

Programme for 31st STAR Conference, Nadi, Fiji
6-8 June 2016
Tanoa International Hotel, Nadi

“GEOSCIENCES, GEO-ENGINEERING AND THE OCEAN IN THE PACIFIC ISLANDS REGION”

Preceded by:

- 1) SPC-EU Deep Sea Minerals Project Final Steering Committee Meeting, 3rd June
- 2) CPC/NIWA/STAR Deep Sea Mining Workshop, 4th June

Time	Theme	Authors & Presenter	Title	Chair
Sunday, June 5th – Conference registration from 3:30 pm at Tanoa International Conference Centre				
Monday, June 6th				
<i>Conference registration continues from 07:00 at Tanoa International Conference Centre</i>				
09:00-10:00	OPENING OF STAR (see separate opening session programme – Attachment 1)			
10:00-10:30	MORNING TEA [GROUP PHOTO]			
10:30-10:45	Ocean Science & Governance	<u>Marino Wichman</u>	Development of the database for seabed minerals activities by the Cook Islands Seabed Minerals Authority	Malakai Finau
10:45-11:00		<u>Robert Smith</u> & Christine Prasad	A geophysical and geological interpretation of northeast Tongatapu, the importance of it to understanding how climate variability drives social adaption	
11:00-11:15		<u>Bapon Fakhruddin</u>	Application of science and technology in the Sendai Framework	
11:15-11:30		<u>Teina Rongo</u>	Using local knowledge to understand climate variability and climate change in the Cook Islands	
11:30-11:45		<u>Matt Blacka</u> , Kristen Splinter, Ron Cox & Francois Flocard	Update on UNSW research program for extreme waves and storm surge on fringing reef coastlines	
11:45-12:10		<u>Robert Van de Poll</u>	Asia Pacific: 25 Coastal States' Law of the Sea Summary Update (Securing the Seabed Resources of the EEZ and ECS)	
12:10-12:25				
12:30-13:30	EARLY LUNCH BREAK			
PARALLEL SESSION A – MAIN CONFERENCE ROOM				
13:30-13:45	Pacific Volcanoes: science, hazard & impacts	<u>Shane J. Cronin</u> , Marco Brenna, Manuela Tost & others	Hunga Ha'apai-Hunga Tonga – birth of a new volcano and discovery of a new caldera	Russell Howorth
13:45-14:00		<u>Graham Leonard</u> , Esline Garaebiti, Sylvain Todman & others	Development of a collaborative consistent volcano communication framework in Vanuatu: hazard maps, education, alert levels, bulletins, signs and procedures	
14:00-14:15		<u>Nick Mortimer</u>	Zealandia: the Southwest Pacific's hidden continent	
14:15-14:30		<u>Esline Garaebiti</u> , Sylvain Todman & Pierre Lebellegard	Development and progress of the Oceania Regional Seismic Network (ORSNET) for tsunami early warning	
14:30-14:45		<u>Steven Sherburn</u> , Taaniela Kula, Leveni Aho & others	Managing a volcanic eruption in a small island country: Lessons from the 2014-15 eruption of Hunga Tonga – Hunga Ha'apai in the Kingdom of Tonga	
14:45-15:00		<u>Paul Taylor</u>	The 1946 eruption of Niuafou'ou Island, Tonga: was an evacuation really warranted?	



PARALLEL SESSION B – TALEI ROOM

13:30-13:45	Ocean Management & Governance	<u>Akuila K. Tawake</u> , Jeffrey R. Wakefield & Kelley Myers	Cost benefit analysis for deep sea minerals mining in the Pacific	Peter Sinclair
13:45-14:00		<u>John Kaitu'u</u>	Building GIS capacity from the ground up	
14:00-14:15		<u>Andrick Lal</u>	Positioning in the Pacific Islands	
14:15-14:30		<u>Emily Artack</u>	Establishing the outer limits of maritime zones of Pacific island countries	
14:30-14:45		<u>Naushad Yakub</u>	MACBIO – Assisting Pacific Governments to manage marine resources	
14:45-15:00				
15:00-15:30	REFRESHMENT BREAK			
15:30-15:45	GSD Science & Policy	<u>Zulfikar Begg</u> , Herve Damlamian, Salesh Kumar & others	El Niño coastal impact and recovery monitoring program, Kiritimati, Kiribati	Paul Lynch
15:45-16:00		<u>Amini Loco</u> , Peter Sinclair, Amit Singh & Martin Mataio	Assessment of water resources in atoll islands	
16:00-16:15		<u>Sandra C. Galvis</u> & Peter Sinclair	Abstraction and climate impacts on the Bonriki freshwater lens, Tarawa, Kiribati: An optimization approach to maximize the resource during droughts	
16:15-16:30		<u>Peter Sinclair</u> & Sandra C. Galvis	Sustainability of freshwater lenses in atoll environments	
16:30-16:45		<u>Wolf Forstreuter</u> & Tevita Faka'osi	Age estimation and form factor calculation of Pacific coconut palms	
16:45-17:00		<u>Sachindra Singh</u>	Provisioning spatial data infrastructure within Pacific island countries	
17:00-17:15		<u>James Jolliffe</u>	The economic dimensions of relocation as an adaptation to climate change in Fiji	
17:15-17:30		<u>Wolf Forstreuter</u>	Mapping village damage with space borne image data	
17:30-17:45	John Burton, <u>Akuila Tawake</u> , Glenn Banks & Pierre-Yves Le Meur	The Pacific Centre for Social Responsibility and Natural Resources – a new research and policy hub		
18:00	CONFERENCE COCKTAIL HOSTED BY CHAIR/FIJI GOVERNMENT			

Tuesday, June 7th

One-day field trip to the Yasawa islands

Wednesday, June 8th

08:00-08:15	Pacific Cyclones & their impacts	Herve Damlamian, Cyprien Bosserelle, Amrit Raj & others	The use of multirotor and fixed wings UAVs to assess 3D shoreline change patterns generated by Tropical Cyclone Pam (Category 5) in Vanuatu 2015	Rajjeli Taga
08:15-08:30		<u>Terry Atalifo</u>	Tropical Cyclone Winston talk by Fiji Meteorological Services	
08:30-08:45		John Leeves, <u>Peter Quilter</u> & Bapon Fakhruddin	Rapid damage mapping – Tropical Cyclone Winston, Fiji	
08:45-09:00		<u>Cyprien Bosserelle</u> , Herve Damlamian, Zulfikar Begg & others	Field investigations of coastal inundation and building damages from tropical cyclone Winston	
09:00-09:15		<u>Geoffroy Lamarche</u> & Cécile Bonnifait	From hazard assessment to village adaptation: the village of Sa'anapu, Samoa	
09:15-09:30		<u>Shaun Williams</u>	Preliminary 3,000 year-long tsunami and cyclone history for the Samoan Islands based on sedimentary records	
09:30-09:45		<u>Seung-Nam Seo</u>	Reclamation and channel dredging of the Korea South Pacific Ocean Research Center, Chuuk	



09:45-10:00	Dredging & Reclamation	<u>Robert B. Smith</u>	Atoll reclamation a solution to pressing problems of land scarcity, water lens vulnerability, sea level rise and climate change	
10:00-10:30	REFRESHMENT BREAK – WORLD OCEANS DAY SIDE EVENT (organised by Molly Powers, SPC)			
10:30-10:45	Ocean technology & marine management	<u>Gary M. McMurtry</u> , Luis A. Dasilveira, James A. Jolly & Jong-Hwa Chun	Towards <i>in situ</i> monitoring of submarine gas hydrate fields with the Deep-ocean Mass Spectrometer (DOMS)	Paul Taylor
10:45-11:00		<u>Kwang-Soon Park</u> & Ki-Young Heo	Development of operational oceanographic system for coastal disaster reduction	
11:00-11:15		<u>Kwang Soo Lee</u>	Role of ocean energy in the stand-alone microgrid system for green energy-independent island	
11:15-11:30		<u>H. Gary Greene</u> & Norman Maher	Mapping and monitoring environmental changes in lagoons, bays and sounds of the San Juan Archipelago using a UAV for management purposes	
11:30-11:45		<u>Jonah Sullivan</u>	High resolution biogeographic classification of regional oceans	
11:45-12:00		<u>Dan McConnell</u> , Jamshid (Jim) Gharib & Paul Kennedy	Seafloor mapping for seafloor mineral exploration – technical overlap with approaches used in wide area high resolution search and large area cold seep mapping	
12:00-12:15	Geothermal	<u>Maxine Lahan</u>	An overview of surface geothermal exploration in Papua New Guinea	
12:15-12:30		<u>Michel Leodoro</u> & Simon Bloomberg	Preliminary geothermal survey – Vanuatu: Tanna and Ambrym	
12:30-13:30	LUNCH BREAK			
13:30-13:45	Geothermal	<u>Willie Kilamanu</u>	Surface and drill-hole geological and geochemical data capture, analysis, input and visualisation	Robert Smith
13:45-14:00	Georesources	<u>Young-Gyu Park</u> , Young Ho Kim & Hanna Na	Could we predict tuna catch using ocean circulation data?	
14:00-14:15		<u>Robert Smillie</u> , Simon Cox, David Heron & Mark Rattenbury	The role of geological mapping and innovative GIS applications for identifying natural resources potential: The New Zealand QMAP Experience	
14:15-14:30		<u>Moira Lunge</u> & Joseph O. Espi	Trace element geochemistry of chalcopyrites and pyrites from Golpuand Nambonga North porphyry Cu-Au deposits, Wafi-Golpu mineral district, Papua New Guinea	
14:30-14:45		<u>Chanmin Yoo</u> , Sang-Bum Chi, Kiseong Hyeong & Seong-hyeon Min	Resources estimation of polymetallic nodule deposits in the Korean Contract area of the Clarion-Clipperton Fracture Zone, northeast Pacific	
14:45-15:00				
15:00-15:30	REFRESHMENT BREAK			
15:30-15:45	Hazards – Science & Management	<u>Andrew C. Barnicoat</u>	Disaster risk reduction challenges in the Pacific: an Australian perspective	Taaniela Kula
15:45-16:00		<u>David Heron</u> , Biljana Lukovic, Graeme Smart & others	New approaches to hazard and risk mapping, Vanuatu – developing safer communities	
16:00-16:15		Kate Crowley, <u>Shaun Williams</u> , Litea Biukoto & others	Towards the implementation of PARTneR: Pacific Risk Tool for Resilience	
16:15-16:30		<u>Sylvain Todman</u> , Patricia Mawa & Esline Garaebiti	Warning information and dissemination platform in Vanuatu: A new approach supported by the Common Alerting Protocol (CAP)	
16:30-16:45		<u>Brenda Rosser</u> & Sally Dellow	Landslide mapping and hazard assessment in New Zealand	
16:45-17:00		Ron K. Hoeke, <u>Kathy L. McInnes</u> & Julian G. O’Grady	Multi-variate coastal inundation forecasting and risk analysis for the Pacific	
17:00-17:15		<u>H. Gary Greene</u> , J. Vaughn Barrie, Kim Conway & others	Assessing the seismic and tsunami hazards along a major transform plate boundary – the Queen Charlotte-Fairweather leaky transform fault system of Canada and Alaska	
17:15-17:30		<u>Stephen Yeo</u> , Michael Bonte-Grapentin, Denis Jody & Simone Esler	Flood risk management in the Pacific	
17:40-18:00		STAR BUSINESS MEETING		



STAR 2016 POSTER PAPERS

{Poster paper authors please come prepared to leave posters behind, as these will be scanned and thumbnails published on the STAR Website; or better still prepare digital copy of the poster which you can hand in to Secretariat so we can publish on the STAR Website}

1	A.P. Martin, D.W. Heron, R.E. Turnbull & N. Mortimer	Assessing soil quality with a systematic geochemical baseline survey: a New Zealand example applicable to the Pacific islands
2	Biljana Lukovic, William Power, Xiaoming Wang & others	Development of tsunami evacuation maps, Port Vila and Luganville, Vanuatu
3	Kyoungrean Kim, Eun-Ji Won, Jin Young Choi & Chang Soo Chung	Pilot study: Remediation of contaminated marine sediments for beneficial use
4	Seongick Cho & Young Je Park	Development of GOCI-II: the next geostationary ocean color imager with potential application for the Pacific islands
5	Gary M. McMurtry, James R. Deluze, David R. Hilton & James E. Blessing	Development of a field-portable Helium Isotope Detector for continuous monitoring of large earthquakes and volcanic unrest
6	Seung-Kyu Son, Ju-Won Son, Kyeong-Hong Kim & others	Searching active hydrothermal vent sites in the EEZ of the Republic of the Fiji Islands using biogeochemical tracers
7	Chris Pearson & Robert Smillie	Datum modernization in the Pacific island developing states: Key infrastructure for sustainable development and disaster risk reduction
8	Arishma R. Ram, Shane J. Cronin & Martin Brook	Characteristics of slope failures induced by Tropical Cyclone Winston (20-21 Feb, 2016) along King's Road, northern Viti Levu, Fiji Islands
9	Christine Prasad	SPC-EU Environmentally Safe Aggregate for Tarawa (ESAT) Project Overview
10	Vira Atalifo	Deep sea minerals in the Pacific region and the potential mining impacts
11	Benjamin Simons, Shane Cronin, Jennifer Eccles & others	Drivers of variation in hazards at a persistently active volcano, Yasur, Vanuatu
12	Sara Beavis & E.A. Beckmann	The Water Ethics Moot: exploring the ethics of water management across the Pacific region
13	Emma Newland	GEF Pacific Ridge to Reef programme poster

STAR 2016 Conference book of abstracts – see online at address below. A revised version will replace the pre-session version, to reflect the actuals of the STAR 2016 Conference.

<http://star.gsd.spc.int/>



ATTACHMENT

Official Opening Programme





STAR 2016

The Pacific Islands Science, Technology and Resources Conference

Hosted by the Government of Fiji

OFFICIAL OPENING – PROGRAM of EVENTS

TRADITIONAL FIJI WELCOME

(Bure outside Conference Centre)

GROUP PHOTOGRAPH

Master of Ceremony

Mr Apete Soro

*Manager Geological Services
Mineral Resources Department
Government of Fiji*

OPENING PRAYER

WELCOME TO PARTICIPANTS

Ms Raijeli Taga

*Acting Director Mineral Development
Government of Fiji*

OFFICIAL OPENING

Guest of Honour

Chair of STAR

Mr Malakai Finau

*Permanent Secretary of Lands and Mineral Resources
Government of Fiji*

Introductory Comments

Director Geoscience Division of the Pacific Community

Professor Michael Petterson

Introductory Comments

President of the Circum-Pacific Council

Professor Gary Greene

Invited Address

Director of the Coordinating Committee for Geoscience Programmes in East and Southeast Asia Technical Secretariat

Dr Adichat Surinkum

Morning Tea will be served at the conclusion of the ceremony

