

Short CV – Oscar Alvarez Esteban

PROFESOR TITULAR DEL AREA DE FÍSICA APICADA (UNIVERSIDAD DE CÁDIZ (2002)):

Grados académicos

1999. PhD in Physics – Physical Oceanography (University of Cadiz),
1990. Degree in Physics, (Universidad Complutense Madrid)

Áreas de investigación principales

- 1.- Shallow waters Hydrodynamic
- 2.- Sediment transport processes
- 3.-Operational Oceanography.

Coordinación y participación en proyectos (6 más relevantes)

Principal investigator. Improving maritime safety and Atlantic Regions Coastal Pollution Response through technology transfer, training and innovation (ARCOPOLPlatform).
ARCOPOL+-2011-1/1 EUROPEAN UNION IC-INTERREG IV

Principal Investigator: Platform for improving maritime coastal pollution preparedness and response in Atlantic regions (ARCOPOLplatform) : IC-INTERREG IV

Principal Investigator 3D modelling of coastal dynamics: the effect of non-linear interactions among wind-waves, tides and topography. Application to the Andalusian coast (CTM 2010-20945/MAR) I+D, ministerio de ciencia y tecnología

Principal investigator A new 3D wind-wave/ tide interaction model. hydrodynamical processes and sediment transport.(CTM 2007-60408/MAR). I+D Ministerio Ciencia y Tecnología

Participant. Establishment of a spanish operational oceanography system (ESEOO),
Andalusian Region Coast (2004-2007). Spanish Science and Technology Ministry
(VEM2003-20577-C14-07).

Participant. Mesooscale Hydrodynamic connections between the Gulf of Cadiz and The Alboran Sea (MEGAN) (2014-2016). Spanish Economy and Competitiveness Ministry (CTM2013-49048-C2-2-R).

publicaciones (15 más relevantes)

González C. J.; Álvarez O.; Mañanes R.; Izquierdo A.; Chioua J.; Bruno M.; Gomiz J. J.; López L. (2013). Baroclinic M_2 tidal circulation in Algeciras Bay and its implications for the water exchange with the Strait of Gibraltar: observational and 3D model results, Journal of Geophysical Research, DOI: 10.1002/jgrc.20404

Chioua J.; Bruno M.; Vázquez A.; Reyes M.; Gomiz J. J.; Mañanes R.; Álvarez O.; González C. J.; López L.; Gómez-Enri J. (2013). Internal waves in the Strait of Gibraltar and their role in the vertical mixing processes within the Bay of Algeciras. Estuarine, Coastal and Shelf Science, doi:10.1016/j.ecss.2013.04.010.

Álvarez, Ó.; C. J. González; R. Mañanes; L. López; M. Bruno; A. Izquierdo; J. Gómez-Enri; M. Forero (2011), Analysis of short-period internal waves using wave-induced surface displacement: a 3D model approach in Algeciras Bay and the Strait of Gibraltar, *J. Geophys. Res.*, 116, C12033, doi:10.1029/2011JC007393.

Izquierdo, A; Bethencourt, M; Benavente, J; González, C; Reyes, M; Alvarez, O (2011) Hydrodynamical modelling as a tool for scattered shipwreck sites identification and prospecting: the "Fogeaux" site case. *Instrumentation Viewpoint* 11 85-87

González, C; Reyes, M; Carmona, A; López-Comí, L; Vidal, J; Izquierdo, A; Alvarez, O (2011). Hydrodynamic modelling and operational oceanography for oil-spill events in the Andalusian coast: a real case study during the Fredra accident (*OcInstrumentation Viewpoint* 11, 80_81

González, C; Alvarez, O; Reyes, J; Acevedo, A (2010). Two-dimensional modeling of hydrodynamics and sediment transport in the San Pedro tidal creek (Cadiz bay): morphodynamical implications. *Ciencias marinas* 36, 393-412

Morris, Ed; Peralta, G; Benavente, J; Freitas, R; Rodrigues, A M; Quintino, V; Alvarez, O; Valcárcel, N; Vergara, J; Hernandez, I; Perez, J (2009) *Caulerpa prolifera* stable isotope ratios reveal anthropogenic nutrients within a tidal lagoon Marine ecology. *Progress series (Halstenbek)*, 117,128. Vol 390

Kagan, B, Alvarez, O; Gorchakov, E (2008) Weak sensitivity of the SWAN wave model to variations in hydrodynamic properties of sea bottom : *Izvestiâ Akademii nauk SSSR. Fizika atmosfery i okeana* , 780,786 vol 44 (6)

Vidal, J; Tejedor, B; Alvarez, O. (2005) Experimental determination of erosion/deposition Parameters and their application to a real case: the Sancti Petri channel. *Ciencias marinas* 31, (3) 577-584

Kagan, B; Alvarez, O; Izquierdo, A. (2005). Weak wind-wave/tide interaction over fixed and moveable bottoms: a formulation and some preliminary results. *Continental Shelf Research*, 25 ,(7-8), 753-773

Alvarez, O; Kagan, B; Izquierdo, A; Tejedor, B (2003). Weak wind-wave/tide interaction over a moveable bottom: results of numerical experiments in Cádiz Bay. *Continental Shelf Research*, 23, 435-456

Alvarez, O; Tejedor, B; Tejedor, L; Kagan, B (2003). A note on sea-breeze-induced seasonal variability in the K1 tidal constants in Cadiz Bay, Spain. *Estuarine, Coastal and Shelf Science* 58 (4), 805-812

Kagan, B; Alvarez, O; Izquierdo, A; Mañanes, R; Tejedor, B; Tejedor, L (2003) Weak wave/tide Interaction in suspended sediment-stratified flow: a case study. *Estuarine, Coastal and Shelf Science*, 56 (5-6), 989-1000

Alvarez, O; Tejedor, B; Vidal, J. (2001) La dinámica de marea en el estuario del Guadalquivir: un caso peculiar de resonancia antrópica. *Física de la tierra*, 13 11-24

Kagan, B; Tejedor, L; Alvarez, O; Izquierdo, A; Tejedor, B; Mañanes, R.(2001) Weak wave-tide interaction formulation and its application to Cadiz Bay. *Continental Shelf Research* 21 (6-7), 697-725

Alvarez, O; Izquierdo, A; tejedor, B, tejedor, L; Kagan B. (1999). The influence of sediment load on tidal dynamics: a case study: Cádiz Bay. Estuarine, Coastal and Shelf Science, 48, 439-450

Participación en paneles expertos:

-Panel to the IHO international (2001).

- Expert for the Evaluation of Research Projects of Galician Program of marine Science and Technology (2010-).

- Expert for the Evaluation of Research Projects of Spanish Program of Marine Science and Technology (2011).

Premios y distinciones:

- Premio de la Unión Europea al mejor proyecto europeo modalidad medioambiente 2016 al proyecto ARCOPOLPLATFORM: Improving maritime safety and Atlantic Regions Coastal Pollution Response through technology transfer, training and innovation (ARCOPOLPlatform).
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