanities</i> |
| | Title: Improving Road Safety and Congestion in Mauritius: Using Generative AI. |
| 11.10 – 11.40 hrs | Presentation by Mrs Sandhya Gunness <i>Senior Lecturer, Centre for Innovative and Lifelong Learning</i> & Miss Mokshada Todar <i>Student at Centre for Innovative & Lifelong Learning</i> |
| | Title: Co-Creation Framework for developing Employability, Sustainability and Future Skills and Competencies at CILL |
| 11.40 – 12.10 hrs | Presentation by Dr Suman Seeruttun <i>Director, MSIRI</i> |
| | Title: Application of Remote Sensing, Drone Technology and AI in Sugarcane Production. |
| 12.10 – 1300 hrs | Networking Lunch Driven by Professor P Ramasami |
| | Prospects for Patenting and Scaling-up of Projects |
| | Venue: UoM Cafeteria |
| | Rapporteur: Dr Raviduth Ramful <i>Senior Lecturer, Faculty of Engineering</i> |



Friday 01 December 2023 – Afternoon Session Venue: Lecture Theatre 2

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|-------------------|---|
| 13.00 – 13.15 hrs | Registration |
| | Session Chair: Assoc Prof (Dr) Vincent Florens <i>Faculty of Science</i> |
| 13.15 – 13.45 hrs | Presentation by Professor Archana Bhaw-Luximon <i>Head, Centre for Biomedical and Biomaterials Research</i> |
| | Title: Strategies for Innovation |
| 13.45 – 14.45 hrs | Presentation by Mr Prakash Ramiah <i>Renewable Energy Consultant, , Leal Group</i> |
| | Title: Adapted RE solutions for SIDS Mauritius |
| 14.45 – 15.15 hrs | Award Ceremony & Closing Ceremony |
| | Rapporteur: Dr Mahendra Gooroochurn <i>Senior Lecturer Faculty of Engineering</i> |
| 15.15 – 15.30 hrs | <i>Refreshments</i> |

Friday 01 December 2023 Venue: AGRI-Tech Park, UoM Farm

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| 15.45 – 16.45 hrs | Inauguration of the Food Innovation Laboratory (Faculty of Agriculture) |
| 16.45-17.00 hrs | <i>Refreshments</i> |



Exhibits/Poster Presentation/ Prototype Presentation by Researchers on Innovation Projects

Friday 01 December 2023 –Raised Plaza

FACULTY OF AGRICULTURE

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| 11.00-15.30 hrs | Dr Swaleha Bibi Huda Neetoo , <i>Senior Lecturer</i> , Miss Sandhya Takooree & Miss Nooreen Mamode Ally <i>Students</i> Title: A Mobile App: Dokter Plant |
| | Assoc Prof (Dr) Brinda Ramasawmy Molaye & Dr Swaleha Bibi Huda Neetoo , <i>Senior Lecturer</i> Title: Smartbite Products and Derivatives (Health Bars) |
| | Mr Shane Hardwar , <i>Senior Lecturer & Representative from Maugreen Aquaponics</i> Title: Sandponics |
| | Mr Navindra Boodia , <i>Senior Lecturer & Miss Rishma Jaunkeypersad</i> , <i>Master Student</i> Title: Unlocking the Potential of Vermiwash: A Game Changer in Biopharming |
| | Mr Navindra Boodia , <i>Senior Lecturer & Mr Yajasingh Serwan</i> , <i>Master Student</i> Title: An IoT-Based Automated Irrigation System for Water Saving in a Forest Nursery |

FACULTY OF ENGINEERING

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| | Dr Mahendra Gooroochurn , <i>Senior Lecturer</i> Title: An Innovative Communication and Demonstration Tool for Climate Education, Awareness and Grassroots Action |
| | Dr Raviduth Ramful , <i>Senior Lecturer</i> Title: Improving the Durability of Natural Materials for the Construction Industry to Promote Sustainable Development |
| | Dr Raviduth Ramful , <i>Senior Lecturer & Mr Yashil Nunkoo</i> , <i>Student</i> Title: Smart Irrigation System Based on IOT for Terra Milling Ltd |
| | Dr Raviduth Ramful , <i>Senior Lecturer & Miss Dipshika Bhookul</i> , <i>Student</i> Title: AI Operated Plastic Waste Sorting System |
| | Dr Raviduth Ramful , <i>Senior Lecturer & Miss Deepti Baijnath</i> , <i>Student</i> Title: Autonomous Solar Powered Composting Device |



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| | <p>Mr Nidhish Mungra & Mr Yasheel Unnoop, <i>Students</i></p> <p>Co-supervisors: Assoc Prof (Dr) Iqbal Jahmeerbacus & Dr Mahendra Goorochurn, <i>Senior Lecturer</i></p> <p>Title: Semi-automated fogponics system</p> |
| | <p>Mr Mohammad Waseem Hisaund, <i>Student</i></p> <p>Supervisor: Mr Anshu Prakash Murdan, <i>Senior Lecturer</i></p> <p>Title: A Solar-Powered, Autonomous Lawnmower with Intelligent Obstacle Avoidance</p> |
| | <p>Dr Anagha Vaidya Soocheta, <i>Senior Lecturer</i></p> <p>Title: Solar Cooker: A SocioTechnological Approach to Sustainability Enhancing Research Capacity to Bridge the Gender Gap 2019/20</p> |
| | <p>Miss Karina Ragoonundun, <i>Student</i></p> <p>Supervisor: Assoc Prof (Dr) S Rosunee</p> <p>Title: Upcycling Old umbrella Fabrics to Create New Products</p> |
| | <p>Miss Vandanaluxmi Dasso, <i>Student</i></p> <p>Supervisor: Assoc Prof (Dr) S Rosunee</p> <p>Title: Seed Paper Bamboo</p> |
| FACULTY OF LAW AND MANAGEMENT | |
| | <p>Assoc Prof (Dr) Viraiyan Teeroovengadam</p> <p>Title: Testing and Improving Financial Literacy for Women Entrepreneurs using Educational Technologies: An Experimental Study</p> |