CURRICULUM VITAE (SHORT) Updated 05-11-2019

CONTACT INFORMATION:

DCTMA- Department of Earth, Environmental and Marine Sciences

CIMA-Centre for Marine and Environmental Research

Gambelas Campus, University of Algarve, 8005-139 Faro, Portugal

anewton@ualg.pt

http://w3.ualg.pt/~anewton/

tel: +351 919 110 026

HIGHER EDUCATION:

BSc (Joint Honours). Oceanography, Marine Biology. University of Wales, Bangor 1978-1981;

MSc (by research). Biological Oceanography, University of Wales, Bangor 1986-1988;

PhD Chemical Oceanography, University of Wales, Bangor 1990-1995;

Agregação (similar to DSc) in Marine Sciences, University of Algarve, 2014.

WORK EXPERIENCE: 1984-2019 Lecturer then tenured Professor, 2004 Head of Department of Chemistry and Biochemistry; 2015 Head of International Office University of Algarve; 2009-2019 Senior Researcher NILU- Norwegian Institute of Air Research

LANGUAGES EN, FR, PT, ES

SHORT BIOGRAPHY

Alice Newton is a tenured Professor in the Department of Marine and Environmental Sciences (DCTMA), Faculty of Sciences and Technology (FCT) of the University of Algarve (UAlg, Portugal). She is a member of Portugal's Institute of Marine Research (IMAR); the Marine and Environmental Research Center (CIMA). An internationally known Chemical Oceanographer, Professor Newton has made an important contribution to the assessment of eutrophication in coastal lagoons. She has also served on numerous national and international committees and boards, including 9 editorial boards, and has forged strong links with a range of industry and stakeholder organisations. Professor Newton was the Chairperson of LOICZ (Land ocean interactions in the coastal zone) a core project of IGBP (the International Biosphere-Geosphere Programme) and IHDP (the International Human Dimension Programme) from 2009 to 2011. She was the chairperson of the European Union Bioeconomy Strategy expert group (DGR&I). She is a Council member of the Estuarine and Coastal Sciences Association (ECSA); the European Engagement Partner of Future Earth Coasts, (FEC, formally LOICZ); a member of RAMSAR Mediterranean Wetlands Scientific and Technical Network Climate Change Specialist Group; a member of the Future Earth Ocean Knowledge Action Networks development team; a Vice-Chairperson of the Integrated Marine Biosphere Research (IMBER) Science Steering Committee; a member of the UN 2nd World Ocean Assessment pool of international experts.

CONSULTANCY

Professor Newton advises various national, international and multinational governmental and non-governmental organisations as well as research funding agencies, on aspects of science-policy implementation. Examples include: **US** Environment Protection Agency (nutrient criteria);

EU-JRC (Eutrophication in Coastal and Transitional waters);

EU-JRC (Implementation of the Water Framework Directive);

EU- DG RTD (Bioeconomy);

Portugal: INAG Portuguese Ministry of Environment and DGRm Directorate for Marine Resources;

Norway: KLIF (now Norwegian Environment Directorate), Management plan for North Sea and Skagerrak;

United Nations Environmental Programme: Regional Seas Conventions, Indicator Group (including Chlorophyll).

Danish Ministry of Environment: Eutrophication report.

RESEARCH

RECENT PARTICIPATION IN INTERNATIONAL SCIENTIFIC RESEARCH PROJECTS

2009-2012: Chairperson of LOICZ Science Steering Committee

2009-2012: 7th Framework Programme KnowSeas- Knowledge-based Sustainable Management for Europe's Seas project

2010-2012 OSPAR-CAMP Comprehensive Atmospheric Monitoring Programme. Project leader

2012-2015: 7th Framework Programme COMET LA project. WP leader.

2012-2016: 7th Framework Programme <u>DEVOTES</u> project (MSFD Biodiversity descriptor). WP leader

2015-2017: EEA grant SOPHIA project. Consultant.

POSTGRADUATE CURRICULUM DESIGN AND COORDINATION

2000-2004 development of international Master programme, European Joint Master programme in Water and Coastal Management based on a large network of European Universities, selected by the European University Association (EUA). Design and delivery of postgraduate (Master) modules in Chemistry and Physical Properties of Water, Hydro-chemical Characterization of Natural Waters, Water Quality Policies and Regulations, Water, Coastal and Environmental Management, Eutrophication.

CURRICULUM VITAE (SHORT) Updated 05-11-2019

2004-2011 Coordination of International Postgraduate Programmes

Erasmus Mundus Master in Water and Coastal Management,

2008-2019: International Curriculum Development and Teaching

- Design and curriculum development then implementation and delivery of the International European Joint Master programme in Water and Coastal Management;
- Design and curriculum development then implementation and delivery of an international Master programme in Inland and Freshwater Quality;
- Design and curriculum development then implementation and delivery of Erasmus Mundus programmes at Master level (Quality in Analytical Laboratories, Marine Biodiversity and Conservation, Ecohydrology) and at PhD level (Marine and Coastal Management);
- Design and curriculum development of the International Erasmus Mundus programme at Master level in Chemical Innovation and Regulation.

CAPACITY BUILDING

Universidad Catolica de la Santissima Concepcion, 9th-12th de May 2005, Concepcion, Chile 4 day Capacity Building course for teaching academic staff in higher education on *Networking Universities and Development of Joint Curricula*. Funded by Ministry of Science and Education, Chile

Universidad de Cadiz, 26th-30th June 2006, Cadiz, Spain. 5 day Capacity Building Course for teaching academic staff in Higher Education on *International courses development and teaching*. Funded by Ministry of Science and Education, Spain Universidad de Cordoba, February 2009, Cordoba, Spain. 3 day Capacity Building Course for teaching academic staff in Higher Education on *International courses development and teaching*. Funded by Ministry of Science and Education, Spain Pontificia Universidad Javeriana, Bogota, 29th-30th November 2010, Bogotá, Colombia. 2 day Capacity Building Course for teaching academic staff in Higher Education on *Environment (including Climate Change)*. Funded by Ministry of Science and Education, Colombia

University of Czestochowa, 12th-13th May 2011, Poland. 2 day Capacity Building Course for teaching academic staff in Higher Education on the *Water Framework Directive*. Funded by EEA Grants and Ministry of Science and Education, Poland

Universidad Nacional del Sur, 15th -17th July 2014, Argentina. 3day Capacity Building workshop on *Adaptive management frameworks for coastal social-ecological systems* for Postgraduates, post-doctoral researchers and senior researchers. Funded by CONICET, Instituto Argentino de Oceanografia

Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, 22nd August 2015, Yantai, China. Capacity Building workshop on *Adaptive management frameworks for coastal social-ecological systems* for Postgraduates, post-doctoral researchers and senior researchers

Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, August 2016, Yantai, China. Capacity Building workshop on *Adaptive management frameworks for coastal social-ecological systems* for Postgraduates, post-doctoral researchers and senior researchers

University of Gothenburg, October 5th, 2016, Göteborg, Sweden. Workshop: *Vitalising a new marine department?* Circa 100 Academic Staff

WIOMSA-Western Indian Ocean Marine Science Association, Mombasa, Kenya from 27th May 2019 to 1st June 2019. 6 day Regional Training Workshop on *Quantification and Valuation of Marine and Coastal Ecosystem Services*ERACOMA sponsored by Western Indian Ocean Marine Science Association (WIOMSA), through its Marine and Coastal Science for Management (MASMA) Programme.

PRIZES, SCHOLARSHIPS AND AWARDS

Professor Newton has been awarded many fellowships/ scholarships. Recent examples include:

2016 - Chinese Academy of Sciences Professorship. Key State Laboratory, Yantai, China.

2017- Scholar of the State Key Laboratory of Estuarine and Coastal Research (East China Normal University, China

CAPACITY BUILDING

Alice Newton has also formulated and successfully implemented 7 multinational post-graduate Master and PhD joint programmes. She has more than 26 years of experience in coordinating several international and national research programmes across several scientific disciplines. She has supervised and co-supervised 60 Master students, 24 Doctoral students and 8 Postdoctoral fellows from many different countries.

Dr Newton has designed and run 9 capacity building courses for University Academic staff and also contributed as visiting professor to the training of post-graduate students at several other Universities around the world: (Argentina) Universidad Nacional del Sur; (Brazil) Universidade Federal de São Paulo, Universidade de Santa Cecília; (Chile) Universidad Catolica de la Santissima Concepcion; (China) Central South University, East China Normal University, Ocean University of China, University of Ningbo; (Colombia) Pontificia Universidad Javeriana, University of Eafit; (Italy) University of Bologna, University of Lecce; (Morocco) Mohamed V University – Agdal; (Norway) University of Bergen;

CURRICULUM VITAE (SHORT) Updated 05-11-2019

(Poland) University of Gdansk, Gdansk Technical University, University of Szczecin, University of Częstochowa; (Spain) University of Barcelona; University of Cadiz, University of Cordoba; (Sweden) University of Göteborg; (UK) University of Plymouth, University of Wales.

SCIENCE COMMUNICATION

Professor Newton is the author or co-author of 88 scientific and academic (ISI) publications in the last 15 years, as well as several book chapters and has been the editor or co-editor of 4 special issues of Journals. She has given numerous presentations at international conferences over the last 10 years, including 40 keynote papers as an invited speaker. Additionally, she has co-chaired or convened 64 scientific events.

BOOK CHAPTERS

Wolanski, E., Newton, A., Rabalais, N., Legrand, C., 2008. Coastal Zone Management. In Sven Erik Jørgensen and Brian D. Fath (Editor-in-Chief), Ecological Engineering, Encyclopedia of Ecology. Ed. Oxford: Elsevier, pp. 630-637.DOI: 10.1016/B978-008045405-4.00046-X

Yakushev E.V., **Newton, A.**, 2013. Introduction: Redox Interfaces in Marine Waters. Chemical Structure of Pelagic Redox Interfaces, Observation and Modelling.

The Handbook of Environmental Chemistry. Ed. SpringerLink, vol. 22, pp. 1-12. DOI: 10.1007/978-3-642-32125-2

Wolanski, E., **Newton, A**., Rabalais, N., Legrand, C., 2013. Coastal Zone Management. Scott Elias (Editor-in-Chief), Ecological Engineering, Encyclopedia of Ecology. Ed. Oxford: Elsevier.

Wolanski E., **Newton A.**, Rabalais N. and Legrand C, Coastal Zone Management, Reference Module in Earth Systems and Environmental Sciences, Elsevier, 2013. 11-Sep-13 doi: 10.1016/B978-0-12-409548-9.00537-6.

Angel Pérez-Ruzafa, Isabel M. Pérez-Ruzafa, **Alice Newton**, Concepción Marcos. 2019. Chapter 15. *Coastal Lagoons: Environmental Variability, Ecosystem Complexity, and Goods and Services Uniformity. in* Coast and Estuaries, the future Edited by Eric Wolanski, John W. Day, Michael Elliott, Ramesh Ramachandran, 730pp. Elsevier ISBN: 978-0-12-814003-1

https://www.sciencedirect.com/science/article/pii/B9780128140031000150?via%3Dihub

Helena M. Galvão, Pedro A. Mendes, Sandra M. Caetano, John D. Icely & **Alice Newton**. 2019. Chapter 5. *Role of Microbes in the Ria Formosa Lagoon* In: Anílbal, J., Gomes, A., Mendes, I. & Moura, D. (eds.), *Ria Formosa: challenges of a coastal lagoon in a changing environment*. 1st edition. University of Algarve. Faro, Portugal.

ISBN 978-989-8859-72-3, 67-81. Persistent identifier: https://sapientia.ualg.pt/handle/10400.1/12475

Maria João Bebianno, Patrícia Pedro, Ângela Serafim, Belisandra Lopes & **Alice Newton**. 2019. Chapter 8. *Human Impact in the Ria Formosa Lagoon* In: Anílbal, J., Gomes, A., Mendes, I. & Moura, D. (eds.), *Ria Formosa: challenges of a coastal lagoon in a changing environment*. 1st edition. University of Algarve. Faro, Portugal.

ISBN 978-989-8859-72-3, 109-123. Persistent identifier: https://sapientia.ualg.pt/handle/10400.1/12475

Sónia Cristina, John Icely & **Alice Newton**. 2019. Chapter 10. *The Application of Remote Sensing for Monitoring the Ria Formosa: the Sentinel Missions* (eds.), *Ria Formosa: challenges of a coastal lagoon in a changing environment*. 1st edition. University of Algarve. Faro, Portugal. ISBN 978-989-8859-72-3,139-151. Persistent identifier: https://sapientia.ualg.pt/handle/10400.1/12475

BOOKS AND SPECIAL ISSUES OF JOURNALS

Ferreira, J.G., et al. including **Newton, A.,** 2006. *Monitoring plan for water quality and ecology of Portuguese transitional and coastal waters.* Development of Guidelines for the Application of the European Union Water Framework Directive. 1.ed. Portugal: INAG –Water Institute, IMAR – Institute of Marine Research.

Alice Newton and John Icely. 2008. Guest editors of special issue: Land-Ocean Interactions in the Coastal Zone: Lessons from Banda Aceh, Atlantis and Canute. Estuarine and Coastal Shelf Science Volume 77, issue 2.

Alice Newton, Jan Harff, Zai-Jin You, Hua Zhang, and Eric Wolanski. 2016. Guest editors of special issue. *Sustainability of Future Coasts and Estuaries*. Estuarine and Coastal Shelf Science Volume 183, Part B.

Mistri, M., Newton A. and Pérez-Ruzafa A. (eds) Frontiers in Ecology and Evolution. "Ecosystem Services, Biodiversity and Water Quality in Transitional Ecosystems"

ISI JOURNAL PUBLICATIONS IN LAST 2 YEARS

Owuor M.A., Icely J., **Newton A.**, Nyunja J., Otieno P., Tuda A.O., Oduor N. 2017. *Mapping of ecosystem services flow in Mida Creek, Kenya*. Ocean & Coastal Management, Volume 140, May 2017, Pages 11-21. http://dx.doi.org/10.1016/j.ocecoaman.2017.02.013.

Gari, S.R., **Newton, A.,** Icely, J.D. and Delgado-Serrano, M.M., 2017. *An Analysis of the Global Applicability of Ostrom's Design Principles to Diagnose the Functionality of Common-Pool Resource Institutions*. Sustainability, 9(7), p.1287.

Clara, I., Dyack, B., Rolfe, J., **Newton, A**, Borg, D., Povilanskas R., Brito, A. C. 2017 *The Value of Coastal Lagoons: Case Study of Recreation at the Ria de Aveiro, Portugal in comparison to the Coorong, Australia.*

Journal for Nature Conservation. https://doi.org/10.1016/j.jnc.2017.10.012

Berninsone, L., **Newton, A.**, Icely, J.D. 2018 A co-designed, transdisciplinary adaptive management framework for artisanal fisheries of Pehuen Co and Monte Hermoso (Argentina).

Ocean and Coastal Management 152, 37-47. https://doi.org/10.1016/j.ocecoaman.2017.11.002

Newton, A. et al. 2018 *Assessing, quantifying and valuing the ecosystem services of coastal lagoons.* Journal for Nature Conservation. https://doi.org/10.1016/j.jnc.2018.02.009

Passarelli, M.C., Riba, I., Cesar, A., **Newton, A.**, DelValls, T.A. 2018 *Using a mesocosm approach to evaluate marine benthic assemblage alteration associated with CO2 enrichment in coastal environments.*

Ecotoxicology and Environmental Safety Volume 157, Pages 29–39 https://doi.org/10.1016/j.ecoenv.2018.03.049

ALICE NEWTON

CURRICULUM VITAE (SHORT) Updated 05-11-2019

Mansur, A.V., Brondizio, E.S., Roy, S., Soares, P.P.M.A and **Newton, A.** 2018. *Adapting to urban challenges in the Amazon: flood risk and infrastructure deficiencies in Belém, Brazil.* Regional Environmental Change 18: 1411. https://doi.org/10.1007/s10113-017-1269-3

Gari, S., Guerrero, C., Uribe, B., Icely, J., **Newton, A** *A DPSIR- analysis of water uses and related water quality issues in the Colombian Alto and Medio Dagua Community Council*. Water Science The National Water Research Center Journal https://doi.org/10.1016/j.wsj.2018.06.001

Tseng H-C, **Newton A.**, Chen C.-T. A., Borges A., DelValls T. A *Social-environmental analysis of methane in the South China Sea and bordering countries*. Anthropocene Coasts (accepted)

Pakhomova, S., E. Yakushev, E.Protsenko, S. Rigaud, D. Cossa, J. Knoery, R.-M. Couture, O.Radakovitch, S.Yakubov, D. Krzeminska, A. **Newton**. 2018. *Modelling the influence of eutrophication and redox condition on mercury cycling at the sediment-water interface in the Berre Lagoon*. Frontiers in Marine Science, section Marine Biogeochemistry. Front. Mar. Sci. 5:291. doi: 10.3389/fmars.2018.00291

Uribe-Castañeda, N., **Newton, A.**, Le Tissier M. 2018. *Coral Reef Socio-Ecological Systems Analysis & Restoration*. Sustainability, 10, 4490. doi:10.3390/su10124490

Danchenko, S. Fragoso, B., Guillebault, D., Icely, J., Berzano, M., **Newton, A**. 2019. *Harmful phytoplankton diversity and dynamics in an upwelling region (Sagres, SW Portugal) revealed by ribosomal RNA microarray combined with microscopy*. Harmful Algae 82, 52-71 https://doi.org/10.1016/j.hal.2018.12.002

Tuda, A., Kark S., Newton, A. 2019.

Exploring the Prospects for Adaptive Governance in Marine Transboundary Conservation in the East African Marine Eco-region Marine Policy, Manuscript ID: JMPO_2018_483 in press

Owuor M.A., Icely J., Newton A. 2019.

Community perceptions of the status and threats facing mangroves of Mida Creek, Kenya: Implications for community based management.

Ocean and Coastal Management 175, 172-179. https://doi.org/10.1016/j.ocecoaman.2019.03.027

Urbis Arvydas, Ramūnas Povilanskas, Alice Newton. 2019.

Valuation of aesthetic ecosystem services of protected coastal dunes and forests

Ocean and Coastal Management, Manuscript ID: OCMA 2018 816 in press

Owuor M.A., Icely J., Mulwa R., Otieno P., Newton A. 2019

Valuing Mangrove Ecosystems Services: An Application of Deliberative Choice Experiment, the case of Mida Creek, Kenya for Ecosystem Services

Ecosystem Services, Manuscript ID: ECOSER_2018_423 in press

From <u>Google Scholar</u>	All	<u>ORCID</u>
<u>Citations</u>	3227	<u>SCOPUS</u>
<u>h-index</u>	30	Research Gate
<u>i10-index</u>	65	<u>LinkedIn</u>