

## CURRICULUM VITAE

### Personal Information:

**Name:** Adil Yousif Al-Handal  
**Date of Birth:** 10/5/1952  
**Degrees:** M.Sc., Ph.D  
**Languages:** English, Swedish, Arabic  
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### Education:

Ph.D. Oceanography, University of Wales Swansea, Great Britain, 1985.  
 M.Sc. Marine Ecology, University of Alexandria, Egypt, 1979.  
 B.Sc. in Marine Biology, University of Basrah, Iraq, 1972.

### Previous Positions:

2016- present	Research Scientist , Department of Biological and Environmental Sciences, Gothenburg University, Sweden.
2009 - 2015	Professor, Marine Science Centre, University of Basra, Iraq.
2006 – 2007	Phytoplankton Expert, Swedish Metrological and Hydrological Institute (SMHI), Göteborg, Sweden.
2005 - 2008	Research Scientist, Dept. of Marine Ecology, University of Gothenburg, Sweden
1996 - 2002	Associate Professor, Dept. of Applied Biology, Jordan University of Science and Technology, Irbid, Jordan.
1989-1996	Assistant professor, Dept. of Biology, Basra University.
1986-1989	Lecturer, Dept. of Fisheries & Marine Resources, Univ. of Basrah, Iraq.
1979-1981	Lecturer, Dept. of Biology, University of Basrah, Iraq.
1976-1979	Research Assistant, College of Science, Univ. of Basrah, Iraq.

**Research Interest:**

Diatoms taxonomy and ecology, Primary production, Water quality monitoring using diatoms.

**Fellowships:**

Visiting professor at the University of South Florida, USA, 2013, 2014

**Supervision of postgraduates:**

Supervised 7 Ph.D students and 13 M.Sc. students in the field of diatoms ecology and taxonomy, microalgal production and water quality.

**Activities:**

1. Member of a scientific team to investigate the effects of oil pollution on the marine life in the Arabian Gulf, Southern Iraq.
2. Teaching courses on Environmental Sciences , General Ecology at several universities for 25 years.
3. Lecturing for high school students in Educational Biology and Ecology.
4. Participating in scientific groups to study the impact of algal blooms on water quality in tropical waters.
5. Editor, Journal of Science, University of Basrah (1996).
6. Associate Editor of the Mesopotamian Journal of Marine Science 2009-2014.
7. Attendance of many international and local meetings and conferences on Environmental Sciences.
8. Reviewer in some international peer review journals (Diatom Research, Botanica Marina, Polar Biology, etc..).

**Honors and Awards:**

1. Awards of excellence from the Minister of Higher Education, Iraq for three years 2009, 2010 and 2011.
2. Awards of excellence from the President of Basra University, years 2009, 2010, 2011 and 2012.

**Grants**

1. The basis of the marine food web - Biodiversity by DNA barcoding. FORMAS, Sweden.
2. Photonic properties of diatom frustules – functional meaning and beyond. VR, Sweden.
3. Taxonomy and ecology of epiphytic and benthic diatoms from King George Island, Antarctica, and its role as indicators of climate change. Grant DE-TAF-6235, Berlin, Germany 2016.

4. Inferring past limnological conditions in the Mesopotamian Marshland using diatoms. University of Basra, Iraq, 2011.
5. Toxic cyanobacterial blooms and Microcystins (Hepatotoxic cyclic peptides) in the water of King Talal Reservoir and its impact on the environment. Jordan Univ. of Science and Technology, 2002.
6. Study of green algae and cyanobacteria causing water quality deterioration in Jordan, The Higher Council for Science & Technology, Amman, Jordan, 2000.
7. Study of water ecology and quality of Wadi Al-Arab Dam Reservoir, Deanship of Scientific Research, JUST, Jordan, 2001.

### Selected Publications

1. **Al-Handal, A.Y.**, O. E. Romero, S. L. Eggers & Angela Wulff. 2020. *Navithidium* gen. nov., a new monoraphid diatom (Bacillariophyceae) genus based on *Achnanthes delicatissima* Simonsen. Accepted for publication in Diatom Research.
2. **Al-Handal, A.Y.**, Angela Wulff & C. Pennesi 2020. *Mastogloia jahniae* sp. nov., a new diatom (Bacillariophyceae) from the Baltic Sea coast of Sweden. Sent for publication to Phytotaxa.
3. **Al-Handal, A.Y.**, Maja Mucko & Angela Wulff. 2020. *Entomoneis annagodhei* sp. nov., a new marine diatom (Entomoneidaceae, Bacillariophyta) from the west coast of Sweden. Diatom Research, <https://doi.org/10.1080/0269249X.2020.1787229>.
4. **Al-Handal, A.Y.** & Al-Shaheen, M.A. 2019. Diatoms in the wetlands of Southern Iraq. *Bibliotheca Diatomologica* 67, 252 pp.
5. **Al-Handal, A.Y.**, Zimmerman, J., Jahn, R., Torstensson, A & Wulff, A. 2019. *Nitzschia biundulata* sp. nov. a new sea ice diatom (Bacillariophyceae) from the Ross Sea, Antarctica. *Nova Hedwigia* 108: 281-290.
6. **Al-Handal, A.Y.**, Riaux-Gobin, C., Jahn, R. & Wulff, A. 2019. Two new marine species of *Cocconeis* (Bacillariophyceae) from the west coast of Sweden. *European Journal of Taxonomy*: 497: 1-16.
7. Hoffmann, R., **Al-Handal, A.Y.**, Wulff, A., deregibus, D., Zacher, K., Quartino, M.L., Wenzhöfer, F. & Braeckman, U. 2019. Implications of Glacial Melt-Related Processes on the Potential Primary Production of a Microphytobenthic Community in in potter Cove (Antarctica). *Frontiers in Marine Science* 1-11.
8. Ytreberg, E., Hassellöv, I-M., Nylund, A.T., Hedblom, M., **Al-Handal, A.Y.** Wulff, A. 2019. Effects of scrubber washwater discharge on microplankton in the Baltic Sea. *Marine Pollution Bulletin* 145: 316-324.

9. **Al-Handal, A.Y.**, Thoma, E., Tortensson, A., Jahn, R. & Wulff, A. 2018. *Gomphonemopsis ligowskii*, a new diatom (Bacillariophyceae) from the marine Antarctic and a comparison to other *Gomphonemopsis*. *Diatom Research* 33: 97-103.
10. **Al-Handal, A.Y.**, Thomas, E. & Pennesi, C. 2018. Marine benthic diatoms in the newly discovered coral reefs, off Basra coast, Southern Iraq. *Phytotaxa* 372: 111-152.
11. Donadel L., Torgan, L.C. & **Al-Handal, A.Y.** 2018. Additional morphological features of the epiphytic diatom *Cocconeis sawensis* Al-Handal & Riaux-Gobin (Cocconeidae, Bacillariophyta) from a coastal lagoon, Southern Brazil.
12. **Al-Handal, A.Y.**, & Chiara Pennesi 2018. *Mastogloia wulffii*, a new diatom (Bacillariophyceae) from the west coast of Sweden. *Fottea* 18: 164-169,
13. Riaux–Gobin, C., Witkowski, A., Igersheim, A., Lobban, C., **Al-Handal, A.Y.** & Compère, P. 2018. *Planothidium juandenovense* sp. nov. (Bacillariophyta) from Juan de Nova (Scattered Islands, Mozambique Channel) and other tropical environments: A new addition to the *Planothidium delicatulum* complex. Accepted for publication in *Fottea* 18.
14. **Al-Handal, A.Y.**, Pierre, C. & Riaux-Gobin, C. 2016. Marine benthic diatoms in the coral reefs of Teunion and Rodrigues islands, West Indian Ocean. *Micronesica* 2016-03:1-77.
15. **Al-Handal, A.Y.**, Kociloek, P. and Abdulla, D.S. 2016. *Williamsella iraqiensis* sp. nov., a new diatom (Bacillariophyta, Fragilariophyceae) from Sawa Lake, South Iraq. *Phytotaxa* 244 (3): 289-297.
16. **Al-Handal, A.Y.**, Taffs, K., Abdulla, D.S. and Zawadski, A. 2016. Vertical distribution of diatoms in the sediment of Al-Huwaiza Marsh, Southern Iraq and their use as indicators of environmental changes. *Algalogical studies* 150: 53-76.
17. **Al-Handal, A.Y.**, Pennesi, C. and Abdulla, D.S. *Mastogloia abnormis* sp. nov. and *Mastogloia descrepata* sp. nov. (Bacillariophyceae, Mastogloiales, Sulcatae) from Sawa Lake, Southern Iraq. *Diatom Research* 31: 131-121.
18. **Al-Handal, A.Y.**, Fricke, A. and Wulff, A. 2016. Observations on diatoms inhabiting natural and artificial substrates in Kongsfjorden, Svalbard, the Arctic. *Polar Biology* DOI10.1007/s00300-016-1998-7
19. **Al-Handal, A.Y.**, Pennesi, C. and Abdulla, D.S. . 2015. Two new species of *Mastogloia* Thwaites ex W. Smith (Bacillariophyceae) from Sawa Lake, southern Iraq. *Fottea* 15 (2): 155-164.
20. **Al-Handal A.Y. and** Hu, C. 2015. MODIS Observations of Human-Induced Changes in the Mesopotamian Marshes in Iraq. *Wetlands* 35:31-40. DOI 10.1007/s13157-014-0590-6.
21. **Al-Handal, A.Y.**, Abdulla, A., Wulff, A. and Taher, M. 2014. Epiphytic diatoms from the Mesopotamian wetland: Huwaiza marsh, South Iraq. *Diatom* 30:1-15.

22. Ligowski, **R.**, **Al-Handal, A.Y.**, Wulff, A. and Jordan, R. 2014. *Rhoicosphenia michali*: a new species of marine diatom (Bacillariophyta) from King George Island, Antarctica. *Phytotaxa* 191:141-151.
23. **Al-Handal A.Y.**, Riaux-Gobin, C., Abdullah, D. & Ali, M. 2014. *Cocconeis sawensis* sp. nov. (Bacillariophyceae) from a saline lake (Sawa Lake), South Iraq: comparison with allied taxa. *Phytotaxa* 181(4): 216-228.
24. Sevilgen, D.S., D. de Beer, **Al-Handal, A.Y.**, Brey1, T. and Polerecky L. 2014. Oxygen budgets in subtidal arctic (Kongsfjorden, Svalbard) and temperate (Helgoland, North Sea) microphytobenthic communities. *Marine Ecology Progress Series* 504: 22-47.
25. **Al-Handal A.Y.**, Taffs, K., Mohammed, D 2013. The Mesopotamian Marshlands, Iraq, an Internationally important biodiversity hotspot, Can paleolimnology assist international restoration aid attempts?. *J. Paleolimnology*, In Press.
26. Catherine Riaux–Gobin and **Al-Handal A.Y.** 2012. New species in the marine diatom genus *Olifantiella* (Bacillariophyta, Biraphidineae) from Rodrigues Island (Western Indian Ocean). *Fottea* 12 (2): 197-212.
27. Mid-Holocene dates for organic-rich sediment, palustrine shell, and charcoal from southern Iraq. *RADIOCARBON*, Vol 54, Nr 1
28. Riaux-Gobin, C., Compère, P. and **Al-Handal, A.Y.** 2012. SEM survey of some small-sized *Planolithidium* (Bacillariophyta) from coral sands off Mascarenes (Western Indian Ocean). *Nova Hedwigia*, 141:295-314.
29. Riaux-Gobin, C., Compère, P. and **Al-Handal, A.Y.** 2011. Small sized Acyhnanthales (Bacillariophyta) from coral sands off Mascarenes (Western Indian Ocean). *Bibliotheca Diatomologica* 57: 1-234.
30. Riaux-Gobin, C., Compère, P. and **Al-Handal, A.Y.** 2011. Species of the *Cocconeis peltoides* group with a marginal row of unusual processes (Mascarenes and Kerguelen Islands, Indian Ocean). *Diatom Research* 26:325-334.
31. Riaux-Gobin, C., Compère, P. and **Al-Handal, A.Y.** 2011. New *Amphicocconeis* species off Mascarenes (Western Indian Ocean) and related taxa. *Diatom Research* 1-11.
32. **Al-Handal, A.Y.** and Abdullah, D.S. 2010. Diatoms from the restored Mesopotamian marshes, South Iraq. *Algological Studies* 133: 65-103.
33. Riaux-Gobin, C., Romero, O. and **Al-Handal, A.Y.** and Compere, P. 2010. Two new *Cocconeis* taxa (Bacillariophyceae) from coral sands off the Maserens (Western Indian Ocean) and some unidentified taxa. *European Journal of Phycology*, 45 (3): 275-292.
34. **Al-Handal, A.Y.**, C. Riaux-Gobin and A. Wulff 2010. *Cocconeis pottercovei* sp. Nov. and *C. pinnta* var. *matsii* var. nov., two new marine diatom taxa from King George Island, Antarctica. *Diatom Research* 25(1).

35. Riaux-Gobin, C., Romero, O. and **Al-Handal, A.Y.** 2009. *Cocconeis costata* var. *subantarctica* var. nov., A new marine diatom off Kerguelen Archipelago (Southern Ocean, Indian Sector). *Diatom Research*, 24: 393-404.
36. **Al-Handal, A.Yousif.** (2009) Littoral diatoms from the Shatt Al-Arab Estuary, North West Arabian Gulf. *Cryptogamie, Algologie* 30(2):1-31.
37. Wulff, A., Iken, K., Liliana, M., **Al-Handal, A.**, Wienke, C. and Clayton, M. (2009). Biodiversity, biogeography and zonation of marine benthic micro- and macroalgae in the Arctic and Arctic. *Botanica Marina* 52: 491-507.
38. **Al-Handal, A.Yousif.** and Wulff A. (2008) Benthic diatoms from Potter Cove, King George Island, Antarctica. *Botanica Marina* 51:51-68.
39. **Al-Handal, A. Yousif** and Wulff, A. (2008) Epiphytic diatoms on marine macroalgae from Potter Cove, King George Island, Antarctica. *Botanica Marina* 51 :411-435.
40. **Al-Handal, A. Yousif**, Riaux-Gobin, C., Romero, O.E. and Wulff,A. (2008). Two new species of the genus *Cocconeis* Ehrenberg; *C. melchiroides* and *C. delmannii* from King George Island, Antarctica. *Diatom Research* 23:269-281.
41. Wulff A, Zacher K, Hanelt D, **Al-Handal A.Yousif.**, Wiencke C. (2008) UV radiation- a threat to Antarctic benthic marine diatoms? *Antarctic Science* 20:12-20
42. Saadoon, I, Bataineh, E. and **Al-Handal, A. Yousif.** (2008). Phytoplankton species composition and seasonal variation at Wadi Al-Arab Dam Lake, Jordan. *Turkish J. Biology* 32: 291-298.
43. **Al-Handal, A.Yousif.**, Karlson, B., Edler, L. and Skjjevik, A. (2006). Phytoplankton distribution, diversity and nutrient variations in the West coast of Sweden with special reference to harmful algae. 12<sup>th</sup> International Conference on Harful Algae, Copenhagen, Denmark.
44. Skjjevik, A., **Al-Handal, A.Yousif.**, Edler, L., Kuylenstierna,M., and karlson,B. (2006). Occurrence of Phytoplankton potentially causing shellfish toxicity in the Skagerrak, the Kattegat and the Sound (Öresund) 1985-2005. 12<sup>th</sup> International Conference on Harful Algae, Copenhagen, Denmark.
45. **Al-Handal, A. Yousif.** and Saadoun, I. 2001. Phytoplankton composition and physical-chemical features of a hypertrophic reservoir in North Jordan: King Talal Reservoir. *Rev. Idriobiol.* 40 (2-3): 305-320.
46. **Al-Handal, A.Yousif.** (1995): Desmids of the Basrah district, south Iraq. *Int. Rev. ges.Hydrobiol.* 80(1): 89-102.
47. **Al-Handal, A.Yousif.** and Al-Rekabi, K. (1995): Diatoms of a turbid lagoon in south Iraq. *Rev.Idrobiol.* 33: 17-38.

48. **Al-Handal, A.Yousif.** (1994): Contribution to the knowledge of diatoms of Sawa lake, Iraq. *Nova Hedwigia* 59(1-2):225-254.
49. **Al-Handal, A.Yousif.** (1995): Algae of the southern marshes of Iraq. In: N.A.Hussain(ed.), *Marshes of Iraq*. Publ.Mar.Sci.Centre, Basrah.
50. **Al-Handal, A.Yousif.** (1988): Plankton diatoms of the north west Arabian Gulf. *Mar. Mesop.* 3(1): 43-101.
51. **Al-Handal, A.Yousif.** (1989): New additions to the algal flora of Iraq. *J. Univ. Kuwait* 16: 97-104.
52. **Al-Handal, A.Yousif.** (1992): Algae of an organically polluted canal in Basrah. *Mar.Mesop.* 7(2): 167-194.
53. **Al-Handal, A.Yousif.** and Abdullah,D.S. (1992): On the diatoms ecology of Basrah district, south Iraq. *Mar. Mesop.* 7(1): 35-48.
54. **Al-Handal, A.Yousif.** and Abdulla, D.S (1992): Phytoplankton production and related ecological factors in the Shatt Al-Basrah canal, south Iraq. *Mar. Mesop.*
55. **Al-Handal, A.Yousif.** , Al-Hakim, T. and Saleh, A. (1993): Nitrogen fixing cyanobacteria isolated from Shatt Al-Arab river. *Mar.Mesop.*
56. **Al-Handal, A.Yousif.** (1991): Carbon fixation by benthic microalgae from Shatt Al-Arab river. 3<sup>rd</sup> Symposium on southern marshes, Basrah, 155-172.
57. **Al-Handal, A.Yousif.** (1989): Phytoplankton ecology and species composition in the north west Arabian Gulf. Tech. Report submitted to the Marine Science Center, Basrah.
58. **Al-Handal, A.Yousif.** , Al-Assa, S.A and Al-mukhtar,M. (1989): Observations on some filamentous algae from Shatt Al-Arab river. *Mar.Mesop.* 4(1):1-17.
59. Halim, Y. and **Al-Handal, A.Yousif.** (1980): The diatom flora of a eutrophic bay, the Eastern Harbour of Alexandria, Egypt. *Acta Adriatica* 21(1):271-298.
60. **Al-Handal, A.Yousif.**, Shaban,A.A. and Al-Saboonchi, A. (1991): Phytoplankton of the Khor Al-Zubair lagoon, south Iraq. *Mar.Mesop.* 6(1):7-32.
61. **Al-Handal, A.Yousif.** and Hashim, A.A. (1990): Vertical distribution of functional chlorophyll a in the sediments of Shatt Al-Arab river. *Mar.Mesop.*5(2):263-274.