

# STAR 2019 CONFERENCE PROVISIONAL PROGRAMME

Time Slots	Presenters	Title
<b>Tuesday, 19 November 2019</b>		
<b>[Note to Secretariat – appoint time keepers!]</b>		
<b>Session 01 OPENING [Facilitator – R. Ravuiwasa]</b>		
08:00-09:00	-----	Registration
08:50-09:00	[STAR participants find seats]	Prepare for Official Opening Session
09:00-09:30	Chief Guest – Dr Raijeli Taga, D/PSLMR	Conference Opening by Deputy Secretary for Lands and Mineral Resources
09:30-10:00	-----	----- Morning Coffee -----
<b>Session 02 WATER RESOURCES &amp; MANAGEMENT [Facilitator – R. Ravuiwasa]</b>		
10:00-10:20	<b>Cyril B. Rachman</b> , FNU	Rural Water Infrastructure on the mainland and outer islands in Fiji
10:20-10:40	<b>Peter Sinclair</b> , SPC	Evidence-based approach to water supply development in volcanic islands – case study from Tanna, Vanuatu
10:40-11:00	<b>Francis John Chottu</b> , FNU	Namara District Fiji, Off-Grid Water Supply System Design
11:00-11:20	<b>Nicholas Metherall</b> , ANU-USP	Quantifying the effects of dry season aggregate extraction on downstream turbidity and sediment transport: a water quality and hydrology assessment of Dawasamu River
	<b>Malakai Tadulala</b> , Keleni Raqisia, Tariq	
11:20-11:40	Rahiman, MRD	Lineaments structures and groundwater characteristics between Sigatoka Valley and Eastern Tailevu Regions
11:40-12:00	<b>Erickson Sammy</b> , Vanuatu	Increasing Water Access Resilience for rural communities in the Pacific islands through solar powered systems – 2 case studies in Vanuatu
12:00 –	Mick McWalter, Circum-Pacific Council and Oil Search Ltd, Port Moresby will show a film about the emergency response to the 26th February 2018 earthquake in PNG called <i>The Last Mile</i> directed by Marco Venditti [spillover into lunchtime]	
12:30-13:30	-----	----- Lunch -----
<b>Session 03 GIS &amp; REMOTE SENSING TECHNIQUES &amp; APPLICATIONS [Facilitator – R. Smith]</b>		
13:30-13:50	<b>Wolf Forstreuter</b> , PICGISRS	History of GIS & Remote Sensing support at the grass root level for Pacific Island Countries
	<b>Evie Packett</b> , <b>Makereta Veitata</b> , ANU-	
13:50-14:10	USP	Utilising Google Earth Engine to track mangrove recovery post cyclone Winston revised
	<b>Asakaia Tabuabisataki</b> , Lands	
14:10-14:30	Department	Importance of Global Navigations Satellite Systems (GNSS) to Positioning Infrastructure – Fiji
14:30-14:50	<b>Swetha Thammadi</b> , Sateesh Pisini, FNU	Developing GIS-based Soil Erosion Map using RUSLE model for Naitasiri Province, Fiji
14:50-15:10	<b>Paul Seaton</b> , Fugro	Unlocking Data Insights in the South Pacific to Mitigate Impact of Climate Change and Sea Level Rise
15:10-15:30	<b>Mark Sinclair</b> , Fugro	Large Scale Airborne Lidar Bathymetric Mapping Projects for Coastal Zone Management
15:30-16:00	-----	----- Afternoon Coffee -----
16:00-16:20	<b>Faatasi Malologa</b> , <b>Arthur Webb</b> , Tuvalu	<b>Tuvalu Report on the benefits of Lidar data and the Tuvalu TCAP Project – TBC</b>
16:20-18:00	<b>RESERVED FOR WORKING GROUPS – [Work in Progress – Facilitator – Dr Russell Howorth]</b>	
WORKING GROUPS: PSIDS LADS Project – RH; EDUCATION WORKING GROUP – Sara Beavis; Pacific Resilience professional development [Melinda Mathers/Elenoa Ratumaitavuki]; SB Islander Cyril B Rachman – Water Resources; Ocean Geosciences [CHAIR TO BE Announced for latter 2]		

## Wednesday, 20 November 2019

08:40-09:00 **Cyril Bernard Rachman**, FNU

09:00-09:20 **Evie Packett**, ANU-USP

09:20-09:40 **Aminisitai Loco**, SPC

**Lloyd Singura**, Tsukasa Ohba, Akita

University-UPNG

10:00-10:30 -----

10:30-10:50 **Michael Nesbitt**, Kalo Exploration

10:50-11:10 **Jack A. Smith**, Vatukoula Gold Mine

11:10-11:30 **Stephen Mann**, Lion One

11:30-11:50 **Yi Huang**, Vatukoula Gold Mine

11:50-12:10 **Stephen Mann**, Lion One

12:10-12:30 **Neechal Kumar**, Eroni Bakabaka, MRD

12:30-13:30 -----

13:30-13:50 **Keleni Raqisia**, MRD

**Paul A. Taylor**, Australian

Volcanological Investigations (AVI)

14:10-14:30 **Noa Tuiloma**, MRD

14:30-15:30

*RESERVED FOR POSTER SESSION – Poster Paper Authors, 5 minutes each present on poster and point out location of poster in the room – then participants go to Posters of Interest and engage with authors – spillover into afternoon tea time. See list of Poster Papers on Page 4*

15:30-16:00 -----

16:00-16:20 **Sereana Vatucicila**, Lion One

**Mohammed Azad, Nilesh Chand**,

MRD

16:40-17:00 **Oliver Lilford, Sara Beavis**, ANU-USP

**Vani Koroisamanunu, Sovaia**

17:00-17:20 **Lewanavanua**, MRD

### Session 05 FIELD APPLICATIONS OF TECHNOLOGY/SCIENTIFIC TECHNIQUES [Facilitator – R. Taga]

Investigating the littoral transport of sediment along the Nasese Coastline, Suva, Fiji Islands

Lessons from the Qfield: novel field data collection methodologies using QFIELD for QGIS

Testing innovative technologies for atoll groundwater mapping

Unearthing tephra deposit, and petrological trace of subvolcanic magma dynamics of two active intra-caldera

volcanoes north of Rabaul volcanic complex – Papua New Guinea

----- Morning Coffee -----

### Session 06 MINERAL RESOURCES, MINING, FIELD TECHNIQUES [Facilitator – R. Mohammed]

Cirianiu: The Epithermal Gold Project that Unlocked a District

Socio-economic sustainability in mining through innovation – the implementation of shrinkage stoping mining methods at Vatukoula Gold Mine, Fiji

The Tuvatu Gold Project, Viti Levu, Fiji

Tailings retreatment practice at Vatukoula Gold Mine Limited

Using Stream Clay BLEB Sampling to Find New Orebodies – Lion One's Tuvatu Project as a Case Study

River Gravel Extraction Monitoring and Compliance

----- Lunch -----

### Session 07 DATA AND INFORMATION COLLECTION, MANAGEMENT & APPLICATION [Facilitator – A. Loco]

Data Management System for Groundwater

Volcanic Hazard Maps: their development and use in Volcanic Environments of the South West Pacific

Landowners engagement in mining and socio-economic benefit of mining

----- Afternoon Coffee -----

### Session 08 ENVIRONMENTAL CONSIDERATIONS IN DEVELOPMENT PROJECTS [Facilitator – E. Sammy]

The Importance of Developing an Environmental Baseline Study – Tuvatu Gold Project

Water Quality Monitoring for Foreshore Development – Nawi Island Limited

Confronting Complexity in Issues of Environmental Degradation and Management – The case of Gold Rock Quarry, Fiji

Water Sampling and Monitoring at AMEX Resources Limited

## Thursday, 21 November 2019

08:40-09:00 **Andreas Antoniou**, SPC

09:00-09:20 **Gary M. McMurtry**, University of Hawaii

09:20-09:40 **Arishma R. Ram**, University of Auckland

09:40-10:00 **Robert Smith**, GEM, SPC

10:00-10:30 -----

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10:30-10:50 **Nasi Racaca**, City of Rockingham

10:50-11:10 **Sushil Kumar**, USP

11:10-11:30 **Paul A. Taylor**, AVI

11:30-11:50 **Gary M. McMurtry**, University of Hawaii

**Sobha Devi Kumar**, Water Authority of Fiji (WAF)

11:50-12:10 **Rigieta Ravuiwasa**, Sakaraia Malodali, Mohammed Zaved, MRD

12:10-12:30 -----

12:30-13:30 -----

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13:30-13:50 **Cécile Dupouy**, CRESICA (New Caledonia)

13:50-14:10 **Sereseini D. Vakawaletabua**, WAF

14:10-14:30 **Kunal Singh**, USP

14:30-14:50 **Inia Corerega**, USP-ANU

14:50-15:10 } **Dr Gregory Stone**, DeepGreen

15:10-15:30 }

15:30-16:00 -----

16:00-18:00

### Session 09 GEOLOGY, GEOPHYSICS, FIELD TECHNIQUES [Facilitator – J. Lavis]

The value of geophysics in understanding the variability of groundwater systems in low carbonate islands  
Continuous Monitoring of Volcanic Unrest and Large Earthquakes: Field-Portable Helium Isotope Detectors as New Geochemical Tools  
Engineering geological and geomorphological investigation of slope failures along roads in Viti Levu, Fiji  
Geophysical and Geological Investigations for Infrastructure Development, Fanga’Uta Lagoon, Tonga  
----- Morning Coffee -----

### Session 10 NATURAL HAZARDS, RISK ASSESSMENT TECHNIQUES [Facilitator – D. Leneuoti]

Coastal Hazard Risk Management and Adaptation Plan for City of Rockingham, Western Australia  
Natural hazards, radio wave detection and their effect on ocean-mesosphere-lower thermosphere region in the South Pacific Region  
Recent volcanic activity in the Kingdom of Tonga  
Locally-generated Tsunami Events Preserved in the Rock and Deposit Record at Ka Lae (South Point) and Other Sites in the Hawaiian Islands

Micro-organisms in potable water supply

Earthquake and Landslide Assessment: Mount Washington, Nabukelevu District, Kadavu

----- Lunch -----

### Session 11 SCIENTIFIC RESEARCH UNDERWAY IN THE REGION [Facilitator – R. Howorth]

The "Along the River" Program: a Research and Innovation Project Focusing on the Integrated Management of Water, its Uses and its Governance in New Caledonia

Suva rivers monitoring in support of the Assimilative Study of the Laucala Bay, Suva

Responses of a high altitude wetland to late-Holocene environmental changes in Taveuni, Fiji

Using GIS to Identify Suva Schools exposed to Tsunami Risk and their Distance to Safe Zones

Ocean Metals and the Future of the Pacific Islands

----- Afternoon Coffee -----

RESERVED FOR BUSINESS MEETING/AGM 2019

## GOVT-STAR 2019 COCKTAIL FUNCTION

Friday, 22 November 2019 GEOLOGICAL EXCURSION – NUKULAU/MAKULUVA; DRONE WORKSHOP, MY SUVA PARK

## LIST OF POSTER PAPERS SUBMITTED TO STAR 2019

#	AUTHOR(S)	AFFILIATION(S)	TITLE OF POSTER PAPER
1	<b><u>Nilufar Sabirova</u></b>	Department of Geography and Ecology, Samarkand State University	The importance of aerospace methods in the study of landscapes transformation: In the case of adjacent areas of the Aydar-Arnasay-Arnasay Lakes System
2	<b>Michel Leodoro</b> [uncertain]	Vanuatu Geology and Mines Unit (Government)	GeoPark Concept for Vanuatu: Proposed Gaua National GeoPark
3	Ilaitia Erene, <b><u>Champathi Gunathilake</u></b> and Indra R. Singh	Fiji National University	Identification of growth & yield of Cassava ( <i>Manihot esculenta</i> ) and Dalo ( <i>Colocasia esculenta</i> ) under integrated farming
4	<b><u>Indra R. Singh</u></b> , Nisha Zureen, Champathi Gunathilake & Saula Koro	Fiji National University	Physico-chemical properties of some selected Soils of the Sigatoka region, Viti Levu, Fiji
5	<b>Timoci Koliyavu</b> [uncertain]	University of the South Pacific – Pacific Centre for Environment and Sustainable Development	Snapshots of CDOM and Chlorophyll dynamics in Laucala Bay, Fiji Islands
6	<b><u>Anesh Kumar</u></b> , Aminisitali Loco, Peter Sinclair, Andreas Antoniou	Geoscience, Energy and Maritime Division, Pacific Community	Assessment of water resources in Onotoa atoll – Republic of Kiribati
7	<b><u>Nicholas Metherall</u></b> <sup>1+2+3</sup> , Sara Beavis <sup>2</sup> , Timoci Koliyavu <sup>2</sup>	<sup>1</sup> Australian National University, <sup>2</sup> University of the South Pacific, <sup>3</sup> Additional research affiliations: Water Authority Fiji, Mineral Resources Department, District Office Ba	Monitoring spatial and temporal variability in geochemistry, water quality and hydrological inputs into alkalinity and pH levels along the Ba River