

# Ocean gliders



## Research Projects

Deployment of ocean gliders as part of WAIMOS, University of Western Australia, Charitha Pattiaratchi, 2008-2011, Partner Institution(s): WAMSI, Funding: Western Australian Marine Science Institution

Quantifying the role of salps in marine food webs and organic carbon export, University of New South Wales, Iain Suthers, Funding: ARC Discovery Project

Coastal cold core eddies of the East Australian Current and their fisheries potential, University of New South Wales, Iain Suthers, Funding: ARC Discovery Project

New insights from ocean gliders - comparing oceanographic forcing of phytoplankton dynamics in two very different Eastern Boundary Current regions, University of Western Australia, University of Washington, Christine Hanson, Peter Rhines, Funding: University of Western Australia

Cross shelf processes and nutrient enrichment in the East Australian Current regime, University of New South Wales, Amandine Schaeffer, Moninya Roughan, 2010-2015

AUV Data Analysis for Predictability in Time-Evolving Regimes (ADAPTER), Naval Research Lab, Jeff Book, 2010-2012, Partner Institution(s): UWA, AIMS, Funding: US-NRL

Ocean-reef interactions as drivers of continental shelf productivity in a changing climate, University of Western Australia, University of New South Wales, Anya Waite, Moninya Roughan, Charitha Pattiaratchi, Jonne Kotta, Helen Orav-Kotta, 2010-2012, Funding: ARC

Shaping integrated monitoring for the Great Barrier Reef World Heritage Area, Paul Hedge, 2011-2015, Funding: National Environmental Research Program (NERP)

Ocean-shelf exchange with an emphasis on the role of waves, tides, eddies and cross-shelf flows on carbon exchange, University of Western Australia, University of Tasmania, James Cook University, Charitha Pattiaratchi, Roger Proctor, Peter Ridd, 2011-2012, Partner Institution(s): UWA, JCU, AIMS, UTas, CSIRO, UNSW, UTS, SARDI/Flinders, IOC, Proudman Oceanographic Laboratory, University of Southern Mississippi, University of Maryland, Baltic Sea Research Institute, Funding: ANNIMS

The connectivity of the Australian North West Shelf with the Leeuwin Current, University of Western Australia, Australian Institute of Marine Science, Naval Research Lab, Gregory Ivey, Ryan Lowe, Peter Stratton, Nicole Jones, Miles Furnas, Richard Brinkman, 2012-2013, Partner Institution(s): UWA, AIMS, US-NRL, UTAS, Funding: NICOP

Additional observations in support of eReefs, Commonwealth Scientific Industrial Research Organisation, Simon Allen, Partner Institution(s): CSIRO, AIMS, IMOS, Funding: CSIRO, Australian Institute of Marine Science, Integrated Marine Observing System (IMOS)

Ocean-shelf exchange with an emphasis on the roles of waves, tides, eddies and cross-shelf flows on carbon exchange, University of Tasmania, University of Western Australia, James Cook University, Roger Proctor, Charitha Pattiaratchi, Peter Ridd, 2012-2014, Funding: ANNIMS

eReefs - hydrodynamic modelling validation, BOM Queensland Regional Office, Arthur Simanjuntak, 2013-2014, Partner Institution(s): CSIRO, AIMS, Funding: Bureau of Meteorology

Finding the shadows using the eyes of gliders, Robin Robertson, Funding: ADFA

Advancing dynamical understanding in the East Australian Current: optimising the ocean observation and prediction effort, Sydney Institute for Marine Science, Moninya Roughan, 2014-2016, Funding: ARC

Australian national shelf reanalysis, Emlyn Jones, Moninya Roughan, Tim Moltmann, Andreas Schiller, Peter May, 2014-2014, Funding: Integrated Marine Observing System (IMOS)

eReefs DA - phase 2, Commonwealth Scientific Industrial Research Organisation, Emlyn Jones, 2014-2015, Partner Institution(s): BOM, AIMS

Predicting circulation patterns along the south-west Australian continental shelf, University of Western Australia, Ivica Janekovic, Charitha Pattiaratchi, Sarath Wijeratne, Yasha Hetzel, Simone Cosoli, 2015-2016, Partner Institution(s): IMOS, Funding: University of Western Australia

Offshore southern right whale calling, Curtin University, Rob McCauley, Alexander Gavrilov

Reflections on sonar, University of New South Wales, Robin Robertson, Funding: ADFA

CARS, synTS and SSS, Commonwealth Scientific Industrial Research Organisation, Madeleine Cahill, J Lovell, Funding: CSIRO

Sediment re-suspension processes under internal waves in the north-west shelf of Australia, University of Western Australia, Charitha Pattiaratchi, Gustavo Lauton de Oliveira, 2015-2016, Funding: University of Western Australia

Develop a strong current warning system and inform knowledge of the nearshore current regime influencing the Western Rock Lobster fishery, University of Western Australia, Charitha Pattiaratchi, Timothy Langlois, Simone Cosoli, Simon de Lestang, 2018-2021, Funding: Fisheries Research and Development Corporation

Develop/enhance the Marine Virtual Laboratory (MARVL) to provide the information infrastructure in support of the national ocean modelling system, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): BOM (Oceans), BOM (water), NCI, SARDI, TPAC, UWA, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

Honours degree, System reliability modelling for the ocean gliders, University of Western Australia; Belinda Chan, 2007-2007, Supervisor(s): Charitha Pattiaratchi

Doctor of Philosophy (PhD), Physical processes along the Rottneest continental shelf, University of Western Australia; Thisara Welhena, 2009-2013, Supervisor(s): Charitha Pattiaratchi, Ming Feng; Partner Institution(s): CSIRO; Funding: Western Australian Marine Science Institution, University of Western Australia

Honours degree, Analysis of Seaglider data, University of Western Australia; Ping Jie Teo, 2010-2010, Supervisor(s): Charitha Pattiaratchi, Christine Hanson, Mun Woo

Honours degree, Function and failure analysis (FMEA) of the critical subsystems and components for the UWA ocean gliders, University of Western Australia; Adrian Wan, 2011-2012, Supervisor(s): Charitha Pattiaratchi, Kecheng Shen

Doctor of Philosophy (PhD), The implications for environmental change on the relative importance of salps, copepods and krill in the Storm Bay (Tasmania) ecosystem, Institute of Marine and Antarctic Studies; Nurul Huda Binti Ahmad Ishak, 2011-2014, Supervisor(s): Kerrie Swadling, So Kawaguchi, Guy Williams, Steve Nicol; Funding: Government of Malaysia

Honours degree, Ocean sediment dynamics off South Western Australia using ocean gliders, University of Western Australia; Jacob Sutton, 2012-2013, Supervisor(s): Charitha Pattiaratchi, Christine Hanson

Honours degree, Suspended sediment processes along the Kimberley shelf using Slocum ocean gliders, University of Western Australia; Rachel Huynh, 2012-2013, Supervisor(s): Charitha Pattiaratchi, Christine Hanson

Honours degree, Seasonal variability in phytoplankton biomass off the South-West of Western Australia: a phenology of the winter bloom, University of Western Australia; Antony Kuret, 2012-2012, Supervisor(s): Charitha Pattiaratchi, Christine Hanson, Martin Lourey

Honours degree, Sediment dynamics off the Pilbara Coast during a cyclone via Ocean Gliders, University of Western Australia; Yi Jie Wang, 2013-2013, Supervisor(s): Charitha Pattiaratchi, Christine Hanson, Florence Kaempf

Honours degree, Planning ocean glider tracks across the Indian Ocean, University of Western Australia; Clair Ashburn, 2013-2013, Supervisor(s): Charitha Pattiaratchi

Honours degree, Ocean circulation in the vicinity of the Perth Submarine Canyon viewed using Seagliders, University of Western Australia; Kah Kiat Hong, 2013-2013, Supervisor(s): Charitha Pattiaratchi, Christine Hanson

Doctor of Philosophy (PhD), The physical and biological variability along the Rottneest continental shelf, University of Western Australia; Miaoju Chen, 2013-2017, Supervisor(s): Charitha Pattiaratchi, Anas Ghadouani, Christine Hanson; Funding: IPRS Scholarship

Doctor of Philosophy (PhD), Dense shelf water formation and gravitational motion, University of Western Australia; Taziha Mahjabin, 2013-2017, Supervisor(s): Charitha Pattiaratchi, Yasha Hetzel

Masters degree, 3D structure of the mesoscale eddies offshore Rottneest Island, University of Western Australia; Yijun Chen, 2016-2016, Supervisor(s): Charitha Pattiaratchi, Simone Cosoli

Masters degree, Variability in the attenuation coefficient in Storm Bay, University of Western Australia; Nathaniel Kwong, 2017-2017, Supervisor(s): Charitha Pattiaratchi

Masters degree, Variability of the attenuation coefficient along Two Rocks, University of Western Australia; Winton Huck, 2017-2017, Supervisor(s): Charitha Pattiaratchi

## Book Chapters

Roughan, M, Schaeffer, A, Suthers, I 2015, Sustained ocean observing along the coast of southeastern Australia: NSW-IMOS 2007-2015, in Y Liu, H Kerkering, R Weisberg (eds.), Coastal Ocean Observing Systems, Elsevier, pp.76-98

Willis, Z 2015, National Ocean Observing Systems in a Global Context, in Y Liu, H Kerkering, R Weisberg (eds.), Coastal Ocean Observing Systems, Elsevier, pp.11-25

**Book Chapters 2**

## Community White Papers / Technical Papers

Testor, P, Meyers, G, Pattiaratchi, C, Bachmayer, R, Hayes, D, Pouliquen, S, Petit de la Villeon, L, Carval, T, Ganachaud, AS, Gourdeau, L, Mortier, L, Claustre, H, Taillandier, V, Lherminier, P, Terre, T, Visbeck, M, Karstensen, J, Krahman, G, Alvarez, A, Rixen, M, Poulain, P, Osterhus, S, Tintore, J, Ruiz, S, Garau, B, Smeed, D, Griffiths, G, Merckelbach, L, Sherwin, T, Schmid, C, Barth, J, Schofield, O, Glenn, S, Kohut, J, Perry, M, Eriksen, C, Send, U, Davis, R, Rudnick, D, Sherman, J, Jones, C, Webb, D, Lee, C, Owens, B; 2009, Gliders as a component of future observing systems, Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol 2), Venice, Italy, September 2009, ESA Publication WPP-306, doi:10.5270/OceanObs09.cwp.89

Ganachaud, AS, Bowie, AR, Brassington, GB, Cai, W, Cravette, S, Davis, R, Gourdeau, L, Hasegawa, T, Hill, K, Holbrook, N, Kessler, W, Maes, C, Melet, A, Qiu, B, Ridgway, K, Roemmich, D, Schiller, A, Send, U, Sloyan, B, Sprintall, J, Steinberg, C, Sutton, P, Verron, J, Widlansky, M, Wiles, P; 2013, Advances from the Southwest Pacific Ocean circulation and climate experiment, CLIVAR Exchanges Newsletter No 61, Vol 18, 16-23

Rudnick, D, Lee, C, et, al.; 2016, OceanGliders Boundary Ocean Observing Network

**Community White Papers/Technical Papers 3**

## Conference Proceedings

Pattiaratchi, C 2008, Shelf and slope processes offshore Fremantle, Western Australia, Proceedings of the 14th biennial international physics of estuaries and coastal seas conference, Liverpool, Presenter: Charitha Pattiaratchi

Hollings, B, Pattiaratchi, C, Woo, M, Hanson, CE 2010, Sustained oceanographic observations around Australia using autonomous ocean gliders, Proceedings of Oceans 2010 IEEE, Sydney, Australia, May, 2010, Sydney, Presenter: Ben Hollings

Pattiaratchi, C, Hollings, B, Woo, M, Hanson, CE 2010, Oceanographic observations of the Australian continental shelf and slope waters, Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Annex), Venice, Italy, September 2009, ESA Publication WPP-306, Venice, Presenter: Charitha Pattiaratchi

Welhena, T, Pattiaratchi, C, Feng, M 2011, Dense water formation and cross-shelf exchange on the Rottneest continental shelf in south-western Australia, Proceedings of Coasts and Ports 2011: 20th Australasian Coastal and Ocean Engineering Conference and the 13th Australasian Port and Harbour Conference, Perth

Penton, J, Pattiaratchi, C 2013, The effects of wind forcing on surface currents on the continental shelf surrounding Rottneest Island, Proceedings of Coasts and Ports 2013: 21st Australasian Coastal and Ocean Engineering Conference and the 14th Australasian Port and Harbour Conference, Sydney, Presenter: Jennifer Penton

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## In Press

In Press null

## Journals

Earp, A, Hanson, CE, Ralph, P, Brando, V, Allen, S, Baird, ME, Clementson, L, Daniel, P, Dekker, AG, Fearn, PRCS, Parslow, J, Strutton, P, Thompson, P, Underwood, M, Weeks, S, Doblin, MA 2011, Review of fluorescent standards for calibration of in situ fluorometers: recommendations applied in coastal and ocean observing programs, *Optics Express*, vol. 19, no. 27, pp. 26768-26782, doi:10.1364/OE.19.026768

Pattiaratchi, C, Hollings, B, Woo, M, Welhena, T 2011, Dense shelf water formation along the south-west Australian inner shelf, *Geophysical Research Letters*, vol. 38, doi:10.1029/2011GL046816

Baird, ME, Suthers, I, Griffin, DA, Hollings, B, Pattiaratchi, C, Everett, JD, Roughan, M, Oubelkheir, K, Doblin, MA 2011, The effect of surface flooding on the physical-biogeochemical dynamics of a warm-core eddy off southeast Australia, *Deep Sea Research Part II*, vol. 58, pp. 592-605, doi:10.1016/j.dsr2.2010.10.002

Jones, EM, Oke, PR, Rizwi, F, Murray, LM 2012, Assimilation of glider and mooring data into a coastal ocean model, *Ocean Modelling*, vol. 47, pp. 1-13, doi:10.1016/j.ocemod.2011.12.009

Baird, ME, Ridgway, K 2012, The southward transport of sub-mesoscale lenses of Bass Strait Water in the centre of anti-cyclonic mesoscale eddies, *Geophysical Research Letters*, vol. 39, doi:10.1029/2011GL050643

Penton, J, Pattiaratchi, C 2013, The effects of wind forcing on surface currents on the continental shelf surrounding Rottneest Island, *International Journal of Environmental, Earth Science and Engineering*, vol. 7, no. 1, pp. 13-18

Schaeffer, A, Roughan, M, Wood, JE 2014, Observed bottom boundary layer transport and uplift on the continental shelf adjacent to a western boundary current, *Journal of Geophysical Research - Oceans*, vol. 119, no. 8, pp. 4922-4939, doi:10.1002/2013JC009735

Schiller, A, Herzfeld, M, Brinkman, R, Stuart, G 2014, Monitoring, predicting and managing one of the seven wonders of the world, *Bulletin of the American Meteorological Society*, vol. 95, no. 1, pp. 23-30, doi:10.1175/BAMS-D-12-00202.1

Everett, JD, MacDonald, HS, Baird, ME, Humphries, J, Roughan, M, Suthers, I 2015, Cyclonic entrainment of preconditioned shelf waters into a frontal eddy, *Journal of Geophysical Research - Oceans*, vol. 120, pp. 677-691, doi:10.1002/2014JC010301

Boettger, D, Robertson, R, Rainville, L 2015, Characterizing the semi diurnal internal tide off Tasmania using glider data, *Journal of Geophysical Research - Oceans*, vol. 120, no. 5, pp. 3730-3746, doi:10.1002/2015JC010711

Schaeffer, A, Roughan, M 2015, Influence of a western boundary current on shelf dynamics and upwelling from repeat glider deployments, *Geophysical Research Letters*, vol. 42, no. 1, pp. 121-128, doi:10.1002/2014GL062260

Mahjabin, T, Pattiaratchi, C, Hetzel, Y 2016, Factors influencing the occurrence of dense shelf water cascades in Australia, *Journal of Coastal Research*, vol. 75, pp. 527-531, doi:10.2112/SI75-106.1

Jones, EM, Baird, ME, Mongin, M, et, al. 2016, Use of remote-sensing reflectance to constrain a data assimilating marine biogeochemical model of the Great Barrier Reef, *Biogeosciences*, vol. 13, pp. 6441-6469, doi:10.5194/bg-13-6441-2016

Schaeffer, A, Roughan, M, Jones, EM, White, D 2016, Physical and biogeochemical spatial scales of variability in the East Australian Current separation from shelf glider measurements , *Biogeosciences*, vol. 13, pp. 1967-1975, doi:10.5194/bg-13-1967-2016

Kerry, C, Powell, B, Roughan, M, Oke, PR 2016, Development and evaluation of a high-resolution reanalysis of the East Australian Current region using the Regional Ocean Modelling System (ROMS 3.4) and Incremental Strong-Constraint 4-Dimensional Variational data assimilation (IS4D-Var), *Geoscientific Model Development* , vol. 9, pp. 3379-3801, doi:10.5194/gmd-9-3379-2016

Bosserel, C, Abdo, DA, Evans, SN, Markey, KL 2016, Keeping it local: dispersal limitations of coral larvae to the high latitude coral reefs of the Houtman Abrolhos islands, *PLoS One*, vol. 11, no. 1, e0147628, doi:10.1371/journal.pone.0147628

Schaeffer, A, Roughan, M, Austin, T, Everett, JD, et, al. 2016, Mean hydrography on the continental shelf from 26 repeat glider deployments along southeastern Australia, *Scientific Data*, vol. 3, doi:10.1038/sdata.2016.70

Hanson, CE, Woo, M, Thomson, P, Pattiaratchi, C 2016, Observing the ocean with gliders: techniques for data visualization and analysis, *Oceanography*, vol. 30, no. 2, pp. 72-73, doi:https://doi.org/10.5670/oceanog.2017.210

Pattiaratchi, C, Woo, M, Thomson, P, Hong, KK, Stanley, D 2017, Ocean glider observations around Australia, *Oceanography*, vol. 30, no. 2, pp. 90-91, doi:https://doi.org/ 10.5670/oceanog.2017.226

Benthuisen, J, Oliver, ECJ, Feng, M, Marshall, AD 2018, Extreme marine warming across tropical Australia during austral summer 2015-16, *Journal of Geophysical Research - Oceans*, doi:10.1002/2017JC013326

**Journals 20**

## Reports

Poloczanska, ES, Hobday, A, Richardson, A 2012, Marine climate change in Australia, impacts and adaptation responses

Schaeffer, A, Roughan, M 2014, Marine Virtual Laboratory (MARVL) - high-resolution ROMS test: the East Australian Current at 30S in Solitary Island Marine Park

Herzfeld, M, Andrewartha, J, Baird, ME, Brinkman, GW, et, al. 2014, eReefs WP3 marine modelling: phase II interim report

Bax, N, Hedge, P 2015, Marine Biodiversity Hub, National Environmental Research Program, final report 2011-2015., Hobart

Griffin, DA 2015, OceanCurrent model validation - Applied Research Program 3

McCulloch, M, et, al. 2016, Perth Canyon ROV exploration and sampling, Comments: Schmidt Ocean Institute Cruise FK150301 Report

**Reports 6**

## Thesis

Welhena, T 2014, Cross-shelf physical processes along the Rottnest continental shelf, Doctor of Philosophy (PhD), University of Western Australia, Perth

Mahjabin, T 2017, Occurances and controls on dense shelf water cascades along the Australian Continental Shelves, Doctor of Philosophy (PhD), University of Western Australia, Perth

Chen, M 2017, Chlorophyll response to physical forcing along the Rottnest continental shelf: new insights using ocean gliders, Doctor of Philosophy (PhD), University of Western Australia, Perth

Bahmanpour, MH 2017, The Holloway Current along the shelf edge of North Western Australia, Doctor of Philosophy (PhD), University of Western Australia, Perth

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## Data Products

Data Products null

## Public Seminars

Pattiaratchi, C; Upwelling along the west Australian coast; School of Environmental Systems Engineering Seminar, 01/05/2008 - 01/05/2008, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Oceanic oscillations and the climate of Western Australia; Water Corporation Seminar, 15/05/2008 - 15/05/2008, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Operational oceanography: some examples from Sri Lanka and South-Western Australia; School of Environmental Systems Engineering Seminar, 27/08/2009 - 27/08/2009, University of Western Australia, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Physical oceanography of Perth coastal waters; CSIRO Marine and Atmospheric Research Seminar, 19/11/2009 - 19/11/2009, Commonwealth Scientific Industrial Research Organisation, Hobart, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Coastal physical oceanography off South-West Australia; CSIRO Marine and Atmospheric Research Seminar, 03/12/2009 - 03/12/2009, Commonwealth Scientific Industrial Research Organisation, Hobart, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Integrated Marine Observing System (IMOS) in Western Australia; Oceans Institute/AIMS Seminar, 10/03/2010 - 10/03/2010, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Ocean observations using gliders; COFS/Civil Engineering Seminar, 16/09/2011 - 16/09/2011, University of Western Australia, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Ocean glider deployments in Australia; Autonomous and Intelligent Underwater Technology (AiUT) Seminar, 03/11/2011 - 03/11/2011, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Coastal ocean observations in Western Australia: from peddies to dense shelf water cascades; Rutgers University seminar, 12/04/2012 - 12/04/2012, New Jersey, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Coastal ocean observations in Western Australia: from peddies to dense shelf water cascades; School of Environmental Systems Engineering and The UWA Oceans institute Seminar, 03/05/2012 - 03/05/2012, University of Western Australia, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; From peddies to dense shelf water cascades; School of Environmental Systems Engineering and The UWA Oceans institute Seminar, 03/05/2012 - 03/05/2012, University of Western Australia, Perth, Presenter(s): Charitha Pattiaratchi

Rainville, L; Observations of internal waves from Autonomous Gliders - studies from Luzon Strait and from Tasmania; University of Western Australia Oceans Institute Seminar, 05/09/2012 - 05/09/2012, University of Western Australia, Perth, Presenter(s): Luc Rainville

Pattiaratchi, C; WAIMOS infrastructure in the Kimberley; WAMSI Kimberley Marine Science Seminar, 21/09/2012 - 21/09/2013, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Integration of physical, biological and chemical oceanography: a Leeuwin Current experience; Universiti Malaysia Terengganu Seminar, 09/12/2012 - 09/12/2012, Terengganu, Presenter(s): Charitha Pattiaratchi



Pattiaratchi, C; OzROMS: a three-dimensional continental shelf and slope model for Australia; School of Environmental Systems Engineering Seminar, 11/04/2013 - 11/04/2013, University of Western Australia, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Coastal ocean observations in the Pilbara; Oceans Institute Seminar, 08/05/2013 - 08/05/2013, University of Western Australia, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Coastal ocean observations in Western Australia; Institute of Oceanography and Fisheries Seminar, 03/10/2013 - 03/10/2013, Split, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Stirring on the inner shelf during tropical cyclone Rusty; Institute of Marine and Coastal Science Seminar, 19/11/2013 - 19/11/2013, Rutgers University, New Brunswick, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Seagliders in defence applications; Australian Society for Defence Engineering (ASDE) and Engineers Australia, 28/08/2014 - 28/08/2014, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Sub-mesoscale processes along the Rottneest shelf; School of Civil, Environmental and Mining Engineering/Centre for Offshore Foundation Systems seminar, 08/09/2014 - 08/09/2014, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Latest oceanographic understanding relevant to coastal impacts in the south-west; 'Coastal planning and oceanographic research', WAMSI seminar series no. 2, 13/11/2014 - 13/11/2014, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Recent developments in ocean observations and modelling; UWA Energy and Minerals Institute - lunch and learn, 14/11/2014 - 14/11/2014, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Peddies and critical latitude; Australian Coastal Ocean Radar Network launch, 21/11/2014 - 21/11/2014, Perth, Presenter(s): Charitha Pattiaratchi

Steinberg, C, Bainbridge, S, Heupel, M, Meekan, MG, Benthuyesen, J, Williams, DK, Brinkman, R; Coastal and Ocean Observing at AIMS; AIMS Science Days, 11/03/2015 - 12/03/2015, Australian Institute of Marine Science, Townsville, Presenter(s): Craig Steinberg

Pattiaratchi, C; Oceanography off Western Australia - what have we learnt in the first decade of IMOS?; School of Civil, Environmental and Mining Engineering/Centre for Offshore Foundation Systems seminar, 01/03/2017 - 01/03/2017, Perth, Presenter(s): Charitha Pattiaratchi

**Public Seminars 25**

## Conferences, Symposia or Workshops

### Conference Oral Presentation

Cetina-Heredia, P, van Sebille, E, Roughan, M; Nutrient input into Australian ocean basins by ocean boundary currents; International Union of Geophysics and Geology (IUGG) General Assembly, 02/07/2007 - 13/07/2007, Perugia, Presenter(s): Paulina Cetina-Heredia

Pattiaratchi, C; Interactions between currents and topography; Conference in Honour of Michael Collins, 13/07/2007 - 15/07/2007, Swansea, Presenter(s): Charitha Pattiaratchi

Woo, M, Pattiaratchi, C, Hollings, B; Ocean observations using autonomous ocean gliders; Western Pacific Geophysics Meeting, 29/07/2008 - 01/08/2008, Cairns

Baird, ME, Roughan, M, Morris, BD, Suthers, I; An Integrated Marine Observing System for southeastern Australia: the East Australian Current and its interaction with coastal environments; Ocean Sciences Meeting, 22/02/2010 - 26/02/2010, Portland

Hanson, CE, Pattiaratchi, C, Woo, M, Hollings, B, Stanley, D; Sustained bio-optical measurements across the Leeuwin Current system via ocean gliders: spatio-temporal patterns and links to physical forcing; Ocean Sciences Meeting, 22/02/2010 - 26/02/2010, Portland, Presenter(s): Christine Hanson



Pattiaratchi, C, Hollings, B, Woo, M, Hanson, CE, Welhena, T; Dense shelf water cascade along west Australian continental shelves; 15th Biennial International Physics of Estuaries and Coastal Seas (PECS) Conference, 14/09/2010 - 17/09/2010, Colombo, Presenter(s): Charitha Pattiaratchi

Welhena, T, Pattiaratchi, C, Feng, M; Cross-shore processes on the Rottneest continental shelf in Western Australia; 15th Biennial International Physics of Estuaries and Coastal Seas (PECS) Conference, 14/09/2010 - 17/09/2010, Colombo, Presenter(s): Thisara Welhena

Woo, M, Pattiaratchi, C; How the Capes current ends: an investigation of a west Australian coastal current using an autonomous ocean glider; 15th Biennial International Physics of Estuaries and Coastal Seas (PECS) Conference, 14/09/2010 - 17/09/2010, Colombo, Presenter(s): Mun Woo

Earp, A, Hanson, CE, Baird, ME, Brando, V, Allen, S, Clementson, L, Daniel, P, Humphries, J, Parslow, J, Ralph, P, Strutton, P, Suthers, I, Thompson, P, Underwood, M, Doblin, MA; Calibrating and validating bio-optical signals from ocean sensors; Australian Marine Science Association Conference, 03/07/2011 - 07/07/2011, Fremantle

Kuret, A, Pattiaratchi, C, Hanson, CE, Lourey, M; Seasonal variability in phytoplankton biomass off the south west of Western Australia: assessment by ocean gliders and in situ sampling; Australian Marine Science Association Conference, 03/07/2011 - 07/07/2011, Fremantle

Mihanovic, H, Pattiaratchi, C; Interaction between the Leeuwin Current and continental shelf along the Rottneest Shelf and Perth Canyon; 18th Australian Meteorological and Oceanographic Society (AMOS) Conference, 31/01/2012 - 03/02/2012, University of New South Wales, Sydney

Rigby, P, Steinberg, C, McAllister, F, Bartlett, C, Tonin, H, Herzfeld, M; Observations of extreme marine conditions under Tropical Cyclone Yasi; AMSA-NZMSS (Australian Marine Sciences Association and New Zealand Marine Science Society) Conference, 01/07/2012 - 07/07/2012, Hobart

Pattiaratchi, C; Ocean gliders; 2nd Australia-European Union Research Infrastructure Workshop, 26/07/2012 - 27/07/2012, Brussels, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Dense shelf water cascades: a mechanism for offshore dispersal of sediment; 34th International Geoscience Congress, 05/08/2012 - 10/08/2012, Brisbane, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Interactions between dense shelf water cascades and wind-driven upwelling in south-west Australia; The Physics of Estuaries and Coastal Seas (PECS) Symposium, 12/08/2012 - 16/08/2012, New York, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Modern approaches to coastal observations: from waves to whales; 10th International Conference on Coasts, Ports and Marine Structures (ICOPMAS), 19/11/2012 - 21/11/2012, Tehran, Presenter(s): Charitha Pattiaratchi

Baird, ME; The southward transport of sub-mesoscale lenses of Bass Strait water in the centre of anti-cyclonic mesoscale eddies; Australian Meteorological and Oceanographic Society (AMOS) Conference, 11/02/2013 - 13/02/2013, Melbourne, Presenter(s): Mark Baird

Armbrecht, L, Roughan, M, Rossi, V, Schaeffer, A, Davies, P, Waite, A, Armand, L; Phytoplankton composition under contrasting oceanographic conditions in a biological hotspot; ASLO 2013 Aquatic Sciences Meeting, 17/02/2013 - 22/02/2013, New Orleans, Presenter(s): Linda Armbrecht

Griffin, DA, Cahill, M; IMOS Ocean Current: monitoring Australia's ocean currents on a daily basis, for all to see; Australian Marine Science Association Conference, 07/07/2013 - 11/07/2013, Gold Coast, Presenter(s): David Griffin

Roughan, M, Schaeffer, A, Mantovanelli, A; Quantifying upwelling on the continental shelf of southeastern Australia; Australian Marine Science Association Conference, 07/07/2013 - 11/07/2013, Gold Coast, Presenter(s): Moninya Roughan

Feng, M; Ningaloo Nino - an unprecedented warming event off the Western Australia coast; WCRP/CLIVAR Second International Symposium on Boundary Current Dynamics, 08/07/2013 - 09/07/2013, Li Jang, Presenter(s): Ming Feng

Pattiaratchi, C; Sub-mesoscale eddies ('peddies') on the South-West Australian continental shelf; IAHS/IAPSO/IASPEI 'Knowledge for the Future' Assembly, 22/07/2013 - 26/07/2013, Gothenburg, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; The Leeuwin Current system: a boundary current system along Western Australia; IAHS/IAPSO/IASPEI 'Knowledge for the Future' Assembly, 22/07/2013 - 26/07/2013, Gothenburg, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Peddies (petite eddies): sub-mesoscale eddies along the continental shelf off South-West Australia; 6th Warnemunde Turbulence Days Conference, 11/08/2013 - 15/08/2013, Vilm, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Tropical cyclone stirring on the inner continental shelf off North-West Australia observed through ocean gliders; 22nd Biennial Coastal and Estuarine Research Federation (CERF) Conference, 03/11/2013 - 07/11/2013, San Diego, Presenter(s): Charitha Pattiaratchi

Griffin, DA; Highlights of the IMOS observations of ocean currents; Australian Meteorological and Oceanographic Society (AMOS) Conference, 12/02/2014 - 14/02/2014, Hobart, Presenter(s): David Griffin

Robertson, R; The effects of latitude on internal tides and tidal mixing; Australian Meteorological and Oceanographic Society (AMOS) Conference, 12/02/2014 - 14/02/2014, Hobart, Presenter(s): Robin Robertson

Robertson, R, Kobashi, D; The effects of latitude on internal tides and mixing; Ocean Sciences Meeting, 23/02/2014 - 28/02/2014, Honolulu

Robertson, R, Hartlipp, P, Boettger, D, Bell, M; The role of tides and tidal mixing in temperature and nitrate distributions off New South Wales; Australian Marine Science Association Conference, 07/07/2014 - 11/07/2014, Canberra, Presenter(s): Robin Robertson

Pattiaratchi, C; Coastal ocean observations in Western Australia: from waves to whales; Seventh world congress of scientific youth, Federation Internationale des Societes scientifiques, 06/11/2014 - 06/11/2014, Mendoza, Presenter(s): Charitha Pattiaratchi

Robertson, R, Clements, J; Acoustic ray propagation in the waters off eastern Australia using ocean glider data; 43rd International Congress on Noise Control Engineering, 16/11/2014 - 19/11/2014, Melbourne, Presenter(s): J Clements

Robertson, R, Clements, J; Tidal effects on acoustic propagation off eastern Australia; 43rd International Congress on Noise Control Engineering, 16/11/2014 - 19/11/2014, Melbourne, Presenter(s): Robin Robertson

Book, JW, Pequignet, C, MacDonald, HS, Jones, N, Lowe, R, Ivey, GN, Rice, AE, Rowley, C, Brinkman, R, Steinberg, C, Strutton, P, Smith, S; Observations and modelling of the North West shelf of Australia during Austral Summer 2011/2012; European Geosciences Union (EGU) General Assembly, 12/04/2015 - 17/04/2015, Vienna, Presenter(s): Jeff Book

Pattiaratchi, C; Sustained ocean observations around Australia using ocean gliders; Blue Planet Symposium, 27/05/2015 - 29/05/2015, Cairns, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Dense shelf water cascades around Australia: dynamics and water column processes; International Union of Geophysics and Geology (IUGG) General Assembly, 22/06/2015 - 02/07/2015, Prague, Presenter(s): Charitha Pattiaratchi

Schaeffer, A, Roughan, M; Influence of a western boundary current on shelf dynamics, upwelling and bio-physical variability from repeat glider deployments; International Union of Geophysics and Geology (IUGG) General Assembly, 22/06/2015 - 02/07/2015, Prague, Presenter(s): Amandine Schaeffer

Schaeffer, A, Roughan, M, Wood, JE; Cross-shelf dynamics, bottom boundary layer transport and upwelling on the continental shelf adjacent to the East Australian Current; International Union of Geophysics and Geology (IUGG) General Assembly, 22/06/2015 - 02/07/2015, Prague, Presenter(s): Amandine Schaeffer

Wijeratne, S, Pattiaratchi, C, Proctor, R; Simulation of boundary currents around Australia; International Union of Geophysics and Geology (IUGG) General Assembly, 22/06/2015 - 02/07/2015, Prague, Presenter(s): Charitha Pattiaratchi

Baird, ME, Mongin, M, Jones, EM; An integrating observational and modelling systems for the management of the Great Barrier Reef; Australian Marine Science Association Conference, 05/07/2015 - 09/07/2015, Geelong, Presenter(s): Mark Baird

Davies, P, Potts, J, Sutherland, M, et, al.; Where does all the mud go?; Australian Marine Science Association Conference, 05/07/2015 - 09/07/2015, Geelong, Presenter(s): Peter Davies

Feng, M, Benthuisen, J, Slawinski, D; Freshening of the Indonesian throughflow and the Leeuwin Current during the 2010-11 La Nina/Ningaloo Nino; Australian Marine Science Association Conference, 05/07/2015 - 09/07/2015, Geelong, Presenter(s): Ming Feng

Thomson, P, Mantovanelli, A, Wright, SW, Pattiaratchi, C; In situ comparisons of glider bio-optical measurements to CTD water properties; Australian Marine Science Association Conference, 05/07/2015 - 09/07/2015, Geelong, Presenter(s): Paul Thomson

Wild-Allen, K, Rayner, M, Baird, ME; Fine-scale nutrient observations confirm simulated biogeochemical variability in estuarine, coastal and shelf systems; Australian Marine Science Association Conference, 05/07/2015 - 09/07/2015, Geelong, Presenter(s): Karen Wild-Allen

Hartlipp, P, Robertson, R, Bell, M; Observed internal tides on the continental shelf off eastern Australia; Australian Meteorological & Oceanographic Society (AMOS) Conference, 15/07/2015 - 17/07/2015, Brisbane, Presenter(s): P Hartlipp

Hartlipp, P, Robertson, R; Internal tides off eastern Australia; Australian Meteorological & Oceanographic Society (AMOS) Conference, 15/07/2015 - 17/07/2015, Brisbane, Presenter(s): P Hartlipp

Roughan, M, Kerry, C, Powell, B, Oke, PR; Observation Impact in Australia's Western Boundary Current; Australian Meteorological & Oceanographic Society (AMOS) Conference, 15/07/2015 - 17/07/2015, Brisbane, Presenter(s): Moninya Roughan

Roughan, M; Upwelling along southeastern Australia; Australian Meteorological & Oceanographic Society (AMOS) Conference, 15/07/2015 - 17/07/2015, Brisbane, Presenter(s): Moninya Roughan

Schaeffer, A, Roughan, M; Influence of the East Australian Current on shelf dynamics, upwelling and bio-physical variability from repeat glider deployments; Australian Meteorological & Oceanographic Society (AMOS) Conference, 15/07/2015 - 17/07/2015, Brisbane, Presenter(s): Amandine Schaeffer

Steinberg, C, Williams, DK, McAllister, F, Rigby, P, Spagnol, S, Brinkman, R, Benthuisen, J, Pattiaratchi, C, Wijffels, S, Sloyan, B, Feng, M, Book, JW; Toward Sustained Ocean Observing across Tropical Northern Australian Shelf Seas; Australian Meteorological & Oceanographic Society (AMOS) Conference, 15/07/2015 - 17/07/2015, Brisbane, Presenter(s): Craig Steinberg

Wood, JE, Schaeffer, A, Roughan, M; Investigations into seasonal variability on the continental shelf adjacent to the East Australian Current; Australian Meteorological & Oceanographic Society (AMOS) Conference, 15/07/2015 - 17/07/2015, Brisbane, Presenter(s): Julie Wood

Roughan, M, Jones, EM, Oke, PR, Moltmann, T, May, P, Schiller, A; A National Shelf Re-analysis (ANSR) project for Australia; Australian Forum for Operational Oceanography, 21/07/2015 - 23/07/2015, Fremantle, Presenter(s): Moninya Roughan

Robertson, R, Hartlipp, P; Acoustic Propagation off Eastern Australia; Australian Acoustical Society Conference, 15/11/2015 - 18/11/2015, Hunter Valley, Presenter(s): Robin Robertson

Book, JW, Steinberg, C, Jones, N, Lowe, R, Ivey, GN, Pattiaratchi, C, Rice, AE; Glider observations of internal tide packets on the Australian Northwest Shelf; Ocean Sciences Meeting, 21/02/2016 - 26/02/2016, New Orleans, Presenter(s): Jeff Book

Mahjabin, T, Pattiaratchi, C, Hetzel, Y; Factors influencing the occurrence of Dense Water Cascades in Australia; International Coastal Symposium, 06/03/2016 - 11/03/2016, Sydney, Presenter(s): Tanziha Mahjabin

Steinberg, C, Benthuisen, J, Herzfeld, M, Tonin, H, et, al.; Responding to the 2016 mass coral bleaching event on the Great Barrier Reef: from observations to modelling; NZMSS and AMSA Sharing Ocean Resources - Now and in the future, 04/07/2016 - 07/07/2016, Wellington, Presenter(s): Craig Steinberg

Pattiaratchi, C; Coastal ocean observations for fisheries; Australian Society for Fish Biology (ASFB) and Oceania Chondrichthyan Society (OCS) 2016, 04/09/2016 - 07/09/2016, Hobart, Presenter(s): Charitha Pattiaratchi

Steinberg, C; Physical oceanographic influences on tropical reef and continental shelf fish from IMOS observations; Australian Society for Fish Biology (ASFB) and Oceania Chondrichthyan Society (OCS) 2016, 04/09/2016 - 07/09/2016, Hobart, Presenter(s): Craig Steinberg

Chen, M; The variability of summer upwelling and its influence on chlorophyll a distribution along the Rottneest continental shelf; 18th Biennial International Physics of Estuaries and Coastal Seas (PECS) Conference, 09/10/2016 - 14/10/2016, Scheveningen, Presenter(s): Miaoju Chen

Mahjabin, T; Australian continental shelves as an inverse estuary; 18th Biennial International Physics of Estuaries and Coastal Seas (PECS) Conference, 09/10/2016 - 14/10/2016, Scheveningen, Presenter(s): Tanziha Mahjabin

Brinkman, R; Sustainable Development of the North's Blue Economy – the role of IMOS to date, and into the future; Australian Marine Science Association Conference, 02/07/2017 - 06/07/2017, Darwin, Presenter(s): Richard Brinkman

Jones, N; Vertical mixing on the Australian Northwest Shelf; Australian Marine Science Association Conference, 02/07/2017 - 06/07/2017, Darwin, Presenter(s): Nicole Jones

Roughan, M; Insight into Continental Shelf Processes Along SE Australia from 10 years of IMOS observations; Australian Marine Science Association Conference, 02/07/2017 - 06/07/2017, Darwin, Presenter(s): Moninya Roughan

Thomson, P; Measuring the underwater light climate on the North West Shelf of Australia using IMOS Slocum gliders; Australian Marine Science Association Conference, 02/07/2017 - 06/07/2017, Darwin, Presenter(s): Paul Thomson

### **Conference Poster**

Suthers, I, Everett, JD, Baird, ME, Oke, PR; Entrain, retain and nurture: The fisheries oceanography potential of submesoscale eddies of western boundary currents; 18th Australian Meteorological and Oceanographic Society (AMOS) Conference, 31/01/2012 - 03/02/2012, University of New South Wales, Sydney

Welhena, T, Pattiaratchi, C, Feng, M; Dense shelf water cascade (DSWC) on the Rottneest continental shelf in South-western Australia; Australian Coastal Ocean Modelling and Observations - ACOMO, 03/10/2012 - 04/10/2012, Canberra, Presenter(s): Thisara Welhena

Wood, JE; Explaining variability on the continental shelf upstream and downstream of a western boundary current's separation zone; Australian Meteorological and Oceanographic Society (AMOS) Conference, 11/02/2013 - 13/02/2013, Melbourne, Presenter(s): Julie Wood

Wild-Allen, K, MacDonald, L, Allen, S; High resolution nutrient observations off Heron Island ; Collaborative on Oceanographic Chemical Analysis (COCA) Workshop, 26/03/2013 - 29/03/2013, University of Hawaii, Honolulu, Presenter(s): Karen Wild-Allen

Bell, M, Robertson, R; Internal tides off the Eastern Australian coast and their seasonal variability as observed by moorings; Australian Meteorological and Oceanographic Society (AMOS) Conference, 12/02/2014 - 14/02/2014, Hobart, Presenter(s): Robin Robertson

Boettger, D, Robertson, R; Internal waves in the waters off East Australia; Australian Meteorological and Oceanographic Society (AMOS) Conference, 12/02/2014 - 14/02/2014, Hobart, Presenter(s): Robin Robertson

Grosjean, L, Robertson, R; Internal tides and waves off East Australia as observed in seaglider data; Australian Meteorological and Oceanographic Society (AMOS) Conference, 12/02/2014 - 14/02/2014, Hobart, Presenter(s): L Grosjean

Moltmann, T, Proctor, R, Donoghue, S; The Integrated Marine Observing System: observations to support research and applications in the coastal zone; Ocean Sciences Meeting, 23/02/2014 - 28/02/2014, Honolulu, Presenter(s): Tim Moltmann

Chen, M, Pattiaratchi, C, Ghadouani, A; The seasonal cycle of Chlorophyll along the Two Rocks Transect; Australian Coastal Ocean Modelling and Observations (ACOMO), 07/10/2014 - 08/10/2014, Canberra

Feng, M, Benthuisen, J, Slawinski, D; La Nina causes extreme freshening of the Leeuwin Current; Australian Coastal Ocean Modelling and Observations (ACOMO), 07/10/2014 - 08/10/2014, Canberra

Kerry, C, Roughan, M, Powell, B; A high resolution re-analysis for the East Australian Current; Australian Coastal Ocean Modelling and Observations (ACOMO), 07/10/2014 - 08/10/2014, Canberra

Pattiaratchi, C, Mihanovic, H; Peddies: what, where, why?; Australian Coastal Ocean Modelling and Observations (ACOMO), 07/10/2014 - 08/10/2014, Canberra

Schaeffer, A, Roughan, M; Marine Virtual Laboratory (MARVL) high-resolution ROMS test: the East Australian Current at 30 degrees South in Solitary Island Marine Park (SIMP) ; Australian Coastal Ocean Modelling and Observations (ACOMO), 07/10/2014 - 08/10/2014, Canberra

Wijeratne, S, Pattiaratchi, C, Proctor, R; Estimates of alongshore and cross-shelf transports around Australia; Australian Coastal Ocean Modelling and Observations (ACOMO), 07/10/2014 - 08/10/2014, Canberra, Presenter(s): Sarath Wijeratne

Mahjabin, T, Pattiaratchi, C, Hetzel, Y; Occurrence of dense shelf water cascades around Australia using ocean gliders; Blue Planet Symposium, 27/05/2015 - 29/05/2015, Cairns, Presenter(s): Tazhiha Mahjabin

Cahill, M, Griffin, DA; IMOS OceanCurrent gridded sea level and ocean surface velocity; Australian Forum for Operational Oceanography, 21/07/2015 - 23/07/2015, Fremantle, Presenter(s): Madeleine Cahill

Roughan, M, Kerry, C, Powell, B, Oke, PR; Using multiple ocean observations to constrain a high-resolution model of the East Australian Current; Australian Forum for Operational Oceanography, 21/07/2015 - 23/07/2015, Fremantle, Presenter(s): Moninya Roughan

Oke, PR, Rykova, T, Sloyan, B, Wijffels, S; Guidance for glider deployments in an energetic western boundary current: East Australian Current example; Australian Coastal and Oceans Modelling and Observations (ACOMO) Workshop, 11/10/2016 - 12/10/2016, Canberra

Ribbat, N, Roughan, M, Powell, B; Mean circulation on the continental shelf off South-East Australia 31.5-34.5: the Hawkesbury Bioregion 2012-2013; Australian Coastal and Oceans Modelling and Observations (ACOMO) Workshop, 11/10/2016 - 12/10/2016, Canberra

Schaeffer, A, Roughan, M, Austin, T, Hollings, B, et. al.; Mean hydrography on the continental shelf from 26 repeat glider deployments along southeastern Australia; Australian Coastal and Oceans Modelling and Observations (ACOMO) Workshop, 11/10/2016 - 12/10/2016, Canberra

### **Course Presentation**

Suthers, I; Observations and implications at the two separation zones of the East Australian Current (EAC); Topics in Australian Marine Science (TAMS) Workshop, 06/03/2014 - 30/05/2014, Sydney Institute for Marine Science, Sydney, Presenter(s): Iain Suthers

### **Key Note Speaker**

Pattiaratchi, C; Climate change effects on coastal processes; 9th International Conference on Coasts, Ports and Marine Structures (ICOPMAS), 29/11/2010 - 01/12/2010, Tehran, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Temporal and spatial scales in coastal processes; 10th International Conference on Coasts, Ports and Marine Structures (ICOPMAS), 19/11/2012 - 21/11/2012, Tehran, Presenter(s): Charitha Pattiaratchi



## Meeting Presentation

- Pattiaratchi, C; Physical oceanography in South-Western Australia; Australasian Abalone Association Meeting, 10/05/2007 - 10/05/2007, Perth, Presenter(s): Charitha Pattiaratchi
- Pattiaratchi, C; Integrated Marine Observing System and climate change; Shark Bay World Heritage Meeting, 18/08/2009 - 18/08/2009, Shark Bay, Presenter(s): Charitha Pattiaratchi
- Hollings, B; Australian National Facility for Ocean Gliders (ANFOG) – The First 12 Months ; European Glider Observatories Congress, 16/11/2009 - 19/11/2009, Larnaca, Presenter(s): Ben Hollings
- Pattiaratchi, C; The UWA Oceans Institute and IMOS (Integrated Marine Observing System); IMarEST WA Branch Meeting, 20/04/2011 - 20/04/2011, University of Western Australia, Perth, Presenter(s): Charitha Pattiaratchi
- Feng, M; Indian Ocean Observing System; IOGOOS Marine Observation and Forecast Meeting, 30/03/2012 - 30/03/2012, Perth, Presenter(s): Ming Feng
- Hanson, CE, Gourcuff, C, Hollings, B, Stanley, D, Woo, M, Pattiaratchi, C; Bio-optical insights from ocean gliders: particulate dynamics off southwest and northwest WA; WAIMOS Annual Science Meeting, 05/11/2012 - 05/11/2012, University of Western Australia, Perth, Presenter(s): Christine Hanson
- Welhena, T, Pattiaratchi, C, Feng, M; Dense Shelf Water Cascade (DSWC) on the Rottneest Continental Shelf in south-western Australia; WAIMOS Annual Science Meeting, 05/11/2012 - 05/11/2012, University of Western Australia, Perth, Presenter(s): Thisara Welhena
- Pattiaratchi, C; Ocean observations: new ideas; Oceans Institute Retreat, 08/02/2013 - 08/02/2013, Perth, Presenter(s): Charitha Pattiaratchi
- Proctor, R, Pattiaratchi, C; Diving in the Southern Seas: the Australian National Facility for Ocean Gliders; GROOM - Gliders for Research, Ocean Observations and Management, 04/06/2013 - 05/06/2013, Trieste, Presenter(s): Roger Proctor
- Pattiaratchi, C; Peddies (petite eddies): sub-mesoscale eddies along the continental shelf off South-West Australia; Ocean Sciences Meeting, 23/02/2014 - 28/02/2014, Honolulu, Presenter(s): Charitha Pattiaratchi
- Wild-Allen, K, MacDonald, L, Allen, S; High resolution nutrient observations off Heron Island; 6th EGO Meeting, 16/06/2014 - 17/06/2014, Kiel, Presenter(s): Karen Wild-Allen
- Steinberg, C, Moltmann, T; Australia's Integrated Marine Observing System; Joint WMO-IOC Commission for Oceanography and Marine Meteorology DBCP PI-1, 04/05/2015 - 07/05/2015, Koror, Presenter(s): Craig Steinberg
- Steinberg, C; Australia's Integrated Marine Observing System; GOOS Steering Committee 4, 24/05/2015 - 26/05/2015, Australian Institute of Marine Science, Townsville, Presenter(s): Craig Steinberg
- Hartlipp, P, Robertson, R, Bell, M; Observed internal tides on the continental shelf off eastern Australia; AOGS - Asia Oceania Geosciences Annual Meeting, 31/07/2015 - 05/08/2015, Singapore, Presenter(s): P Hartlipp
- Hartlipp, P, Robertson, R; Tidal impacts off eastern Australia; AOGS - Asia Oceania Geosciences Annual Meeting, 31/07/2015 - 05/08/2015, Singapore, Presenter(s): P Hartlipp
- Steinberg, C, Williams, DK, McAllister, F, Rigby, P, Spagnol, S, Skirving, WJ, Bird, J, Brinkman, R; Queensland and Northern Australia's Integrated Marine Observing System and the tidal hydrodynamics of a coral bleaching event; Don Wallace Memorial Lecture Permanent Committee on Tides and Mean Sea Level, 02/11/2015 - 02/11/2015, Cairns, Presenter(s): Craig Steinberg
- Roughan, M, Austin, T, Milburn, S, Archer, M; Gliders, moorings and Port Hacking heatwaves ; NSW IMOS Community Meeting and RAAP Project Update, 08/05/2017 - 08/05/2017, Sydney Institute for Marine Science, Sydney, Presenter(s): Moninya Roughan

Benthuisen, J; Oceanography of Northern Australia; temperature loggers, moorings, gliders, and thermosalinograph results highlighted; Dhimurru Aboriginal Corporation, 20/06/2017 - 20/06/2017, Nhulunbuy, Presenter(s): Jessica Benthuisen

Benthuisen, J; Oceanography of Northern Australia; temperature loggers, moorings, gliders, and thermosalinograph results highlighted; Anindilyakwa Land and Sea Rangers, 21/06/2017 - 21/06/2017, Alyangula, Presenter(s): Jessica Benthuisen

Moltmann, T; IMOS observations for coasts and extremes (Meeting Nov 2014); CAWCR, Melbourne, Presenter(s): Tim Moltmann

### **Symposium Presentation**

Pattiaratchi, C; Impacts of climate change on Fremantle; Adapting to Climate Change in Coastal Fremantle a Deliberative Symposium, 24/07/2009 - 24/07/2009, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Slocum ocean glider deployments along the Two Rocks transect; WAMSI Node 6 Symposium, 25/08/2009 - 25/08/2009, University of Western Australia, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Ocean glider deployments in WA: Overview; WAMSI Node 6 symposium: Ocean science for offshore and coastal engineering, 26/11/2010 - 26/11/2010, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Node 3: oceanographic processes and water circulation; WAMSI 1 Symposium, 19/09/2011 - 19/09/2011, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Node 6: ocean glider deployments in WA - an overview; WAMSI 1 Symposium, 19/09/2011 - 19/09/2011, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C, Zeldis, J, O'Callaghan, J; Comparative approaches to integrated coastal observations including applications of gliders; The New Zealand-Australia Symposium in Ocean Observing and Data Management, 05/12/2011 - 06/12/2011, Hobart, Presenter(s): Charitha Pattiaratchi

Sutton, P, Ridgway, K, Pattiaratchi, C; Trans Tasman glider deployments; The New Zealand-Australia Symposium in Ocean Observing and Data Management, 05/12/2011 - 06/12/2011, Hobart, Presenter(s): Philip Sutton

Pattiaratchi, C; The influence of the Leeuwin current on wave propagation onto the continental shelf off south-west Australia; 2nd Australian Wind-Wave Symposium, 04/06/2013 - 05/06/2013, Melbourne, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Integrated Marine Observing System infrastructure in north-west Australia; WAMSI North-West Marine Science Symposium, 21/02/2014 - 21/02/2014, Perth, Presenter(s): Charitha Pattiaratchi

### **Workshop Presentation**

Pattiaratchi, C; Ocean observations off Western Australia ; Global Ocean Observing System Scientific Steering Committee Workshop, 23/02/2009 - 24/02/2009, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Interactions between the Leeuwin Current and the continental shelf; Institute of Marine Engineering, Science and Technology Seminar, 20/05/2009 - 20/05/2009, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; The West Australian Integrated Marine Observation System (WAIMOS); Institute of Marine Engineering, Science and Technology Seminar, 20/05/2009 - 20/05/2009, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Physical oceanography; WAMSI Node 3 Synthesis Workshop, 23/03/2010 - 23/03/2010, Commonwealth Scientific Industrial Research Organisation, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; An introduction to the Australian glider programme; Ocean University of China Seminar, 30/08/2011 - 30/08/2011, Qingdao, Presenter(s): Charitha Pattiaratchi



Pattiaratchi, C; The role of coastal engineering and oceanography on the environment and infrastructure; Environment and Infrastructure Workshop, 12/06/2012 - 12/06/2012, University of Western Australia, Perth, Presenter(s): Charitha Pattiaratchi

Jones, EM, Brinkman, R, Gillibrand, P, Herzfeld, M, Margvelashvili, N, Mongin, M, Rigby, P, Sharman, C, Timms, GP, Tonin, H, Wild-Allen, K; Australian coastal modelling and information systems: assisting management decision making; Australian Coastal Ocean Modelling and Observations - ACOMO, 03/10/2012 - 04/10/2012, Canberra, Presenter(s): Emlyn Jones

Steinberg, C, Baird, ME, Middleton, J, Pattiaratchi, C, Roughan, M, Stevens, C, Wyatt, LR; Ocean observation uptake: Present status and the way forward; Australian Coastal Ocean Modelling and Observations - ACOMO, 03/10/2012 - 04/10/2012, Canberra, Presenter(s): Craig Steinberg

Pattiaratchi, C; Ocean observations in Western Australia; ROMS/TOMS Workshop, 24/10/2012 - 24/10/2012, Rio de Janeiro, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Peddies: what, where, why?; WAIMOS Science and Data Uptake Workshop, 05/11/2012 - 05/11/2012, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Welcome, introduction and overview of IMOS and WAIMOS; WAIMOS Science and Data Uptake Workshop, 05/11/2012 - 05/11/2012, Perth, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Physical oceanography; Bluewater & Climate Node Science Meeting, 28/11/2012 - 29/11/2012, Hobart, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Modern ocean observations and prediction: from waves to whales; Zhejiang University Seminar, 04/12/2012 - 04/12/2012, Hangzhou, Presenter(s): Charitha Pattiaratchi

Pattiaratchi, C; Modern ocean observations and prediction: from waves to whales; Hohai University Seminar, 06/12/2012 - 06/12/2012, Nanjing, Presenter(s): Charitha Pattiaratchi

Wild-Allen, K, MacDonald, L, Allen, S; High resolution nutrient observations off Heron Island; Collaborative on Oceanographic Chemical Analysis (COCA) Workshop, 26/03/2013 - 29/03/2013, University of Hawaii, Honolulu, Presenter(s): Karen Wild-Allen

Gedeon, A; Introducing IMOS and the Australian national facility for Ocean Gliders; Exploring Glider Data and Gliderscope Workshop, 03/10/2013 - 03/10/2013, University of Western Australia, Perth, Presenter(s): Agi Gedeon

Gourcuff, C, Kaempf, F; Glider instrumentation, sensors, data parameters, IMOS portal and WA deployments; Exploring Glider Data and Gliderscope Workshop, 03/10/2013 - 03/10/2013, University of Western Australia, Perth, Presenter(s): Claire Gourcuff

Hanson, CE; Working with and visualising glider data using Gliderscope v4.0; Exploring Glider Data and Gliderscope Workshop, 03/10/2013 - 03/10/2013, University of Western Australia, Perth, Presenter(s): Christine Hanson

Gedeon, A; Introducing IMOS and the Australian national facility for Ocean Gliders; Exploring Glider Data and Gliderscope Workshop (15/10/13), 15/10/2013 - 15/10/2013, University of Western Australia, Perth, Presenter(s): Agi Gedeon

Gourcuff, C, Kaempf, F; Glider instrumentation, sensors, data parameters, IMOS portal and WA deployments; Exploring Glider Data and Gliderscope Workshop (15/10/13), 15/10/2013 - 15/10/2013, University of Western Australia, Perth, Presenter(s): Claire Gourcuff

Hanson, CE; Working with and visualising glider data using Gliderscope v4.0; Exploring Glider Data and Gliderscope Workshop (15/10/13), 15/10/2013 - 15/10/2013, University of Western Australia, Perth, Presenter(s): Christine Hanson

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