

Professor Michael Collins B.Sc, D. Phil, D.Sc, FGS: Curriculum Vitae

Introductory Remarks

Detailed CV

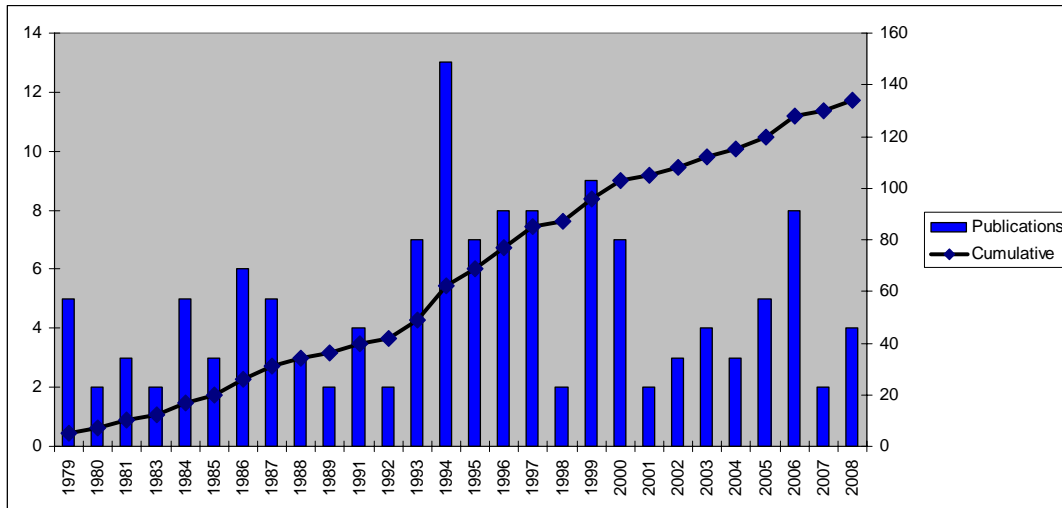
Membership of Government Committees

## 1. INTRODUCTORY REMARKS

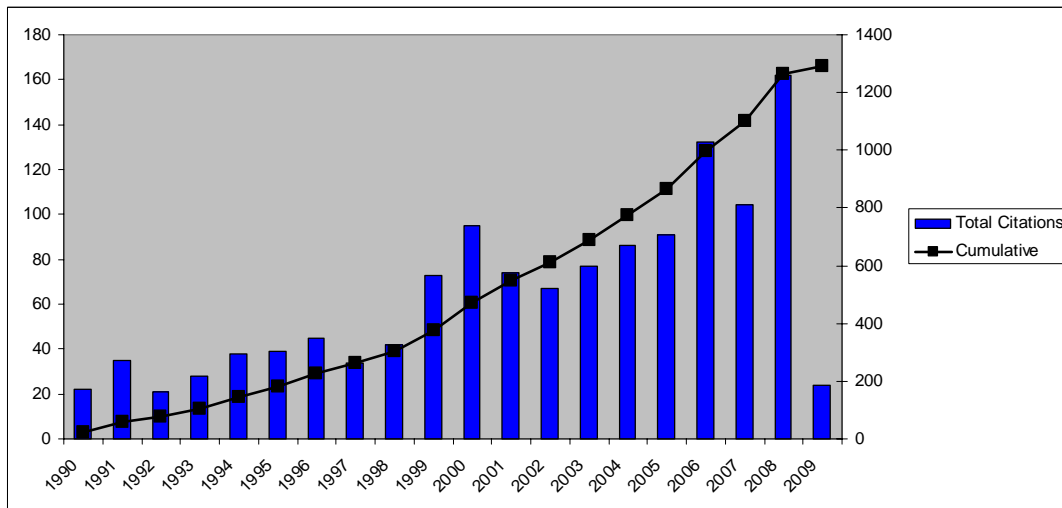
Michael Collins trained originally as a civil engineer, then went on to undertake research into the transport of sediments in the headwater catchments of rivers (University of Sussex). During postdoctoral studies at Imperial College, London, he undertook research into sediment transport in estuaries and over intertidal flats. Subsequently, moving to Swansea (South Wales), he developed research interests on beaches and the inner continental shelf (including sandbanks). At the same time, unique laboratory equipment was designed and constructed, to investigate the movement of sedimentary particles under the combined influence of waves and currents. This research theme was continued and enhanced following a move to Southampton. In parallel, research programmes were being established in West Africa, China and Europe (in particular, Greece).

The above research profile has provided Professor Collins with wide-ranging expertise and experience in investigations into sediments (mud, sand and gravel) supply, transport, and deposition in environments ranging from the headwaters of rivers, to the deep ocean. As such, he is a proponent of the coastal zone being part of a much larger (regional) system. In terms of predictive capabilities, for management purposes, the laboratory investigations undertaken improve the understanding of physical processes for inclusion (for example) in numerical models. An engineering background provides the Applicant with a pragmatic approach to problem-solving.

Professor Collins has published extensively in internationally-refereed journals and has edited (jointly) a number of books on regional case studies (including *Oceanography and Marine Environment of the Basque Country*). In total, he has written 160 papers in internationally-refereed journals, with 1,404 citations (see below).



Published Items in Each Year.



Citations in Each Year.

In addition to the scientific publications listed above, Professor Collins was the Founding (U.K) Editor of *Continental Shelf Research*, which he has continued to edit for the past 27 years.

At both of the academic institutions where he was a member of academic staff (University College of Swansea (Wales), 1973 to 1986; and the University of Southampton, 1986 to present), Professor Collins served his terms as Head of the Departments of Oceanography. In the case of the latter institution, he was instrumental in the merging of the Department of Geology and Oceanography, into the (now) School of Ocean and Earth Science at the National Oceanography Centre (NOC). At the NOC,

for a period of time, he was the leader of the Coastal and Shelf Seas Research Group. In 1986, Professor Collins was a Visiting Fellow at St. Johns College, Cambridge.

Over a number of years, Professor Collins was part of the U.K Delegation to the Intergovernmental Oceanographic Commission (IOC) and was short-listed for the position of Secretary.

Forty-three PhD (and 18 MSc / MPhil) students have been supervised by Michael Collins; of these, some 7 are Professors at Universities, in countries throughout the world, whilst others are in prominent positions in their organizations.

Each of the above activities has provided the Applicant with extensive experience in team building capacity and fund raising. The research programmes undertaken, in the field or in the laboratory, all required a group of individuals- ranging from scientist to technical support. In the latter case, particularly in relation to shallow waters and deep water research cruises, where the Applicant has been Senior Scientist on cruises in the North Sea and Aegean and Ionian Seas. The integrated nature of the research carried out is reflected in the number of multi-author publications, with other researchers as the lead authors.

In terms of fund-raising, Professor Collins has received extensive funding from a range of sources: local authorities (U.K); UK Research Councils (NERC and EPSRC); (U.K) Government Ministries (Defence; Agriculture; Fisheries and Food); the European Commission (Grants and Networks- e.g. Coastal Environments, NE Atlantic: Physical processes); and consultants /industrial companies. In total, some £4 million (4.5 million EUR) has been received, in support of sediment dynamics research (including hydrography). Indirect funding has been received in terms of ship-time and airborne/spaceborne campaigns.

Professor Collins acts presently as a consultant to the dredging industry and is a member of ACHWS (Advisory Committee on Historic Wreck Sites) of the U.K Government (Department of Culture, Media and Sport). He is a Fellow of the Geological Society and an Honorary Professor of the University of Nanjing, P.R China. He has acted as advisor, on many occasions, to FCT (Foundation for Science and

Technology), Portugal, in relation to the assessment of marine laboratories and equipment purchase.

# Michael Bernard COLLINS, BSc, DPhil, DSc, FGS

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### PERSONAL INFORMATION

<b>Home Address</b>	Eden House, 7 Bassett Heath Avenue, Southampton SO16 7GP Tel: (023) 8076 6534
<b>Date of birth</b>	20 July 1944
<b>Place of Birth</b>	Amersham, Bucks
<b>Nationality</b>	British
<b>Marital Status</b>	Married, 2 children

## DEGREES

1967	B.Sc.	Civil Engineering: II(1), CNA A
1973	D.Phil.	Sediment Transport in Rivers: University of Sussex
1995	D.Sc.	Sediment Dynamics: University of Sussex

## RESEARCH GRANTS AWARDED

**(a) University College, Swansea**

1974	Swansea City Council	Water movement, Swansea Bay	£ 3,510
1975	Welsh National Devel. Authority	Dye diffusion studies	£ 10,634
1975	Institute of Oceanographic Sciences (Taunton)	Sediment movement, Swansea Bay	£ 14,496
1978	Metal Box Ltd	W Coast Storm Surges	£ 4,997
1978	Swansea City Council	Water & Sediment Movement, Swansea Bay	£ 5,000
1979	SRC (Marine Technology Directorate)	Threshold of Heavy Mineral Grains	£ 12,505
1980	NERC	Hydrodynamics and Sedimentology of Linear Sandbanks	£ 39,318
1983	UNESCO	Coastal Erosion in West & Central Africa	£ 3,700
	NATO	Plume dispersion studies, Aegean Sea	£ 4,500
1984	BP Chemicals	Sedimentation in the Neath Estuary	£ 20,500
	Argabay Ltd	Neath Estuary studies	£ 3,800
	NERC	Sandbanks (Supplement)	£ 7,900
1986	MoD (ARE, Portland)	Surface Mixed Layer Dynamics: NE Atlantic	£ 89,000
	BP Chemicals	Neath Estuary Sediments	£ 3,000
	Argabay Ltd	Sedimentation of coal dust	£ 9,300

**(b) University of Southampton**

1988	Welsh Water	Sediment Movement in Swansea Bay	£ 7,998
	MoD (ARE, Portland)	Surface Mixed Layer Dynamics: NE Atlantic (transfer from Swansea)	£ 30,999
	MoD (ARE, Portland)	NE Atlantic (Supplement)	£ 29,900
1989	Ennemix Marine Dredging	Investigations into offshore gravel deposits	£ 27,000
	Arun District Council	Coastal erosion investigation: Pagham Harbour	£ 8,750
	MoD (ARE, Portland)	NE Atlantic: Literature Review	£ 49,921
1990	MoD (ARE, Portland)	Barents Sea: Literature Review	£ 89,883
	Ennemix Marine Dredging	Research into offshore gravel deposits	£ 150,000
	MoD (ARE, Portland)	Assessment of sea bed discrimination system (RoxAnn)	£ 7,140
	Local Authorities (New Forest/Bournemouth <i>etc</i> )	Beach and nearshore studies	£ 51,599
	EC, Marine Science & Technology (I)	European Linear Sandbanks	£ 7,163
	MAFF	Shingle Movement in Coastal Waters	£ 173,586
1991	Local Authorities (New Forest/Bournemouth Councils <i>etc</i> )	Beach and nearshore studies	£ 56,531
	EC, Marine Science & Technology (I)	Water and sediment flux through the Dover Straits (FLUXMANCHE)	£ 298,911
	Arun District Council	Coastal stability investigations	£ 7,636
	NERC (Capital Equipment)	Oscillating trolley wave stimulator	£ 26,203
	Local Authorities (New Forest/Bournemouth Councils <i>etc</i> )	Beach and nearshore studies	£ 48,961
	Ennemix Marine Dredging	Research into offshore gravel deposits (Renewal)	£ 20,000
1992	EC, Marine Science & Technology (I)	Water and sediment flux through the Dover Straits (FLUXMANCHE)	£ 70,879 (with P J Statham & S R Boxall)

	Hydraulics Research	Shingle Mobility Study (for Crown Estate/SCOPAC)	£ 32,500
	NERC	An autonomous underwater optical measurement system	£ 78,028 (with I.S.Robinson, M Johnson & J Dakin)
	EC, Marine Science & Technology (II)	CSTAB (Circulation and Sediment Transport Around Banks)	£ 63,700 (plus £ 30,000 supplement)
	SCOPAC (Standing Conference on Problems Associated with the Coast-line)	Regional investigations into beach response and sediment transport paths	£ 38,290
	EC, Marine Science & Technology (II)	Water and Sediment Flux through the Cretan Straits (PELAGOS)	£ 29,839
	Bournemouth Borough Council	Beaches & Nearshore Studies	£ 23,362
1993	EC, Human Capital and Mobility (M. Poulos)	Sediment movement in Greek waters	£ 75,805
	Hydraulics Research	Electronic pebble development	£ 36,085
	(MAFF)	Beach Profiles and Sediment Transport Analyses SCOPAC	£ 38,290
	Bournemouth Borough Council	Monitoring and survey work	£ 47,250
	New Forest District Council	Coastal Monitoring Programme	£ 34,892
	European Union (N. Grochowski)	Resuspension of fine-grained sediments by currents and waves.	£ 52,245
	EU, Laboratory Fellowships	Coastal Ocean Processes	£ 151,515
1994	Borough of Christchurch	Beach monitoring	£ 5,984
	EU, Marine Science and Technology (II)	Water and Sediment Flux in the eastern Channel (FLUXMANCHE II).	£ 104,651 (with S R Boxall and P J Statham)
1995	EU, Laboratory Network	Coastal Environments, N E Atlantic: Physical Processes	£ 63,430



	EU Individual Fellowship (I. Panagiotopoulos)	Experimental Determination of threshold under waves and currents	15,000 ECU
	HR Wallingford	Nash Bank - Effects of long-term Dredging	£ 9,870
	HR Wallingford	Estuary processes: Scoping study	£ 9,165
	EC	Coastal Environments (E. Atlantic) Physical Processes	£ 63,430
	HR Wallingford	Shingle Beach field studies - 1995	£ 5,950
1996	HR Wallingford/ MAFF	Shingle Beach Research	£ 45,500
	Southern Science	Survey Work at Queensborough	£ 1,313
	New Forest	Coastal Survey	£ 23,433
1996/ 1997	Bournemouth	Monitoring and survey work at Bournemouth and Hengistbury Head 96/97	£ 26,501
	EU/ METRO MED	Dynamics of matter transfer and bio- geochemical cycles: their modelling in coastal systems of the Mediterranean Sea	£ 56,911
	EU/ MATER	Mass Transfer and ecosystem response	£ 78,512
1997	EC	Coastal Ocean Processes	£ 32,000
	BOURNEMOUTH	Monitoring and survey work at Bournemouth and Hengistbury Head beaches 97/98	£ 13,456
	CHRISTCHURCH	Beach monitoring and survey work	£ 5,300
	EU	INDIA (Inlet Dynamics Initiative: Algarve)	£ 126,621
	Isle of Wight Council	European LIFE project (Coastal change, climate and stability)	£ 14,952
	States of Jersey	Coastal stability and sediment dynamics.	£ 15,095
1998	EPSRC	Coarse sediment transport measurement in rivers and coasts using advanced particle tracing technologies.	£ 204,877
	EU	SWAMIEE - Sediment and Water Movement in Industrialised Estuarine Environments.	£ 110,400

	EPSRC	Shingle & mixed beach processes: A comparative laboratory and field study.	£ 59,585
	NERC	AQUILLA - The development of the Aquila System for monitoring the marine environment.	£ 55,900
	EPSRC	Influence of biota on silt dynamics Following dredging activities	£ 158,491
	NERC	Spatial variability of bottom turbulence over a linear sandbank: effects on vorticity field and topography evolution (AUTOSUB) (With Dr. G. Voulgaris)	£ 107,910
	Borough of Bournemouth	Monitoring and survey work	£ 28,094
	EU (LIFE)	Coastal change, climate and stability (With Dr. J.K. Dix)	£ 14,952
	States of Jersey	Coastal stability and sediment dynamics	£ 15,095
1999	States of Jersey	Coastal Stability sediment dynamics	£ 18,881
	Borough of Bournemouth	Monitoring and survey work	£ 28,937
	H R Wallingford	Emphasys	£ 38,000
2000	Borough of Bournemouth	Monitoring and survey work	£ 31,106
2001	EU	DELOS	£ 91,842
	EU	INTERPOL	£ 58,949
	Borough of Bournemouth	Monitoring and survey work	£ 32,041
	Environment Agency	Freiston Shore	£ 13,500
	Dep.for Environment Food and Rural Affairs	Estuary Process Research Project	£ 54,000
2002	Borough of Bournemouth	Monitoring and survey work	£ 16,581
	British Council	Study of the hydrodynamics & sediment dynamics at the coastal zone of the Gournes area of the County of Haraklio (Island of Crete) for the confronting of coastal erosion	£ 5,500
	EU	EUMARSAND	£ 94,789

## INDIRECT RESEARCH SUPPORT

## (a) Ship-time (NERC), as Principal Scientist

1978	21 days, <i>RRS Shackleton</i>
1981	21 Days, <i>RRS Shackleton</i>
1983	28 days, <i>RRS Discovery</i>
1986	28 days, <i>RRS Charles Darwin</i>
1988	14 days, <i>RRS Challenger</i>
1999	14 days, <i>Côte D'Aquitaine</i>

## (b) Remote Sensing:

Investigator in NERC MSS-82, 83, 84 and 85 Airborne Campaigns

## PhD AND MSc RESEARCH SUPERVISION

(Degree, date awarded) (\*supervised jointly)

Moore, N H (MSc, 1977)	Physical oceanographic and hydrological observations in the Loughor Estuary, S Wales.
Barrie, J V (MSc, 1978)	Heavy mineral distribution in bottom sediments of the Bristol Channel.
Ferentinos, G (PhD, 1978)	Aspects of the sedimentology and hydrodynamics of Swansea Bay and the northern Bristol Channel.
Carling, P A (PhD, 1979)	The influence of creek systems on intertidal flat sedimentology.
Conispoliatis, N (MSc, 1979)	The sedimentology and Mineralogy of Thermaikos Bay, northwestern Aegean Sea.
Evans R J *(PhD, 1979)	Investigations into the interrelationships between the acoustic and geotechnical properties of sediments.
Lykousis, V (MSc, 1979)	Studies of the seabed in areas of the Eastern Mediterranean.
Rigler, J K (MSc, 1979)	Flooding in the Neath Estuary, in response to tidal surge-freshwater interaction.
Wilding, A J (PhD, 1979)	Numerical studies of tides, surges and free oscillations in Swansea Bay.
Al-Ramadhan, B (PhD, 1980)	Physical oceanographic investigations in the Loughor Estuary.
Robles, F L E (PhD, 1980)	Water masses and circulation in the SE Meridional Pacific and the 'El Nino' event.
Pattiaratchi, C B (MSc, 1981)	Estimates of sand-transport due to unidirectional and oscillatory flow.
Rowlands, G L (MSc, 1981)	Morphology and structure of the Scarweather Sands, northern Bristol Channel.
Borthwick, I (PhD, 1982)	Dye diffusion studies and surface water circulation in Swansea Bay.

Harris, P T (MSc, 1982)	The distribution and dynamics of sedimentary bedforms in the Central and Inner Bristol Channel.
Moran, A D (MSc, 1982)	Sediment transport in the Mumbles Head area of Swansea Bay.
Van Smirren, J (MSc, 1982)	Sediment transport processes over the intertidal flats of the Wash, E England.
Galloway, J S (PhD, 1984)	Breaking wave characteristics and their influence on sediment transport.
Harris, P T (PhD, 1984)	Sediment transport paths in the Bristol Channel.
Williams, S J (PhD, 1984)	Experimental studies of the transport of sediment in controlled unidirectional and oscillatory flows, separately and in combination.
Cramp, A (PhD, 1984)	Late Pleistocene-Holocene sedimentation in the eastern Mediterranean, with particular reference to Sapropelic Units.
Pattiaratchi, C B (PhD, 1985)	Hydrography and sedimentology of a headland-associated linear sandbank: Scarweather Sands, northern Bristol Channel.
Al-Ghadbhan, A N (PhD, 1986)	Sediment transport in Carmarthen Bay (northern Bristol Channel).
Osborne, M J (MSc, 1986)	Radar remote sensing of the ocean surface and the application of the Ocean Surface Current Radar (OSCR).
Barrie, J V (PhD, 1986)	Surficial geological development of Grand Bank and Labrador Shelf Holocene sediments.
Nash, L A (PhD, 1987)	Settling and threshold characteristics of biogenic sediments.
Rimmer, J C (PhD, 1987)	Remote sensing of suspended sediments, in Swansea Bay.
Poulos, S (PhD, 1989)	Deltaic sedimentation in the microtidal environment of Greek waters.
Osborne, M J (PhD, 1990)	Oceanographic conditions influencing the surface mixed layer at <i>OWS Lima</i> , NE Atlantic.
Voulgaris, G (PhD, 1992)	Beach process studies: nearshore sediment and water movement.
Tomlinson, B (PhD, 1992)	Laboratory studies into sand transport under unidirectional and oscillatory flow.
Gao, S (PhD, 1992)	The stability of tidal inlets.
Algan, A O* (PhD, 1993)	Regional patterns of fine-grained sediment movement: The Solent.
Ke, X (PhD, 1995)	Intertidal flat sedimentation processes.
Cowgill, C (PhD, 1994)	The <i>in situ</i> determination of sediment erodibility.

Velegarakis, A (PhD, 1994)	Aspects of geomorphology and sedimentology of a coastal embayment system: Poole and Christchurch Bays, southern England.
Muskananfol, M* (PhD, 1994)	Biological influences on sediment threshold.
Whitcombe, L (PhD, 1995)	Regional sediment transport patterns, Hayling Island (Havant District Council)
Powell, H (PhD, 1996)	Sediment movement in the vicinity of a North Sea sandbank.
Panagiotopoulos, I (PhD, 1996)	The threshold of movement of clay/sand admixtures.
Workman, M (PhD, 1998)	The development and use of transmitting pebbles in shingle beach studies.
Mason, T E (PhD, 1997)	The hydrodynamics and sediment dynamics of mixed (sand and gravel) beaches.
Wallbridge, S J (PhD, 1998)	Settling and threshold characteristics of foraminifera.
McFarland, S (PhD, 1998)	Investigations of beach stability - N. Kent (Canterbury, CC)
Bradbury, A (PhD, 1998)	Coastal processes and coast protection between Chewton Bunny and Hurst Castle (New Forest District Council).
Uriarte, A(PhD, 1998)	Sediment transport along the northern Spanish continental shelf (Basque country).
Lee, M W (PhD, 2001)	Processes of shingle movement on beaches, using tracer techniques.
Lecouturier, M N A (PhD, 2001)	Secondary flow structures and sediment dynamics
Friend, P L (PhD, 2001)	Biological influence on sediment suspension and retention in intertidal environments.
Greenaway, B A J (MPhil, 2002)	Coastal stability and sediment dynamics: States of Jersey.
Paphitis, D (PhD, 2001)	Laboratory studies of sediment threshold under wave/current interaction.
Teles, A P (PhD)	Sediment transport and deposition in estuaries: Southampton Water
Bastos, A C (PhD)	Sediment dynamics - shelf/coastal sediment exchange: Dorset coastline sediment resuspension, in wave - and tidally-dominated environments
Hughes, Z J (PhD)	Sediment resuspension, in wave- and tidally- dominated environments
Lambkin, D (PhD)	The effect of non-sinusoidal waves, individual and groups, on the movement of bed sediments

Yining Chen (MPhil/PhD) Factors affecting the cross-sectional profiles of tidal creeks.

## PUBLICATIONS

### Edited works

Banner, F.T., Collins, M. B. and Massie, K. S. (Eds.), 1979. *The N W European Shelf Seas: the Sea Bed and the Sea in Motion, I Geology and Sedimentology*. Elsevier Oceanographic Series 24A, Amsterdam. 1-300.

Banner, F. T., Collins, M.B. and Massie, K.S. (Eds.), 1979. *The N W European Shelf Seas: the Sea Bed and the Sea in Motion, II Physical and Chemical Oceanography and Physical Resources*. Elsevier Oceanographic Series 24B, Amsterdam. 301-638.

Collins, M.B., Banner, F.T., Tyler, P.A., Wakefield, S. J. and James, A.E. (Eds.), 1980. *Industrialised Embayments and their Environmental Problems: A Case Study of Swansea Bay*. Pergamon Press, Oxford. 632 pp.

Amos, C.L. and Collins, M.B. (Eds.), 1991. *The Seabed of the Canadian Continental Shelf. Continental Shelf Research, 11*(8-10). 645 pp.

Collins, M.B. and Ansell, K. (Eds.), 2000. *Solent Science: A Review*, Elsevier, Amsterdam. 385pp

Borja, A. and Collins, M. (Eds.), 2004. *Oceanography and marine environment of the Basque Country*, Amsterdam, Netherlands, Elsevier, 640pp.

Balson, P.S. and Collins, M.B. (Eds.), 2007. *Coastal and Shelf Sediment Transport*. Geological Society of London, Special Publications, 274pp.

### Recent Book Contributions

Collins, M. and Borja, A., 2004. *Conclusions: notes on a research agenda for the region*. In: Borja, A. and Collins, M. (Eds.), *Oceanography and marine environment of the Basque Country*. Amsterdam, Netherlands, Elsevier, 599-601.

Uriarte, A., Collins, M., Cearreta, A., Bald, J. and Evans, G., 2004. *Sediment supply, transport and deposition: contemporary and Late Quaternary evolution*. In: Borja, A. and Collins, M. (Eds.), *Oceanography and marine environment of the Basque Country*. Amsterdam, Netherlands, Elsevier, 97-131.

Calewaert, J.-B., Maes, F., Lymbery, G., Engelen, G., Van Lancker, V., Douvere, F., Vanaverbeke, J., Collins, M., Mink, E. and Elliott, M., 2007. *Chapter 7. Final chapter SUMANOS*, pp. 260-314. In: F. Maes and J.-B. Calewaert (Eds.), *Science and Sustainable Management of the North Sea: Belgian case studies*. Ghent, Academia Press Scientific Publisher, 314 pp.

Collins, M.B. and Balson, P.S., 2007. *Coastal and shelf sediment transport: an introduction*. In: Balson, P.S. and Collins, M.B. (Eds.), *Coastal and shelf sediment transport*. London, UK, Geological Society of London, 1-5. (Geological Society Special Publication 274).

Velegrakis, A.F., Collins, M.B., Bastos, A.C., Paphitis, D. and Brampton, A., 2007. *Seabed sediment transport pathway investigations: review of scientific approach and methodologies*. In: Balson, P.S. and Collins, M.B. (Eds.), *Coastal and shelf sediment transport*. London, UK, Geological Society of London, 127-146. (Geological Society Special Publication 274).

### Refereed papers, in International Journals

Collins, M.B., 1970. Discussion, Design Curves for Suspended Load Estimation. *Proc., Institution of Civil Engineers*, 46, 85-88.

Banner, F.T. and Collins, M.B., 1975. 'Introduction to Oceanography' at University College of Swansea. *Proc., Geologists Association*, 86(1), 87-93.

Collins, M.B., 1976. Suspended Sediment Sampling Towers as used on the Intertidal Flats of the Wash, Eastern England. *Estuarine & Coastal Marine Science*, 4, 45-57.

Amos, C.L. and Collins, M.B., 1978. The combined effects of wave motion and tidal currents on the morphology of intertidal ripple marks, the Wash, UK. *Journal of Sedimentary Petrology*, 48,(3), 849-856.

Collins, M.B. and Banner, F.T., 1979. Secchi Disc depths, suspensions and circulation, north-eastern Mediterranean Sea. *Marine Geology*, 31. M39-M46.

Collins, M.B. and Barrie, J.V., 1979. The threshold of movement of the Woodhead sea-bed drifter under unidirectional and oscillatory flow, separately and in combination. *Deutsche Hydrographische Zeitschrift*, 32,(3), 113-118.

Collins, M.B., Ferentinos, G. and Banner, F.T., 1979. The hydrodynamics and sedimentology of a high (tidal and wave) energy embayment (Swansea Bay, northern Bristol Channel). *Estuarine & Coastal Marine Science*, 8, 49-74.

Ferentinos, G. and Collins, M.B., 1979. Tidally-induced secondary circulations and their associated sedimentation processes. *Journal, Oceanographical Society of Japan*, 35, 655-74.

Hammond, T.M. and Collins, M.B., 1979. Flume studies of the response of various current meter oscillatory flow. *Deutsche Hydrographische Zeitschrift*, 32, (2), 39-58.

Hammond, T.M. and Collins, M.B., 1979. Notes on the design of an oscillating trolley wave-simulator for installation in unidirectional flow flumes. *Journal of Sedimentary Petrology*, 49, (2), 643-646.

Hammond, T.M. and Collins, M.B., 1979. On the threshold of transport of sand-sized material under the combined influence of unidirectional and oscillatory flow. *Sedimentology*, 26, 795-812.

Hammond, T.M. and Collins, M.B., 1979. The design and use of an oscillating trolley wave-simulator for installation in unidirectional flow flumes. *Estuarine & Coastal Marine Science*, 9,(6), 801-811.

Ferentinos, G. and Collins, M.B., 1980. Effects of shoreline irregularities on the rectilinear tidal current and their significance in sedimentation processes. *Journal of Sedimentary Petrology*, 50,(4), 1081-1094.

Wilding, A.J., Collins, M.B. and Ferentinos, G., 1980. Analyses of sea level fluctuations in Thermaikos Gulf and Salonica Bay, north-western Aegean Sea. *Estuarine & Coastal Marine Science*, 10, 325-334.

Collins, M.B., Amos, C.L. and Evans, G., 1981. Observations of some sediment transport processes over intertidal flats, the Wash, UK. Special Publication, *International Association Sedimentologists*, 5. 81-98.

- Collins, M.B., Lykousis, V. and Ferentinos, G., 1981. Temporal variation in sedimentation patterns: NW Aegean Sea. *Marine Geology*, 43. M39-M48.
- Collins, M.B., 1981. Sediment yield studies of headwater catchments in Sussex, SE England. *Earth Surface Processes and Landforms*, 6, 517-539.
- Ferentinos, G., Brooks, M. and Collins, M.B., 1981. Gravity-induced deformation on the north flank and floor of the Sporadhes Basin of the North Aegean Sea Trough. *Marine Geology*, 44, 289-302.
- Lykousis, V., Collins, M.B. and Ferentinos, G., 1981. Modern sedimentation in the NW Aegean Sea. *Marine Geology*, 43, 111-130.
- Rigler, J. K., Collins, M.B. and Williams, S. J., 1981. A high precision digital-recording sedimentation tower for sands. *Journal of Sedimentary Petrology*, 51, 642-644.
- Wilmot R & Collins M B. 1981. Contemporary fluvial sediment supply to the Wash. Special Publication, *International Association Sedimentologists*, 5. 99-110.
- Collins M B & Rigler J K. 1982. The use of settling velocity in defining the initiation of motion of heavy mineral grains, under unidirectional flow. *Sedimentology*, 29. 419-426.
- Collins M B & Sternberg R W. 1982. Editorial. *Continental Shelf Research*, 1(1). (i)-(ii).
- van Smirren J & Collins M B. 1982. Short-term changes in sedimentological and hydrographic characteristics over a sandy intertidal zone, the Wash, UK. *Geo-Marine Letters*, 2. 55-60.
- Collins M B. 1983. Supply, distribution and transport of suspended sediment in a macrotidal environment: Bristol Channel, UK. *Canadian Journal of Fisheries & Aquatic Science*, 40 (Suppl 1). 44-59.
- Rigler J K & Collins M B. 1983. Initial grain motion under oscillatory flow - a comparison of some threshold criteria. *Geo-Marine Letters*, 3. 43-48.
- Robles F L, Collins M B & Ferentinos G. 1983. Water masses in Salonica Bay and Thermaikos Bay (north-western Aegean Sea). *Estuarine, Coastal and Shelf Science*, 16. 363-378.
- Collins M B & Ferentinos G. 1984. Residual circulation in the Bristol Channel, as suggested by Woodhead Sea-bed Drifter recovery patterns. *Oceanologica Acta*, 7(1). 33-42.
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*International Journal of Remote Sensing*

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*Journal of Sedimentary Petrology*

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*Physics and Chemistry of the Earth*

*Proceedings, Geologists' Association*

*Research Council for Earth and Life Sciences in the Netherlands (ALW)*

*Sedimentology*

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 University of Caen (France), Centre Regional d'Etudes Cotieres  
 University of Cambridge, Engineering  
 University of Cambridge, Geography and Geology  
 University of Dundee, Civil Engineering  
 University of Dundee, Geology  
 University of Lille (France), Earth Sciences (in French)  
 University of Lisbon (Portugal), Geology  
 University of London, Geology  
 University of London, Plant Biology & Microbiology  
 Plymouth Polytechnic Southwest, Faculty of Technology  
 University of Reading, Meteorology  
 University of Rouen (France), Geologie (in French)  
 University of St. Andrews, Geography and Geology  
 University of Wales (Bangor), Ocean Sciences
- (ii) MSc University College of North Wales (Physical Oceanography)  
 University of Birmingham, Civil Engineering (October 1992)
- (iii) BSc University of East Anglia (Geophysical Sciences)  
 University of Lille (in French)

## RECENT/FORTHCOMING TALKS

- September 2008, Keynote Lecture at “Tidalites 2008” Conference, Qingdao, PR China.
- October 2008, Keynote Lecture at Climate Change, Economics, Health and International Processes (UNDP), THE GAMBIA (West Africa)
- March 2009, Invited presentation at International Sediment Transport Symposium, Kaohsiung, TAIWAN.
- October 2009, Keynote Lecture at International Seminar on Marine Sediments, Andhra University (Visakhapatnam), INDIA

## JOURNAL EDITORSHIP

UK Founder Editor, *Continental Shelf Research*

**Editorial Board Member:**

*Oceanologia et Limnologia Sinica* (Chinese Journal of Oceanology and Limnology)  
*Thalassographica* (National Centre for Marine Research, Greece).  
*Space Technology*  
*Coastal Systems and Continental Margins* (Kluwer Academic Publishers, Book Series)  
*Oceanography* (Iranian National Centre for Oceanography (INCO))

## EXTERNAL COLLABORATION AND INDUSTRIAL LIAISON/CONSULTANCY

External (international) collaboration established, on research into:

- (i) Sediment dynamics in the Aegean and Ionian Sea regions (Universities of Athens and Patras and National Centre for Marine Research, Greece)
  - (ii) Sediment and water movement along the coastline of mainland China (Dept of Geo and Marine Sciences, University of Nanjing, PR China)
  - (iii) Comparative sedimentological studies (Universities of Bordeaux, Caen and Rouen, France)
- and
- (iv) Comparative investigations into coastal and shelf water and sediment movement (San Sebastian, Spain).

Industrial/commercial links (U.K.) with:

- (i) ABP (Research and Development), Hydraulics Research (Wallingford); and MAFF
- and
- (ii) Local and other Authorities, southern England (*eg* Bournemouth, Christchurch, New Forest, Arun, Canterbury and SCOPAC)

## RESEARCH PROGRAMMES: General Areas of Interest

- . Fluvial contributions to continental shelves, on a global basis
- . Intertidal flat sedimentation processes, in tidally-dominated seas
- . Formation and maintenance of linear sand- and shingle-banks, on tidally-dominated continental shelves
- . Sediment transfer through submarine canyons, to the deep ocean (eastern Mediterranean Sea)
- . Comparative laboratory studies into sediment movement under waves and currents, separately and in combination
- . Regional sediment (suspended and bed load) transport pathways and coastal management
- . Tracer technology (silt, sand and pebbles) and the use of (airborne and spaceborne) remote sensing in sediment transport investigations

### 3. GOVERNMENT COMMITTEE MEMBERSHIP

Department for Culture, Media and Sport (available at <http://www.culture.gov.uk/images/publications/Collins-reappointmentPN.pdf>)

#### **June 2008**

#### **Professor Michael Collins is reappointed as a member of the Advisory Committee on Historic Wreck Sites.**

Margaret Hodge, the Minister for Culture, announced today that Professor Michael Collins has been reappointed as a member of the Advisory Committee on Historic Wreck Sites (ACHWS). His term of appointment will run from 7 July 2008 to 6 July 2012.

#### Biographical notes

Professor Michael Collins is Professor of Oceanography (Sediment Dynamics) at the School of Ocean and Earth Science of the University of Southampton. He has over 30 years experience in the sediment dynamics of fluvial, estuarine, coastal, and open sea environments. Professor Collins has published extensively on sediment dynamics, served on ship-based research expeditions and acted as a consultant. He is the founding Editor of Continental Shelf Research, an international marine science journal. Professor Collins has acted as advisor to research programmes in France, Greece, Spain and Portugal and under the auspices of the European Commission. He is an Honorary Professor of the University of Nanjing, PR China. He has not undertaken any political activity in the past five years.

#### Background

The Advisory Committee was set up to advise Ministers following the passing of the Protection of Wrecks Act 1973. ACHWS members advise Ministers on i) the suitability of wreck sites to be designated for protection on the grounds of historical, archaeological, or artistic interest in accordance with the Protection of Wrecks Act 1973, and ii) the issue of licences for the surveillance and excavation of designated sites by named individuals, and recommends the conditions to be attached to such licences.

ACHWS members give their services on an honorary basis but travel/subsistence and out-of-pocket expenses are paid.

This reappointment has been made in accordance with the OCPA Code of Practice. Appointments are made on merit and political activity plays no part in the selection process.