

(A) Refereed Publications

1. Sallal, A-K.J. Ghannoum, M.A. Al-Hasan, R.H. Nimer, N.A. and Radwan, S.S. (1987) Lanosterol & diethyl-glycerophosphocholine in lipids from whole cells & thylakoids of the cyanobacterium *Chlorogloeopsis fritschii* "Archives of Microbiology 148:1-7.
2. Sallal, A-K.J. Al-Hasan, R.H. & Nimer, N.A. (1987) Localization of Glycollate dehydrogenase in *Dunaliella salina* " *Planta* 171: 429-432.
3. Sallal, A-K.J. and Nimer, N.A. (1988) The intracellular localization of malate dehydrogenase in *Anacystis nidulans* *FEMS Microbiology Letters* 50:151-155
4. Sallal, A-K.J. and Nimer, N.A. (1988) Shikonin isovalerate: An inhibitor to photosystem II in *Chlorogloeopsis fritschii* *Archives of Microbiology* 150: 519-522.
5. Sallal, A-K.J. and Nimer, N.A. (1989) The intracellular localization of glycollate oxidase in *E. coli* *FEBS Letters* 258:(2) 277-280.
6. Sallal, A-K.J. and Nimer, N.A. (1990) The presence of glutamate dehydrogenase in *Chlorogloeopsis fritschii* *FEMS Microbiology Letters* 67: 215-220.
7. Sallal, A-K.J. and Nimer, N.A. (1990) The presence of malate dehydrogenase in thylakoids of *Anabaena cylindrica*, *Nostoc muscorum* and *Chlorogloeopsis fritschii* *Zeitschrift fur Naturforschung*. 45: 249-252.
8. Sallal, A-K.J. Al-Hasan, R.H. and Nimer, N.A. (1990) Effect of salinity on photosynthesis and Glycollate dehydrogenase of *Spirulina subsalsa* and *Synechocystis* sp. *British Phycological Journal* 25: 201-203.
9. Sallal, A-K.J. Nimer, N.A. and Al-Oriquat G. (1990) Inhibition of photosystem II in *Chlorogloeopsis fritschii* with shikonin acetate *FEBS Letters* 263: 248-250.
10. Sallal, A-K.J. Nimer, N.A. and Radwan, S.S. (1990) Lipids and fatty acid composition of fresh water cyanobacteria *Journal of General Microbiology* 136: 2034-2048.
11. Nimer, N.A. Sallal, A-K.J. Al-Hasan, R.H. and Merrett, M.J. (1990) The presence of glycollate dehydrogenase and glycollate oxidase in *Dunaliella primolecta*. *Planta* 181: 374- 377.
12. Nimer, N.A. Dixon, G.K. and Merrett, M.J. (1992) Inorganic carbon utilization by the Coccolithophorid *Emiliana huxleyi*. *New Phytologist* 120: 123-128.
13. Nimer, N.A. and Merrett, M.J. (1992) Calcification and utilization of inorganic carbon by the coccolithophorid *Emiliana huxleyi*. *New Phytologist* 121: 173-177.
14. Dong, L.F., Nimer, N.A., Okus, E. and Merrett, M.J. " Dissolved inorganic carbon utilization in relation to calcite production in *Emiliana huxleyi* (1993) *New Phytologist* 123: 679- 684.
15. Nimer, N.A. and Merrett, M.J. "Calcification rate in *Emiliana huxleyi* Lohmann in response to light, nitrate and inorganic carbon availability (1993) *New Phytologist*. 123:673- 677.
16. Merrett, M.J., Dong, L.F. and Nimer, N.A. (1993) "Nitrate availability and calcite production in *Emiliana huxleyi* Lohmann" *European Journal of Phycology* 28: 243-246.
17. Sallal A-K.J, Nimer, N.A. & ElDurinin N.M. (1994). Effect of Gibberellic acid on photosynthetic electron transport reactions and nitrogenase activity in *Anabaena cylindrica*. *Micobios*. 78:17-25.

18. Nimer, N.A., Guan, Q. and Merrett, M.J. (1994). Extra and intra cellular carbonic anhydrase in relation to culture age in a high-calcifying strain of *Emiliana huxleyi* Lohmann. *New Phytologist*. 126: 601-607.
19. Nimer, N.A., Brownlee, C. and Merrett, M.J. (1994). Carbon dioxide availability, intracellular pH and growth of *Emiliana huxleyi* (Lohmann). *Marine Ecology Progress Series*. 109:257- 262.
20. Sallal A-K.J & Nimer, N.A. (1994). Ethanolic dehydration and its effect on membrane bound enzymes of *Chlorogloeopsis fritschii* and *Chlorella pyrenoidosa*. *World Journal of Microbiology*. 10: 187-190.
21. Nimer, N.A., Dong, L.F., Guan, Q. and Merrett, M.J. (1995). Calcification rate, dissolved inorganic carbon utilization and carbonic anhydrase activity in *Emiliana huxleyi*. *Proceedings of the Biomineralization symposium, Monaco. Physiology and Biomedical applications*. 2: 43-49.
22. Brownlee, C., Davies, M., Nimer, N.A., Dong, L.F. and Merrett, M.J. (1995). Calcification, photosynthesis and intracellular regulation in *Emiliana huxleyi*" *Proceedings of the - Biomineralization symposium, Monaco. Physiology and Biomedical applications*. 2: 19- 35.
23. Nimer, N.A. and Merrett, M.J. (1995). Calcification rate in relation to carbon dioxide release, photosynthetic carbon fixation and oxygen evolution in *Emiliana huxleyi*. *Proceedings of the Biomineralization symposium, Monaco. Physiology and Biomedical applications*. 2: 37-42.
24. Nimer, N.A. and Merrett, M.J. (1996). Dissolved inorganic carbon (DIC) utilization and extracellular carbonic anhydrase in marine phytoplankton species. *Plant Physiology and Biochemistry*. "Special Issue, 10th FESP Congress, Florence": 118-119.
25. Merrett, M.J., Nimer, N.A. and Dong, L.F. (1996). "The Utilization of bicarbonate ions by the marine microalga *Nannochloropsis oculata* (Droop) Hibberd. *Plant, Cell & Environment*. 19 (4): 478-484.
26. Nimer, N.A. and Merrett, M.J. (1996) " The development of a CO₂ concentrating mechanism in a high calcifying strain of *Emiliana huxleyi* Lohmann". *New Phytologist* 133: 383-389.
27. Nimer, N.A., Brownlee, C. and Merrett, M.J. (1996) " Inorganic carbon transport in relation to culture age in high calcifying cells of *Emiliana huxleyi* (Lohmann)." *Journal of Phycology* 32: 813-818.
28. Nimer, N.A., Iglesias-Rodriguez, M.D. and Merrett, M.J. (1997) "Bicarbonate utilization by marine phytoplankton species." *Journal of Phycology* 33: 625-631.
29. Nimer, N.A., Warren, M. and Merrett, M.J. (1998) " The regulation of photosynthetic rate and activation of extracellular carbonic anhydrase under CO₂-limiting conditions in the marine diatom *Skeletonema costatum*." *Plant, Cell & Environment*. 21: 805-812.
30. Nimer, N.A., Brownlee C. & Merrett M.J. (1999) Extracellular carbonic anhydrase facilitates CO₂ transport for photosynthesis in the marine dinoflagellate *Prorocentrum micans*. *Plant Physiology*. 120: 105-111.
31. Nimer, N.A., Ling, M.X. Brownlee, C. & Merrett, M.J. (2000) Inorganic carbon-limitation, Exofacial carbonic anhydrase and plasma membrane redox activity in marine phytoplankton species. *Journal of Phycology*. 35: 1200-1205.
32. Nimer, N.A., Regulation by inorganic phosphate of the calcification/photosynthesis ratio by inorganic phosphate in the coccolithophore *Emiliana huxleyi* (submitted)

33. Nimer, NA., Does extracellular carbonic anhydrase of marine phytoplankton mediate CO₂ drawdown into the oceans? (submitted)

(B) Books and Technical Reports

1. Harris R., Burkill P., Green J., Taylor R., Tarran G., Tyrell T., Lesley D., Purdie D., Crawford D., Weston K., Saunders S., Eglinton G., Conte M., Barker G., Thompson T., Westbroek P., Smith M., Corstens P., Heimdal B., Aksnes D., Bratbak G., Heldal M., Egge J., Fagerbakke K. Batvik H., Norland S., Pettersson L., Miles M., Kloster K., Thigstad F., Brownlee C., Merrett M., Nimer N., Anadon R., Fernandez E., Young J., Medlin L., Kooijman S., Zonneveld C., Paasche E., Kristainsen S., Neilsen M., & Sakshaug E. September 1993. First Progress Report. "Coccolithophorid dynamics: The European *Emiliana huxleyi* programme.
2. Harris R., Burkill P., Green J., Taylor R., Tarran G., Tyrell T., Lesley D., Purdie D., Crawford D., Weston K., Saunders S., Eglinton G., Conte M., Barker G., Thompson T., Westbroek P., Smith M., Corstens P., Heimdal B., Aksnes D., Bratbak G., Heldal M., Egge J., Fagerbakke K. Batvik H., Norland S., Pettersson L., Miles M., Kloster K., Thigstad F., Brownlee C., Merrett M., Nimer N., Anadon R., Fernandez E., Young J., Medlin L., Kooijman S., Zonneveld C., Paasche E., Kristainsen S., Neilsen M., & Sakshaug E. September 1994. Second Progress Report. "Coccolithophorid dynamics: The European *Emiliana huxleyi* programme.
3. Merrett M.J., Nimer N.A. and Brownlee C. September 1994. Final Report. (NERC) "Regulation of calcification and cellular homeostasis in coccolithophores".
4. Brownlee, C., Nimer, N., Dong, L.F. and Merrett, M.J. (1994). "Cellular regulation during calcification in *Emiliana huxleyi*" In: *Biology of the Prymnesiophytes*. J. Green and Leadbeater (Eds.), Clarendon Press, Oxford. pp133-148.
5. Harris R., Burkill P., Green J., Taylor R., Tarran G., Tyrell T., Lesley D., Purdie D., Crawford D., Weston K., Saunders S., Eglinton G., Conte M., Barker G., Thompson T., Westbroek P., Smith M., Corstens P., Heimdal B., Aksnes D., Bratbak G., Heldal M., Egge J., Fagerbakke K. Batvik H., Norland S., Pettersson L., Miles M., Kloster K., Thigstad F., Brownlee C., Merrett M., Nimer N., Anadon R., Fernandez E., Young J., Medlin L., Kooijman S., Zonneveld C., Paasche E., Kristainsen S., Neilsen M., & Sakshaug E. September 1995. Final Report. "Coccolithophorid dynamics: The European *Emiliana huxleyi* programme.
6. Merrett M.J., Nimer N.A. and Brownlee C. (1998) Final report (NERC) "Mechanisms of inorganic carbon transport in phytoplankton spp. and their possible influence on PCO₂ in the oceans."

(C) Conference Presentations

1. Cellular regulation and control during calcification in *Emiliana huxleyi*. The Biology of Prymnesiophyta. Plymouth, UK. March, 1993.
2. Calcification rate, dissolved inorganic carbon utilization and carbonic anhydrase activity in *Emiliana huxleyi*. "Biom mineralization 93". The seventh International symposium on Biom mineralization. Monaco. Nov. 1993.

3. Calcification, Photosynthesis and intracellular regulation in *Emiliana huxleyi*. "Biom mineralization 93". The seventh International symposium on Biom mineralization. Monaco. Nov. 1993.
4. Inorganic carbon utilization by high calcifying cells of *Emiliana huxleyi*. "Emiliana huxleyi and the Oceanic Carbon Cycle". Natural History Museum, London, UK April, 1995.
5. Mechanisms of Dissolved Inorganic Carbon Utilization by Marine Phytoplankton species. British Phycological Society Winter Meeting. Lancaster, UK. 2-5 Jan.1996.
6. Dissolved inorganic carbon (DIC) utilization and extracellular carbonic anhydrase in marine phytoplankton species. The 10th FESPP Congress " From Molecular Mechanisms to the Plant: an Integrated Approach" Firenze, Italy. 9 - 13 Sept. 1996.
7. CO₂ availability, extracellular carbonic anhydrase activity and the regulation of photosynthetic rate in *Skeletonema costatum*. British Phycological Society Winter Meeting. Sheffield UK. 2-5 Jan. 1997.
8. Short-term regulation of extracellular carbonic anhydrase activity in the marine diatom *Skeletonema costatum*. Third International Symposium on Inorganic Carbon Utilization by Aquatic Photosynthetic Organisms. University of British Columbia. Vancouver Canada July 28 - August 1, 1997.
9. The role of extracellular carbonic anhydrase in the marine dinoflagellate *Prorocentrum micans*. Third International Symposium on Inorganic Carbon Utilization by Aquatic Photosynthetic Organisms. University of British Columbia. Vancouver Canada July 28 - August 1, 1997.
10. Extracellular carbonic anhydrase in relation to photosynthetic rate in the marine dinoflagellate *Prorocentrum micans*. British Phycological Society Winter Meeting. Royal Holloway, UK. 5-8 January 1998.
11. Extracellular carbonic anhydrase (CA_{ext}) facilitates CO₂ transport in the marine dinoflagellate *Prorocentrum micans*. British Phycological Society Winter Meeting Dundee, UK 4-8 January 1999.
12. Human activities, phytoplankton and global carbon cycle. (2004)

مؤتمر العلوم الحياتية و المجتمع: الخدمات والعوائق جامعة اليرموك 12-14 تشرين اول 2004 الاردن

(E)Reviewing activities:

1. External examiner to **10** M.Sc. students at Jordan University of Science & Technology 2002-2010
2. Reviewed 2 textbooks to مؤسسة عبد الحميد شومان
3. Reviewed 1 textbook to جائزة فيلادلفيا لاحسن كتاب