# School of Science & Technology

# Publications and Presentations 2019

#### **Department of Science Publications**

#### A. Ajay Singh Journal Publications

- Singh, A. A., Maharaj, A., Kumar, M., Singh, P., Singh, S., Muller, F., McCarthy, M., Joseph, L., Damlamian, H., Begg, Z., 2019. Developing High Resolution Baseline Coast Resource Maps Using World View 2 Imagery for a Coastal Village in Fiji. Fron-tiers in Marine Science, 6, 207.
- Joseph, L., Singh, P., Singh, A.A., Raj, K., Maharaj, A., 2019. Implications of Seagrass Ecosystem Degradation on Marine Re-sources and People's Livelihood: A Case Study from Komave Village, Fiji. Asian Journal of Fisheries and Aquatic Research, 2 (3), 1-13.

#### Workshop Presentation

 Singh, A. A., Maharaj, A., Raj, K., Singh, S., Singh, P., 2019. Ocean Acidification status of coastal oceanic waters in Fiji. The 4th Global Ocean Acidification Observing Network (GOA-ON) International Workshop, Hangzhou, China. State Key Laboratory of Satellite Ocean Environment Dynamics (SOED) and the Second Institute of Oceanography (SIO), Ministry of Natural Resources, Hangzhou. "14 Apr—17 Apr 2019

## Anish Maharaj

## **Publications**

- Filho, W. L., Havea, P. H., Balogun, A.-L., Boenecke, J., Maharaj, A. A., Ha'apio, M., &Hemstock, S. L. (2019). Plastic debris on Pacific Islands: Ecological and health implications. Science of The Total Environment. <u>https://doi.org/10.1016/j.scitotenv.2019.03.181</u>
- 2. Singh AA, Maharaj A, Kumar M, Singh P, Singh S, Muller-Karger FE, McCarthy M, Joseph L, Damlamian H and Begg Z (2019). Developing High Resolution Baseline Coast Resource Maps

UsingWorld View 2 Imagery for a Coastal Village in Fiji. Front. Mar. Sci.6:207. DOI: 10.3389/fmars.2019.00207

3. Scheday, S., Boenecke, J., Gogoi, A., **Maharaj, A.** and Korovou, S., 2019. Climate Change, Health and Mosquito-Borne Diseases: Trends and Implications to the Pacific Region. International Journal of Environmental Research and Public Health, 16(24), p.5114.

#### Danian Singh

#### Publications

- Danian Singh, (2019), Correlation between Dietary Patterns and Academic Performance of Secondary School Students in the Western Division, Munich, GRIN Verlag, https://www.grin.com/document/458927
- 2. Singh, D and Railoa, K., 2019. Microbial Analysis of Drinking Water from Nadi to Lautoka Area in Viti Levu Fiji. Pacific Health. In press
- Singh, D., Joseph, L, Naaz, Z and Railoa, K., 2019. Sugarcane Weevil Borer (*Rhabdoscelus obscurus*) in Fiji Islands and Recommendations Towards its Control. Outlooks on Pest Management 30(6). DOI: https://doi.org/10.1564/v30\_dec\_07.

## Dhrishna Charan

#### **Publication**

 Maekawa M, Singh P, Charan D, Yoshioka N, Uakeia T. (2019). Livelihood Re-Establishment of Emigrants from Kiribati in Fiji. Journal of Disaster Research. 14: 9, pp. 1277-1286. DOI https://doi.org/10.20965/jdr.2019.p1277

## **Conference Presentations**

 Charan D. (2019). The status of Fiji's coconut oil industry and prospects for coconut oil biodiesel (CME and CEE) production. International Symposium on Renewable Energy, Environment and Climate Change (ISREECC), Tanoa International Hotel, Nadi, 20-21<sup>st</sup> August, 2019.

# Lionel Joseph Publications

- Singh, A. Maharaj, A. Kumar, M. Singh, P. Muller, F. McCarthy, M. Joseph, L. Kumar, S. Damlamian, H. Bosserelle, C. Kumar, S. and Begg, Z. (2019). *Developing High Resolution Baseline Coast Resource Maps Using World View 2 Imagery for a Coastal Village in Fiji*. Frontiers in Marine Science, 6, 207. [Q1 Ranked Journal]
- Singh, D., Joseph, L, Naaz, Z and Railoa, K., 2019. Sugarcane Weevil Borer (*Rhabdoscelus obscurus*) in Fiji Islands and Recommendations Towards its Control. Outlooks on Pest Management 30(6). DOI: https://doi.org/10.1564/v30\_dec\_07.

## Chapters in an edited book

- Joseph, L. and Prasad, R. (2019). *Viability of commercial onshore wind farms in Viti Levu, Fiji. In:* Singh, A., eds. Translating the Paris Agreement into Action in the Pacific. Advances in Global Change Research – Springer.[Accepted: In Press].
- Prasad, R., Joseph, L. and Deo, R. (2019).*Modelling and forecasting renewable energy resources for sustainable power generation basic concepts and predictive model results. In:* Singh, A., eds. Translating the Paris Agreement into Action in the Pacific. Advances in Global Change Research – Springer.[Accepted: In Press].

# **Conferences**

 Joseph, L. and Singh, A. Energy, economics and environmental evaluation of Waste-to-Energy (WtE) scenarios using multi-criteria decision analysis (MCDA): A case study of Naboro Landfill. International Symposium on Renewable Energy, Environment and Climate Change (ISREECC), Tanoa International Hotel, Nadi, 20-21<sup>st</sup> August, 2019.

## Malvin Nadan

# Conference Presentations

 Nadan, M.K. and Singh, A. Anaerobic digestion of municipal waste for power generation: A study of the Vunato Disposal Site in Fiji. International Symposium on Renewable Energy, Environment and Climate Change (ISREECC), Tanoa International Hotel, Nadi, 20-21<sup>st</sup> August, 2019.

# Priyatma Singh

# **Publications**

- Singh, A. Maharaj, A. Kumar, M. Singh, P. Muller, F. McCarthy, M. Joseph, L. Kumar, S. Damlamian, H. Bosserelle, C. Kumar, S. and Begg, Z. (2019). *Developing High Resolution Baseline Coast Resource Maps Using World View 2 Imagery for a Coastal Village in Fiji*. Frontiers in Marine Science, 6, 207. Doi: [Q1 Ranked Journal]
- 2. Joseph, L., Singh, A.A., **Singh**, **P.**, Raj, K., Maharaj, A. 2019. *Implications of Seagrass Ecosystem Degradation on Marine Resources and People's Livelihood: A Case Study from Komave Village*, *Fiji*. Asian Journal of Fisheries and Aquatic Research.
- 3. Michalena, E., Straza, T.R., **Singh**, **P.**, Morris, C.W. and Hills, J.M., 2019. *Promoting sustainable and inclusive oceans management in Pacific islands through women and science*. Marine Pollution Bulletin, p.110711. [Q1 Ranked Journal]
- 4. Maekawa, M., Singh, P., Charan, D., Yoshioka, N. and Uakeia, T., 2019. *Livelihood Re-Establishment of Emigrants from Kiribati in Fiji.* Journal of Disaster Research, 14(9), pp.1277-1286.

## Conference/Workshop Presentations

- Singh P., (2019) Governing large-scale marine ecosystems: Perspectives from Fiji. The Geopolitics of Sustainable Oceans, 3<sup>rd</sup> –5<sup>th</sup> September, 2019, Division of Environmental Change and the Centre for Climate Science and Policy Research, Linkoping, Sweden.
- Singh P., (2019) Policy Update: Focus on Fiji's Climate Actions. Overcoming Incoherence in National Climate and Sustainable Development Goal Implementation, 9th –11th September, 2019, Stockholm Environment Institute, Stockholm, Sweden.(Workshop)
- Singh P., (2019) Climate Change Induced Relocation in Fiji. Asia pacific week 2019, 1<sup>st</sup> –4<sup>th</sup> July, 2019, Department of Pacific Affairs, the Australian National University, Canberra, Australia. (Poster Presentation)
- Singh P., (2019) National implementation of global goals: Coherence between Nationally Determined Contributions (NDC) and the Sustainable Development Goals (SDG). International Symposium on Renewable Energy, Environment and Climate Change (ISREECC), Tanoa International Hotel, Nadi, 20-21<sup>st</sup> August, 2019.

## Ramendra Prasad

## **Publications**

- Ali, M., Prasad, R., (2019) Significant wave height forecasting via an extreme learning machine model integrated with improved complete ensemble empirical mode decomposition. Renewable and Sustainable Energy Reviews. 104, pp. 281-295. Doi: https://doi.org/10.1016/j.rser.2019.01.014(Q1;ImpactFactor:9.184andSNIP:3.594; 96<sup>th</sup> percentile).
- Prasad, R., Ali, M., Kwan, P., and Khan, H., (2019) Designing a multi-stage multivariate empirical mode decomposition coupled with ant colony optimization and random forest model to forecast monthly solar radiation.Applied Energy. 236, pp. 778-792. Doi:https://doi.org/10.1016/j.apenergy.2018.12.034 (Q1;ImpactFactor:7.900andSNIP:2.765; 99<sup>th</sup> percentile).
- Joseph, L. and Prasad, R. (2019). Viability of commercial onshore wind farms in Viti Levu, Fiji. In: Singh, A., eds. Translating the Paris Agreement into Action in the Pacific. Advances in Global Change Research – Springer. [Accepted: In Press].
- Prasad, R., Joseph, L. and Deo, R. (2019). Modelling and forecasting renewable energy resources for sustainable power generation – basic concepts and predictive model results. In: Singh, A., eds. Translating the Paris Agreement into Action in the Pacific. Advances in Global Change Research – Springer. [Accepted: In Press].

#### **Conference Presentations**

- Sharma E., Deo R., Parisi A., Prasad R., (2019) *Real time optimisation of air quality predictions* for Australia through Artificial Intelligence. Australian mathematical Sciences Institute (AMSI) Optimize-2019, 17<sup>th</sup> –21<sup>st</sup> June, 2019, Perth, Australia. (Poster presentation).
- Prasad R. and Deo R. (2019)*Modelling Energy Management Systems: New Approaches, Methods and Prospects.* International Symposium on Renewable Energy, Environment and Climate Change (ISREECC), Tanoa International Hotel, Nadi, 20-21<sup>st</sup> August, 2019.

# Zafia Naaz

# **Publications**

Singh, D., Joseph, L, Naaz, Z and Railoa, K., 2019. Sugarcane Weevil Borer (*Rhabdoscelus obscurus*) in Fiji Islands and Recommendations Towards its Control. Outlooks on Pest Management 30(6). DOI: https://doi.org/10.1564/v30\_dec\_07.

# Department of Computer Science and Mathematics Publications

# Alvin Prasad

# **Conference Presentation**

- Prasad, Alvin. "Exhausted Servers Deny Service HTTP GET Attack." 2nd International Conference on Communication & Media, Engineering Sciences and Information Technology. Sydney, 2019. 14-15 Dec 2019, Holiday Inn Sydney Australia.
- 2. Prasad, Alvin and Kaylash C Chaudhary. "Interactive Animation and Affective Teaching & Learning in Programming Courses." *4th International Conference on Computer, Communication and Computational Sciences.* Thailand, 2019. 11 12 October. Bangkok, Thailand.