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現職：國立嘉義大學水生生物科學系終身特聘暨名譽教授

學歷：美國麻州大學食品科學系博士（1991）

美國緬因大學動物暨獸醫科學系碩士（1986）

國立台灣大學畜牧學系學士（1980）

經歷：

日本鹿兒島大學水產學部兼任教授(2022-2023)

亞洲水產學會理事(2013-2019)

亞洲水產學會刊編輯委員(2016-2024)

台灣水產學會刊編輯委員(2013-)

國立嘉義大學生命科學院院長(2010-2013)

日本鹿兒島大學水產學部訪問學者(2018/09-11)

加拿大漁業暨海洋部西溫歌華試驗所訪問學者 (2002;2006-2007)

加拿大卑詩大學（UBC）研究生指導委員會委員（2002-2009）

國立嘉義大學水生生物科學系教授(2000-2023)

國立嘉義技術學院水產養殖系教授（1999-2000）

國立嘉義技術學院水產養殖科教授兼科主任（1998-1999）

國立嘉義農專、技術學院水產養殖科副教授兼科主任（1993-1998）

教育部延攬海外學人-國立嘉義農專水產養殖科客座副教授（1992-1993）

美國麻州大學海洋中心博士後研究（1991-1992）

必強公司農業部飼料添加劑業務代表（1982-1984）

行政院農委會基因改造飼料或飼料添加物查驗登記審議小組審查委員
國合會貝里斯水產養殖計畫短期顧問專家
國家考試典試委員
各部會計畫初、複審委員
自學進修學力鑑定考試考科大綱規劃委員
教育部委辦高教評鑑中心大學校院系所評鑑委員
教育部委辦台灣評鑑協會科技大學系所評鑑委員
各大學系所自我評鑑委員
亞洲生產力組織會議台灣觀察員
教師升等外審委員(教育部暨各校)
校內外各種委員會委員或召集人
校外推廣課程講員

獎勵：國科會甲種獎助、國科會暨科技部計畫主持人加給(2002-2021)、特聘教授加給(2010-16)、終身特聘教授(2017)、科技部獎勵特殊優秀人才加給(2017)

任教科目：水產飼料營養研究設計與數據分析、水產飼料營養學、水產飼料分析、生物統計學

會員：Sigma Xi, World Aquaculture Society, Institute of Food Technologists, Asian Fisheries Society, 臺灣水產學會, 台灣食品科學會

主持研究計畫：

1. 鰻魚飼料之研發(83 年度農委會)
2. 吳郭魚漿產品開發(83 年度農委會)
3. 動物用藥品在水產品中之穩定性(83 年度農委會)
4. 鰻魚飼料之研發(84 年度農委會)

5. 吳郭魚產品開發(84 年度農委會)
6. 鰻魚飼料之研發(85 年度農委會)
7. 抗氧化包裝材料用於油性魚類儲存之研究(85 年度國科會)
8. 鰻魚飼料之研發(86 年度農委會)
9. 歐洲鰻飼料之研發(87 年度農委會)
10. 飼糧脂質來源對台灣鏟頜魚成長之影響(87 年度國科會)
11. 以豆粉取代甲魚飼料魚粉之研究(88 年度農委會)
12. 飼料蛋白質含量與脂質來源對台灣馬口魚成長之影響(88 年度國科會)
13. 甲魚人工飼料之改進研究-飼料甲硫胺酸需求(89 年度農委會)
14. 台灣馬口魚的營養需求研究(89 年度國科會)
15. 甲魚人工飼料之改進研究-飼料鈣需求(90 年度農委會)
16. 飼料維生素 E 含量對淡水魚成長與組織抗氧化能力之研究(89 年度國科會)
17. 脂質過氧化緊迫下吳郭魚對維生素 E 之需求研究(90 年度國科會)
18. 甲魚人工飼料之改進研究-飼料維生素 E 需求(91 年度農委會)
19. 以組織脂質過氧化為指標評估魚類對抗氧化營養份之需求(第 40 屆國科會補助科技人員國外短期研究)
20. 飼料維生素 A 與胡蘿蔔素對吳郭魚成長與組織脂質抗氧化能力之影響(91-92 年度國科會)
21. 以脫殼豆粉取代魚粉對吳郭魚成長之影響(92-93 年美國黃豆協會)
22. 甲魚對飼料鐵需求之研究(93 年度國科會)
23. 鱉對飼料銅需求之研究(94 年度國科會)
24. 甲魚對飼料鋅需求之研究(95 年度國科會)
25. 甲魚對飼料維生素需求之研究(96-98 年度國科會)
26. 甲魚對飼料鎂、硒與錳需求之研究(99-101 年度國科會)

27. 甲魚對飼料維生素 C 之需求(102 年度科技部)
28. 探討甲魚對飼料肌醇與膽鹼之最適需求(103-104 年度科技部)
29. 甲魚對飼料維生素 K 之需求研究(105 年度科技部)
30. 探討甲魚對飼料維生素 B_1 與維生素 B_6 之最適需求(106-107 年度科技部)
31. 探討甲魚飼料補充短鏈脂肪酸對攝餌、成長、腸道健康以及免疫力之影響 (108-110 年度科技部)

共同主持研究計畫：

1. 水產品品質衛生檢驗計畫(85 年度-87 年度，農委會)
2. 藻類提昇文蛤活力之研究(99 年度國科會)
3. 提升文蛤活力及營養價之研究(100 年度國科會)
4. 山藥對魚類生長、抗氧化與免疫力的影響(101 年度國科會)

期刊審查:

Aquaculture
Aquaculture Nutrition
Aquaculture Research
Asian Fisheries Science-Editorial Board Member
Comparative Biochemistry and Physiology
Fish Physiology and Biochemistry
Fish and Shellfish Immunology
Fisheries Science
Journal of Fish Biology
Journal of Food Biochemistry
Journal of Herpetology
Journal of the Fisheries Society of Taiwan-Editorial Board Member
Journal of Marine Science and Technology
Journal of the World Aquaculture Society
Journal of Zhejiang University-Science B
Taiwanese Journal of Food Science and Technology
North American Journal of Aquaculture
Zoological Studies

學術著作

(A) 期刊論文：

1. **Huang, C.-H**. and Bayer, R.C. 1989. Gastrointestinal absorption of various

antibacterial agents in the American lobster (*Homarus americanus*). The Progressive Fish-Culturist 51: 95-97. (SCI)

2. Decker, E.A., **Huang, C.-H**., Osinchak, J.E. and Hultin, H.O. 1989. Iron and copper: role in enzymic lipid oxidation of fish sarcoplasmic reticulum at *in situ* concentration. Journal of Food Biochemistry 13:179-186. (SCI)
3. Osinchak, J.E., Hultin, H.O., Zajicek, T.O., Kelleher, S.D. and **Huang, C.-H**. 1992. Effect of NaCl on catalysis of lipid oxidation by the soluble fraction of fish muscle. Free Radical Biology and Medicine 12: 35-41. (SCI)
4. **Huang, C.-H**. and Hultin, H.O. 1992. Soluble and bound iron equally effect lipid oxidation of sarcoplasmic reticulum. Journal of Food Biochemistry 16:1-13. (SCI)
5. **Huang, C.-H**., Hultin, H.O. and Jafar, S.S. 1993. Some aspects of Fe(II)-catalyzed oxidation of fish sarcoplasmic reticular lipid. Journal of Agricultural and Food Chemistry 41:1886-1892. (SCI)
6. 黃承輝、熊文俊、秦宗顯 1995. 加熱方式對殘留於鰻魚肉中之羥四環素之影響。 嘉農學報 43：101-110.
7. 周昱翰、秦宗顯、黃承輝 1996. 高度不飽和脂肪酸對黃鰭鯛卵質與孵化率之影響。 生物科學 39：19-27.
8. 黃承輝、陳哲俊、秦宗顯 1996. 飼料魚油的穩定性與添加於粉狀鰻飼料中對日本鰻的影響。 嘉農學報 46：101-109.
9. 黃承輝、賴弘智 1996. 純黴素與根黴菌萃取物對於美洲鰻成長之影響。 嘉農學報 48：95-102.
10. 秦宗顯、周昱翰、黃承輝 1996. 高度不飽和脂肪酸對七星鱸種魚產卵品質之影響。 技術學刊 11：539-545.
11. 賴弘智、黃承輝、林天生 1997. 四種毛刷過濾處理方式對歐洲鰻（*Anguilla anguilla*）養殖池動物性浮游生物群落組成之影響。 生物科學 40：7-19.
12. 黃鈴娟、黃承輝、翁義銘 1997. 利用聚乙烯抗菌膜及輕度微波加熱控制吳郭魚排冷藏期間微生物生長之研究。 食品科學 24：263-268.
13. 賴弘智、黃承輝 1997. 三種過濾循環處理對日本鰻（*Anguilla japonica*）養殖池浮游動物群落之比較。 嘉農學報 52：109-122.
14. **Huang, C.-H.*** and Lee, A.-C. 1997. Effects of substituting peanut meal for fish meal in diets on growth of European eel, *Anguilla anguilla*. Journal of the Biomass Energy Society of China 16：135-143.
15. 郭世榮、黃承輝、邵廣昭 1997. 台灣西海岸紅樹林區魚類種類組成之研究。 中華生質能源學會會誌 16：63-72.
16. 黃承輝、熊文俊 1998. 飼料蛋白質含量對台灣鏟頷魚（*Varicorhinus barbatulus*）成長之影響。 生物科學 41：1-10.
17. 黃承輝、黃銘志、李安進 1998. 吳郭魚肌漿網膜之脂質過氧化的特性。 食品

科學 25：104-108.

18. 李安進、黃承輝、秦宗顯 1998. 建立檢測調控粒線體外膜 VDAC channel 之蛋白質的方法。 中華生質能源學會會誌 17：11-17.
19. **Huang, C.-H.***, Huang, M.-C. and Hou, P.-C. 1998. Effect of dietary lipids on fatty acid composition and lipid peroxidation in sarcoplasmic reticulum of hybrid tilapia (*Oreochromis niloticus* × *O. aureus*). Comparative Biochemistry and Physiology Part B 120: 331-336. (SCI)
20. **Huang, C.-H.*** and Weng, Y.M. 1998. Inhibition of lipid oxidation in fish muscle by antioxidant incorporated polyethylene film. Journal of Food Processing and Preservation 22: 199-209. (SCI)
21. Shyong, W.-J., **Huang, C.-H.*** and Chen, H.-C. 1998. Effects of dietary protein concentration on growth and muscle composition of juvenile *Zacco barbata.* Aquaculture 167: 35-42. (SCI)
22. **Huang, C.-H.***, Lai, H.-T. and Weng, Y.-M. 1998. Suitability of hybrid tilapia (*Oreochromis niloticus* × *O. aureus*) muscle for gel formation. International Journal of Food Science and Technology 33:339-344. (SCI)
23. **Huang, C.-H**.* and Shyong, W.-J. 1999. Effect of dietary lipid level on growth and muscle composition of *Varicorhinus barbatulus*. Journal of the Fisheries Society of Taiwan 26：95-102.
24. **Huang, C.-H**.*, Shyong, W.-J. and Kuo, S.-R. 1999. Effect of dietary lipid source on growth and muscle fatty acid composition of juvenile *Varicorhinus barbatulus*. Journal of the Biomass Energy Society of China 18:66-73.
25. **Huang, C**.-**H**.* and Lin, W. -Y. 1999. Effects of substituting fermented soybean meal for fish meal in diets on growth and body composition of juvenile soft-shelled turtle, *Trionyx sinensis*. Journal of the Fisheries Society of Taiwan 26:225-232.
26. **Huang, C.-H**.*, Shyong, W.-J. and Lin, W.-Y. 2000. Effect of varying dietary energy contents with two protein concentrations on growth and feed utilization of juvenile *Zacco barbata*. Journal of the Fisheries Society of Taiwan 27: 303-309.
27. **Huang, C.-H**.*, Huang, S.-L. and Chang, R.-J. 2001. Some characteristics of iron-catalyzed lipid peroxidation in sarcoplasmic reticulum of cultured grass shrimp (*Penaeus monodon*) and grass carp (*Ctenopharyngodon idellus*). Journal of the Fisheries Society of Taiwan 28: 27-33.
28. **Huang, C.-H**.*, Shyong, W.-J. and Lin, W.-Y. 2001. Dietary lipid supplementation affects the body fatty acid composition but not the growth of juvenile river chub, *Zacco barbata*. Aquaculture Research 32:1005-1010. (SCI)
29. Liang, M.-F., **Huang, C.-H.** and Kam, Y.-C. 2002. Effects of intermittent feeding on the growth of oophagous (*Chirixalus eiffingeri*) and herbivorous (*Chirixalus idiootocus*) tadpoles from Taiwan. Journal of Zoology 256: 207-213. (SCI)
30. **Huang, C**.-**H**.* and Lin, W. -Y. 2002. Estimation of optimal dietary methionine requirement for softshell turtle, *Pelodiscus sinensis*. Aquaculture 207:281-287. (SCI)
31. **Huang, C.-H.***, Chang, R.-J., Huang, S.-L. and Chen, W. 2003. Dietary vitamin E supplementation affects tissue lipid peroxidation of hybrid tilapia, *Oreochromis niloticus* × *O. aureus*. Comparative Biochemistry and Physiology Part B 134: 265-270. (SCI)
32. **Huang, C.-H.,** Liang, M.-F. and Kam, Y.-C. 2003. The fatty acid compositions

of oophagous tadpoles, *Chirixalus eiffingeri*, fed conspecific and chicken egg yolk. Comparative Biochemistry and Physiology Part A 135: 329-336. (SCI)

33. Lin, Y.-R., Huang, S.-L. and **Huang, C.-H.*** 2003. Characteristics of NADH-dependent lipid peroxidation in sarcoplasmic reticulum of white shrimp, *Litopenaeus vannamei*, and freshwater prawn, *Macrobrachium roesenbergii*. Comparative Biochemistry and Physiology Part B 135: 683-687. (SCI)
34. **Huang, C.-H.***, Lin, W.-Y. and Wu, S.-M. 2003. Effect of dietary calcium and phosphorus supplementation in fish meal-based diets on growth of soft-shelled turtle, *Pelodiscus sinensis* (Wiegmann). Aquaculture Research 34: 843-848. (SCI)
35. Shih, S., Weng, YM. Chen, S., Huang, SL., **Huang, C.-H**. and Chen, W. 2003. FT-Raman spectroscopic investigation of lens proteins of tilapia treated with dietary vitamin E. Archives of Biochemistry and Biophysics 420: 79-86. (SCI)
36. Wu, G.S., Chung, Y.M., Lin, W.Y., Chen, S.Y. and **Huang, C.-H.*** 2003. Effect of substituting de-hulled or fermented soybean meal for fish meal in diets on growth of hybrid tilapia, *Oreochromis niloticus* × *O. aureu*s. Journal of the Fisheries Society of Taiwan 30: 291-297.
37. Huang, S.-L., Weng, Y.-M. and **Huang, C.-H.*** 2004. Lipid peroxidation in sarcoplasmic reticulum and muscle of tilapia is inhibited by dietary vitamin E supplementation. Journal of Food Biochemistry 28:101-111. (SCI)
38. **Huang, C.-H.*** and Huang, S.-L. 2004. Effect of dietary vitamin E on growth, tissue lipid peroxidation, and liver glutathione level of juvenile hybrid tilapia, *Oreochromis niloticus* × *O. aureus*, fed oxidized oil. Aquaculture 237: 381-389. (SCI)
39. **Huang, C.-H.*** and Lin, W.-Y. 2004. Effects of dietary vitamin E level on growth and tissue lipid peroxidation of soft-shelled turtle, *Pelodiscus sinensis* (Wiegmann) Aquaculture Research 35: 948-954. (SCI)
40. **Huang, C.-H.***, Higgs, D.A., Balfry, S.K. and Devlin, R.H. 2004. Effect of dietary vitamin E level on growth, tissue lipid peroxidation, and erythrocyte fragility of transgenic coho salmon, *Oncorhynchus kisutch*. Comparative Biochemistry and Physiology Part A 139:199-204. (SCI)
41. Lin, W.Y., Chen, C.C., Du, M.C. and **Huang, C.-H**.* 2004. Replacement of fish meal with de-hulled soybean meal in diets on growth of subadult hybrid tilapia, *Oreochromis niloticus* × *O. aureu*s. Journal of the Fisheries Society of Taiwan 31: 263-268.
42. **Huang, C.-H.***, Lin, W.Y. and Chu, J.H. 2005. Dietary lipid level influences fatty acid profiles, tissue composition, and lipid peroxidation of soft-shelled turtle, *Pelodiscus sinensis*. Comparative Biochemistry and Physiology Part A 142: 383-388. (SCI)
43. Hu, C.-J., Chen, S.M., Pan, C.H. and **Huang, C.-H.*** 2006. Effects of dietary vitamin A or β-carotene concentrations on growth of juvenile hybrid tilapia, *Oreochromis niloticus* × *O. aureus*. Aquaculture 253: 602-607. (SCI)
44. Sutton, J., Balfry, S.K., Higgs, D.A., **Huang, C.-H.** and Skura, B. 2006. Impact of iron-catalyzed dietary lipid peroxidation on growth performance, general health and flesh proximate and fatty acid composition of Atlantic salmon (*Salmo salar* L.) in seawater. Aquaculture 257: 534-557. (SCI)
45. Lin, W.Y. and **Huang, C.-H.*** 2007. Fatty acid composition and lipid peroxidation of soft-shelled turtle, *Pelodiscus sinensis*, fed different dietary lipid source. Comparative Biochemistry and Physiology Part C 144: 327-333. (SCI)
46. Chu, J.H., Chen, S.M. and **Huang, C.-H.*** 2007. Effect of dietary iron

concentrations on growth, hematological parameters, and lipid peroxidation of soft-shelled turtle, *Pelodiscus sinensis*. Aquaculture 269: 532-537. (SCI)

47. Chang W. B., Huang, C. H. Cheng, S. H. and Kuo, J. 2008. Fatty acid composition of copepods fed with different diets. Platax 5: 23-37.
48. Wu, G.S. and **Huang, C.-H.*** 2008. Estimation of dietary copper requirement of juvenile soft-shelled turtle, *Pelodiscus sinensis*. Aquaculture 280: 206-210. (SCI)
49. Wu, G.S., Chen, C.C. and **Huang, C.-H.*** 2008. Growth, tissue lipid peroxidation and hepatic trace element content of soft-shelled turtles, *Pelodiscus sinensis*, fed a Cu-loaded diet followed by a normal diet. Journal of the Fisheries Society of Taiwan 35: 195-200.
50. Chu, J.H., Chen, S.M. and **Huang, C.-H.*** 2009. Growth, haematological parameters and tissue lipid peroxidation of soft-shelled turtles, *Pelodiscus sinensis*, fed diets supplemented with different levels of ferrous sulphate. Aquaculture Nutrition 15: 54-59. (SCI)
51. Huang, S.C., Chen, S.M. and **Huang, C.-H.*** 2010. Effects of dietary zinc levels on growth, serum zinc, haematological parameters, and tissue trace elements of soft-shelled turtles, *Pelodiscus sinensis*. Aquaculture Nutrition 16: 284-289. (SCI)
52. Tseng, K.Y., Chen, S.M. and **Huang, C.-H.*** 2010. Some characteristics of iron-catalyzed NADH-dependent sarcoplasmic reticular lipid oxidation in a seawater clam (*Meretrix lusoria*) and freshwater clam (*Corbicula fluminea*). Journal of Food Biochemistry 34: 825-837. (SCI)
53. Chen, L.P. and **Huang, C.-H.*** 2011. Effects of dietary β-carotene levels on growth and liver vitamin A concentrations of the soft-shelled turtle, *Pelodiscus sinensis* (Wiegmann). Aquaculture Research 42: 1848-1854. (SCI)
54. Huang, S.C. and **Huang, C.-H.*** 2012. Zinc requirements of soft-shelled turtles, *Pelodiscus sinensis*, fed diets containing phytic acid. Journal of the Fisheries Society of Taiwan 39: 78-85.
55. Chou, S.J. and **Huang, C.-H.*** 2013. Ultraviolet influences growth, tissue vitamin D status, and carapace strength of Chinese soft-shelled turtle, *Pelodiscus sinensis*. Journal of the Fisheries Society of Taiwan 40: 71-77.
56. Guo, S.M. and **Huang, C.-H.*** 2013. Estimating zinc requirements of soft-shelled turtle, *Pelodiscus sinensis*, fed diet with soybean meal as the major protein source. Journal of the Fisheries Society of Taiwan 40: 117-124.
57. Chen, C.Y., Chen, S.M. and **Huang, C.H**.* 2014. Dietary magnesium requirement of soft-shelled turtle, *Pelodiscus sinensis*, fed diets containing exogenous sodium phytate. Aquaculture 432: 80-84. (SCI)
58. Chen, R.M., Chen, S.M. and **Huang, C.H**.* 2014. Effect of salbutamol supplementation on growth, muscle protein mass and residue salbutamol in muscle of hybrid tilapia. Journal of the Fisheries Society of Taiwan 41: 165-170.
59. Chen, S.M., Tseng, K.Y. and **Huang, C.H**.* 2015. Fatty acid composition, sarcoplasmic reticular lipid oxidation, and immunity of hard clam (*Meretrix lusoria*) fed different dietary microalgae. Fish and Shellfish Immunology 45:141-145. (SCI)
60. Wang, C.C. and **Huang, C.H**.* 2015. Effects of dietary vitamin C on growth, lipid oxidation, and carapace strength of soft-shelled turtle, *Pelodiscus sinensis*. Aquaculture 445: 1-4. (SCI)
61. Chen, L.P. and **Huang, C.H**.* 2015. Estimation of dietary vitamin A requirement of juvenile soft-shelled turtle, *Pelodiscus sinensis*. Aquaculture

Nutrition 21: 457-463. (SCI)

62. Chen, C.Y. and **Huang, C.H**.* 2015. Effects of dietary magnesium on the growth, carapace strength, and tissue magnesium concentrations of soft-shelled turtle, *Pelodiscus sinensis* (Wiegmann). Aquaculture Research 46: 2116-2123. (SCI).
63. Li, M.R. and **Huang, C.H.*** 2016. Effect of dietary zinc level on growth, enzyme activity, and body trace elements of hybrid tilapia, *Oreochromis niloticus* × *O. aureus*, fed soya bean meal-based diets. Aquaculture Nutrition 22:1320-1327 (SCI).
64. Hsieh, M.C., **Huang, C.H.**, Yang, H.W., Chen, J.C. and Hsu, C.K.* 2017. Black soybean seed coat containing diet enhancing the growth performance of juvenile hybrid tilapia *Orechromis nitoticus* × *O. aureus*. Aquaculture Research 48: 2593–2601 (SCI).
65. Chou, S.J. and **Huang, C.H.*** 2017. Effect of excessive dietary vitamin D on growth of soft-shelled turtle, *Pelodiscus sinensis*, under dark environment. Journal of the Fisheries Society of Taiwan 44:249-254.
66. Tsai, T.H. and Huang, C.H.* 2019. Thiamine requirement of Chinese soft-shelled turtle, *Pelodiscus sinensis* (Wiegmann). Aquaculture Research 50: 3218-3219 (SCI).
67. Su, Y.T. and Huang, C.H.* 2019. Estimation of dietary vitamin K requirement of juvenile Chinese soft-shelled turtle, *Pelodiscus sinensis*. Aquaculture Nutrition 25: 1327-1333 (SCI).

(B) 專書章節

1. 黃承輝，2007 年，水族營養與飼料，農業概論 (廖宇賡等編輯)。國立嘉義大學出版，403-408 頁。

(C) 學術研討會發表論文

1. Huang, C.-H. and Hultin, H.O. 1990. Soluble and bound iron equally effect lipid oxidation of sarcoplasmic reticulum. 5th Biennial Meeting, International Society for Free Radical Research on Oxidation Damage and Repair, Pasadena, CA.
2. Huang, C.-H. and Hultin, H.O. 1992. Some aspects of Fe^{2+}-catalyzed lipid oxidation in fish sarcoplasmic reticulum. Annual Meeting, Institute of Food Technologists, New Orleans, LA.
3. Opiacha, J.O., Hultin, H.O., Huang, C.-H. and Kelleher, S.D. 1997. Improvements in stability and functionality of fatty fish surimi. International Conference of Food Science and Technology of the Fine Particle Society and “John E. Kinsella Symposium on Food System Functionality”, Las Vegas, NV.
4. 黃承輝、熊文俊 1997. 飼糧蛋白質含量對台灣鏟頷魚（*Varicorhinus barbatulus*）成長之影響。 台灣省水產學會 86 年度論文發表會，屏東。
5. Huang, C.-H., Huang, M.-C. and Hou, P.-C. 1998. Effect of dietary lipids on fatty acid composition and lipid peroxidation of sarcoplasmic reticulum of hybrid tilapia, *Oreochromis niloticus* × *O. aureus*. 中國生物學會 87 年度論文發表會，台

北。

6. 黃承輝、熊文俊　1998.　Effect of dietary lipid level on growth and muscle composition of *Varicorhinus barbatulus*. 台灣省水產學會 87 年度論文發表會，台北。
7. Huang, C.H.　1999.　Research for developing cost effective feeds for aquaculture in Taiwan.　Joint South Africa-Taiwan Aquaculture, Fisheries Resources and Management Forum.　Pretoria, South Africa.
8. Huang, C.-H. and Lin, W. -Y.　1999.　Effect of replacing fish meal with fermented soybean meal in diets on growth and body composition of juvenile soft-shelled turtle, *Trionyx sinensis*.　台灣省水產學會 88 年度論文發表會，高雄。
9. Huang, C.-H. and Shyong, W.-J.　2000.　Effect of varying energy contents with two protein levels in diets on growth of *Zacco barbata*. The 9th International Symposium on Nutrition and Feeding in Fish, Miyazaki, Japan.
10. Huang, S.-L, Huang, C.-H., Chang, R.-J　2000.　Some characteristics of iron-catalyzed lipid peroxidation in sarcoplasmic reticulum of cultured grass shrimp (*Penaeus monodon*) and grass carp (*Ctenopharyngodon idellus*).　台灣省水產學會 89 年度論文發表會，基隆。
11. Huang, C.-H., Chang, R.-J and Huang, S.-L.　2001.　Effect of dietary vitamin E on growth and lipid peroxidation in hybrid tilapia, *Oreochromis niloticus* × *O. aureus*, tissues. 台灣省水產學會 90 年度論文發表會，高雄。
12. Huang, C.-H. and Lin, W. -Y.　2001.　Estimation of optimal dietary methionine requirement for softshell turtle, *Pelodiscus sinensis*.　The 6th Asian Fisheries Forum, Koashiung, Taiwan.
13. Huang, C.-H. and Lin, W. -Y.　2002.　Dietary calcium supplementation improves the growth of cultured soft-shell turtle on fish meal based diets.　The 10th International Symposium on Nutrition and Feeding in Fish, Rhodes, Greece.
14. Sutton, J., Balfry, S., Higgs, D., Huang, Huang, C.-H., Skura, B. and Lall, S. 2002.　The impact of actively oxidizing dietary lipid on the growth, health and fillet quality of post-juvenile Atlantic salmon in sea water.　New Brunswick, Canada.
15. Huang, C.-H. 2003.　Lipid peroxidation in fish nutrition and product quality. In: J Baker and IC Liao (eds) Joint Australia-Taiwan Aquaculture, Fisheries Resources and Management Forum III. Australian Academy of Technological Science and Engineering, Melbourne, Australia. pp. 81-86.
16. Lin, W.-Y. and Huang, C.-H.　2003.　Effects of dietary vitamin E level on growth and tissue lipid peroxidation of soft-shelled turtle, *Pelodiscus sinensis* (Wiegmann).　台灣省水產學會 92 年度論文發表會，高雄。
17. Lin, Y.-R., Huang, S.-L. and Huang, C.-H.　2003. Characteristics of NADH-dependent lipid peroxidation in sarcoplasmic reticulum of white shrimp, *Litopenaeus vannamei*, and freshwater prawn, *Macrobrachium roesenbergii*. 台灣省水產學會 92 年度論文發表會，高雄。
18. Hu, C.J. and Huang, C.-H.　2003.　Dietary vitamin A requirement of hybrid

tilapia. 台灣省水產學會 92 年度論文發表會，高雄。

19. Chu, J.H., Wu, G.S. and Huang, C.-H. 2004. Effect of dietary iron level on hematological parameters of soft-shelled turtle. 台灣省水產學會 93 年度論文發表會，台北。
20. Huang, C.-H. and Huang, S.-L. 2004. Effect of dietary vitamin E on growth, tissue lipid peroxidation, and liver glutathione level of juvenile hybrid tilapia, *Oreochromis niloticus* × *O. aureus*, fed oxidized oil. The 11th International Symposium on Nutrition and Feeding in Fish, Phuket Island, Thailand.
21. 吳冠璇、黃承輝 2005. 甲魚對飼料銅之需求。台灣省水產學會 94 年度論文發表會，屏東。
22. 黃聖佳、黃承輝 2006. 甲魚對飼料鋅之需求。台灣省水產學會 95 年度論文發表會，基隆。
23. 郭書銘、黃承輝 2006. 甲魚對飼料鋅之需求。台灣省水產學會 95 年度論文發表會，基隆。
24. Tseng, K.Y., Chen, S.M. and Huang, C.-H. 2007. Some characteristics of iron-catalyzed NADH or NADPH dependent lipid oxidation in sarcoplasmic reticulum of seawater clam and freshwater clam. Annual Meeting, Institute of Food Technologists, Chicago, USA.
25. Chen, L.P. and Huang, C.H. 2007. Dietary vitamin A requirement of soft-shelled turtles. Annual Meeting, Taiwan Fisheries Society, Kaoshiung, Taiwan.
26. Lu, C.S. and Huang, C.H. 2008. Effect of organic zinc on growth of soft-shelled turtles fed diets containing phytic acid. Annual Meeting, Taiwan Fisheries Society, Taipei, Taiwan.
27. Chou, S.J. and Huang, C.H. 2008. Influence of dietary vitamin D level on growth of soft-shelled turtles. Annual Meeting, Taiwan Fisheries Society, Taipei, Taiwan.
28. Huang, C.-H., Chu, J.H. and Chen, S.M. 2008. Growth, haematological parameters and tissue lipid peroxidation of soft-shelled turtles, *Pelodiscus sinensis*, fed diets supplemented with different levels of ferrous sulphate. World Aquaculture 2008, Busan, Korea.
29. Huang, C.-H. and Wu, G.S. 2008. Effect of dietary copper on growth, trace mineral content, hematology, and lipid peroxidation of soft-shelled turtle, *Pelodiscus sinensis*. 5th World Fisheries Congress, Yokohama, Japan.
30. Huang, C.H., Huang, S.J. and Chen, S.M. 2009. Growth, serum zinc, hematological parameters and tissue trace elements of soft-shelled turtles *Pelodiscus sinensis* fed different level of zinc sulfate. Asian-Pacific Aquaculture 2009, Kuala Lumpur, Malaysia.
31. Lin, Y.J. and Huang, C.H. 2009. Influence of dietary selenium on glutathione peroxidase activity in soft-shelled turtles. Annual Meeting, Taiwan Fisheries Society, Kaoshiung, Taiwan.
32. Chen, L.P. and Huang, C.H. 2011. Dietary beta-carotene influences liver vitamin A concentrations of the soft-shelled turtle, *Pelodiscus sinensis*. The 9th Asian Fisheries Forum, Shanghai, China.
33. Lin, Y.J. and Huang, C.H. 2010. Effects of dietary selenium and vitamin E on glutathione peroxidase activities in soft-shelled turtle, *Pelodiscus sinensis.* The 14th International Symposium on Nutrition and Feeding in Fish, Cingdao, China.

34. Lu, C.S and Huang, C.H. 2010. Effects of dietary lysine level on growth of soft-shelled turtle, *Pelodiscus sinensis.* The 14th International Symposium on Nutrition and Feeding in Fish, Qingdao, China.
35. Lin, W.H. and Huang, C.H. 2010. Dietary attractants improve feed consumption and growth of soft-shelled turtles fed semi-purified diets. The 14th International Symposium on Nutrition and Feeding in Fish, Qingdao, China.
36. Huang, C.H. and Huang, S.C. 2012. Dietary zinc requirements of soft-shelled turtles, *Pelodiscus sinensis*, fed diets containing phytic acid. Australian Aquaculture 2012, Melbourne, Australia.
37. Huang, C.H. and Chen, C.Y. 2012. Estimation of dietary magnesium requirements of soft-shelled turtles, *Pelodiscus sinensis*. Aqua2012, Prague, Czech.
38. Huang, C.H. and Chou, S.J. 2013. Light exposure influences growth, vitamin D status, and carapace strength of soft-shelled turtle, *Pelodiscus sinensis*. The 10th Asian Fisheries and Aquaculture Forum, Yeosu, Korea.
39. Guo, S.H. and Huang, C.H. 2013. Estimating zinc requirements of soft-shelled turtle, *Pelodiscus sinensis*, fed diet with soybean meal as the major protein source. 9th Symposium of the Worlds Chinese Scientists on Nutrition and Feeding of Finfish and Shellfish. Xiamen, China.
40. Huang, C.H. and Chen, C.Y. 2013. Dietary magnesium requirements of soft-shelled turtles, *Pelodiscus sinensis*, fed diets containing phytic acid. Asian-Pacific Aquaculture 2013, Ho Chi Minh City, Vietnam.
41. Huang, C.H. and Li, M.R. 2014. Dietary zinc requirement of hybrid tilapia, *Oreochromis niloticus* × *O. aureus*, fed a soybean meal based diet. The 16th International Symposium of Fish Nutrition and Feeding, Cairns, Australia.
42. Huang, C.H. 2015. Aquaculture education in Taiwan. 2nd International Symposium on Aquaculture and Fisheries Education, Shanghai, China.
43. Huang, C.H. and Wang, C.C. 2015. Dietary vitamin C is needed to maintain carapace strength of soft-shelled turtle, *Pelodiscus sinensis*. World Aquaculture 2015, Jeju, Korea.
44. Huang, C.H. and Chang, Y,S. 2016. Growth, body minerals, and hematological parameters of hybrid tilapia fed diets containing exogenous phytic acid. The 7th World Fisheries Congress, Busan, Korea.
45. Su, Y.T. and Huang, C.H. 2016. A sarcoplasmic reticular lipid peroxidation system in some fish and shellfish muscle. The 11th Asian Fisheries and Aquaculture Forum, Bangkok, Thailand.
46. Huang, C.H. 2017. Recent developments of aquaculture education in Taiwan. The JSFS 85th Anniversary-Commemorative International Symposium, Tokyo, Japan
47. Huang, C.H. 2017. Advance in soft-shelled turtle nutrition. The 11th Symposium of the Worlds Chinese Scientists on Nutrition and Feeding of Finfish and Shellfish, Huzhou, China.
48. Huang, C.H. 2019. Suitability of tilapia muscle for protein gel formation. The 12th Asian Fisheries and Aquaculture Forum, Iloillo, Philippines.
49. Huang, C.H. 2019. Dietary Requirements of soft-shelled turtle for some trace elements. The 12th Asian Fisheries and Aquaculture Forum, Iloillo, Philippines.
50. Huang, C.H. 2019. Summary of post-harvest, food safety and processing technology session (plenary). The 12th Asian Fisheries and Aquaculture Forum, Iloillo, Philippines.