

# CURRICULUM VITAE

Name: **Peimin He**

Designation: Professor, Ph. D, Director of Central Lab

Address: College of Aqua-life Science and Technology,  
Shanghai Fisheries University,  
334 Jungong Road, Shanghai 200090, China

Tel:86-21-65710364:

Fax: 86-21-65710364

Email: pmhe@shfu.edu.cn

## EDUCATION

B.S. 1984 Biological College, Jiangxi University, Nanchang, China;

M.A. 1989 Aquaculture Department, Shanghai Fisheries University; Shanghai, China

Ph.D. 2000 Nanjing Agriculture University, Nanjing, China

## EXPERIENCE

1984-1986, Assistant Lecturer, Biological Department, Jiangxi University

1989-1996, Lecturer, Fisheries College, Shanghai Fisheries University

1996-2001, Associate Professor, Fisheries College, Shanghai Fisheries University

2001-2002, Guest Visitor, University of Connecticut, Connecticut, USA.

2002-Now, Professor, College of Aqua-life Science and Technology, Shanghai Fisheries University

## FIELD OF SPECIALIZATION

Seaweed Biotechnology/Marine Biology/Biology Molecular/Ecology/Aquaculture/Bioremediation

## Teaching

Six courses for undergraduate and graduate:

Seaweed Cell and Tissue Culture

Seaweed Cell engineering

Seaweed Cultivation

Plant and Seaweed Physiology

Cell Engineering

Molecular biology

## RESEARCH PROJECTS:

**1 Breeding technology with somatic cells in *Porphyra yezoensis***, sub-project of  
**Application of Cell Engineering in the Breeding of *Porphyra***, supported by  
the '75' Plan of the Academy Science of China in 1987-1991.

**2 Breeding with cell suspension culture in *Porphyra yezoensis***, supported by International  
Foundation Science, Sweden in 1991,1992,1996-2000 (3 times).

- 3 Application studies of breeding with cells in *Porphyra yezoensis***, supported by Shanghai Fisheries University in 1993. This new technology was identified to be the advance study in world and China.
- 4 parent: Breeding with immobilization cells in *Porphyra*.**
- 5 Transferring of foreign gene and cell line resisting high temperature with cell engineering in *Porphyra yezoensis***, supported by Agriculture Ministry in 1996-2000.
- 6 Studies on photosynthetic function and CCM of pyrenoid in alga**, supported by Twilight Plan of Shanghai(SG-98-032) of Education Committee of Shanghai in 1999-2001.
- 7 Exploiting of the domain chain of cultivating, proceeding and exporting in *Porphyra***, supported by Agriculture Ministry of China in 2000-2001.
- 8 Seaweed/fish integrated recirculating aquaculture system**, supported by the USA - China Living Marine Resources Joint Coordination Plan, 2002-2004.
- 9 Harmful Algal Bloom**, supported by the USA -China Living Marine Resources Joint Coordination Plan, 2002-2004.
- 10 Isolation and purification of phycoerythrin from *Porphyra***, supported by Qidong Science and Technology Bureau, 2002-2003.
- 11 Breeding with free conchospore in *Porphyra***, supported by the National Education Department, 2004-2005.
- 12 Studies on photosynthetic function and CCM of pyrenoid in alga**, supported by National Science Foundation of China, 2004-2006.
- 13 Industrial aquaculture and ecological regulation of two economic seaweeds**, supported by Ningbo Science and Technology Bureau, Zhejiang Province, 2004-2006.
- 14 Isolation and purification of phycoerythrin from *Porphyra* and commercial products exploitation**, supported by Shanghai Education Committee, 2004-2006.

#### **MEMBERSHIP**

Member of Chinese Phycology Association  
 Member of Shanghai Fisheries Association  
 Member of America Phycology Association  
 Member of the Asian Fisheries Association  
 Member of World Aquaculture Association

#### **ACADEMIC ACTIVITY**

- In Jan.1992, attending “The First Asia-Pacific Conference on Algal Biotechnology” held in Kuala Lumpur, Malaysia, and giving a presentation.
- In May.1992, attending “The first annual meeting of youths in China Science association” held in Beijing, China, and giving a presentation.
- In Aug.1992, attending “The First Asia-Pacific Conference on Agriculture Biotechnology” held in Beijing, China, and giving a presentation.
- In Apr.1994, attending “The Second Asia-Pacific Conference on Algal Biotechnology” held in Singapore, and giving a presentation.

- In Aug. 1994, attending “The Fifth International Phycological Congress” held in Qingdao, China.
- In Jun. 1995, attending “The First Congress of Fisheries for Youth in China” held in Shanghai, China, and giving a presentation.
- In Jun. 1996, attending “The Congress of 2000 Agriculture Development in China” held in Beijing, China, and giving a presentation.
- In Jun. 1998, attending “The IX International Plant Cell and Tissue Culture Congress” held in Jerusalem, Israel, and giving a presentation.
- In Jul. 1999, attending “The Second Asian Pacific Phycological Forum’ held in Hong Kong, and giving a presentation.
- In Nov. 2000, attending “The Sixth International Symposium on the Efficient Application and Preservation of Marine Biological Resources” held in Shanghai, China.
- In Jun 2001, attending “The 55<sup>th</sup> Annual Meeting of Phycological Society of America” held in Colorado, USA, and giving a presentation
- In Aug 2001, attending “The 7th International Phycological Congress” held in Greece, and giving a poster.
- In Apr 2002, attending “The 41st East-North Alga Symposium” held in New Hampshire, USA, and giving a presentation.
- In Oct 5-6, 2003, attending “Symposium of International Marine biology resources protection and sufficient utilization” held in Japan, and giving the presentation “Establishment and cultivation of cell line HB with high temperature resistance and fast growth in *Porphyra yezoensis*”.
- In Oct 19-23, 2003, attending “5<sup>th</sup> Asian-Pacific Algal Biotechnology Conference”, and gave the presentation “The free conchosporangia culture of Northeast American *Porphyra* species”.
- In Nov 3-5, 2003, attending “ 11 China Phycology Conference” held in Suzhou, and giving the presentation “Regulation and Breeding with free conchosporangia branches in *Porphyra*”.
- In Mar 1-5, 2004, attending “World Aquaculture 2004” conference held in Hawaii, and giving the presentation “*Porphyra* aquaculture development and its use in bioremediation in China”.
- In July 24-30, 2005, attending “10<sup>th</sup> International Applied Phycology Conference” held in Yunnan, and giving the presentation “Eutrophication and bioremediation of *Porphyra* cultivation in Lusi coast” and “Study on anti-fatigue and oxidation resistance bioactivity of polysaccharide from *Porphyra yezoensis*”.
- In Aug 19-22, 2005, attending National 863 Plan Resource Environment Technology “3<sup>rd</sup> Advance Science and Technology Forum on Marine Biotechnology” held in Xiemen, and presenting paper for exchange “Important Macro-Seaweeds Bioremedaiton and Development Policy”.

## PUBLICATION

- He Peimin**, Wang Sujuan, 1991. Cell seedling culture and total nitrogen and amino acid analysis in *Porphyra yezoensis*. J Fisheries of China, 15(1): 48-54.
- He Peimin**, 1991. Ultrastructure Studies of mitosis and miosis in red alga. In: Studies on ultrastructure of seaweeds in China. Wang Sujuan et al <eds>, p138-140, Zhejiang Science and Technology Press.
- He Peimin**, 1991. Ultrastructure Studies of mitosis and miosis in brown alga. In: Studies on ultrastructure of seaweeds in China. Wang Sujuan et al <eds>, p179-181, Zhejiang Science and Technology Press.
- He Peimin**, Wang Sujuan, 1992. Studies on the differentiation and development of isolated cells in *Porphyra yezoensis*. Acta Botany of Chinese, 34 (11): 874877.
- He Peimin**, Wang Sujuan, 1992. Effects of external factors on the differentiation and development of somatic cells in *Porphyra yezoensis*. Marine Science, 4(4): 305-309.
- He Peimin**, Wang Sujuan, 1992. Primal study on cell culture with high density in *Porphyra yezoensis*. Proceedings of the first annual meeting of youths in China Science association, p423-427, Chinese Science and Technology Press.
- Wang Sujuan, **He Peimin**, 1992. Application of breeding with immobilized cells in cultivation in *Porphyra yezoensis*. J Fisheries of China, 16(3): 263-268.
- Wang Sujuan, **He Peimin**, 1992. Breeding with attaching cells on nets directly and cultivation on sea field. J Shanghai Fisheries University, 1(3-4): 305-309.
- Wang Sujuan, **He Peimin**, 1992. Reformation of traditional breeding in *Porphyra yezoensis* with seaweed biotechnology. In Agricultural Biotechnology, C.B.You & Z.L.Chen <eds>. p489-492, China Science and Technology Press
- He Peimin**, 1994. Technology of cell culture in seaweeds. In: Seaweed biotechnology, Wang SJ, He PM, <eds>. P42-48, Shanghai Science and Technology Press.
- He Peimin**, 1994. Technology of protoplast culture in seaweeds. In: Seaweed biotechnology, Wang SJ, He Peimin, <eds>. p49-60, Shanghai Science and Technology Press.
- He Peimin**, 1994. Technology of immobilized cells culture in seaweeds. In: Seaweed biotechnology, Wang SJ, He Peimin, <eds>. p134-137, Shanghai Science and Technology Press.
- He Peimin**, 1994. Advances and current status of gene engineering in seaweeds. In: Seaweed biotechnology, Wang SJ, He Peimin, <eds>. p143-147, Shanghai Science and Technology Press.
- He Peimin**, Wang Sujuan, 1994. Cell suspension culture and breeding in *Porphyra yezoensis*. In Algal Biotechnology in the Asia-Pacific Region, Phang S.M. et al.<eds>.p226-232, Univ. Malaya.
- He Peimin**, Wang Sujung, 1995. Primal studies on the breeding with spore suspension culture in *Laminaria japonensis*. Proceeding of the first congress of fisheries for youth in china, p500-506, Tongji University Press.
- Wang Sujuan, **He Peimin**, et al, 1995. An efficient and simple breeding with somatic cells and its application. Proceedings of the Congress of the Application of Biotechnology on Agriculture in China, p278-282, Association of Science and Technology of China.
- Wang Sujuan, **He Peimin** & Zhou Yihong, 1995. Advances of breeding with somatic cells and cultivation at sea in *Porphyra yezoensis*. J.Shanghai Fisheries University, 4(2): 128-138 .
- He Peimin**, Wang Sujuan, 1996. Development of seaweed biotechnology in China. Proceedings of the Congress of 2000 Agriculture Development in China, p322-326, Chinese Agriculture Technology Press.
- He Peimin** & Wang Sujuan, 1996. The effect of nitrogen and phosphorus on cell culture in *Porphyra yezoensis*. J.Shanghai Fisheries University, 5(3): 153-162.

- He Peimin**, Wang Sujuan, Ma Jiahai, 1998. Current status, foreground and strategy of application study of *Spirulina* on Fisheries culture. J Shanghai Fisheries University, 7(2): 149-154.
- He Peimin**, et al, 1998. Primal selection of strain resisting high temperature with cell engineering in *Porphyra yezoensis*. Abstract of IX International Plant Cell and Tissue Culture Congress, p150, Israel.
- He Peimin**, Zhang Yinjiang, He Wenhui, 1999. Effects of *Spirulina* feed on the growth and color of Carp. J Fisheries of China, 23(2): 162-168.
- He Peimin**, Zhang Rongxian, 1999. Photosynthesis and its main effect factors in *Porphyra*. J Nanjing Agriculture University, 22(4): 19-22.
- He Peimin**, Ma Jiahai, 1999. *Porphyra* cultivation and its biotechnology application in China. Abstract of the Second Asian Pacific Phycological Forum, Hong Kong, s-20.
- He Peimin**, Zhang Rongxian, 2000. Gene map of alga chloroplast genome. J Shanghai Fisheries University, 9(1): 49-56.
- He Peimin**, Zhang Yinjiang, Wang Zhaohua, Wu Weining, Ma Jiahai, 2000. Study on water pollution from aquaculture sewage and its control. Proceedings of the Sixth International Symposium on the Efficient Application and Preservation of Marine Biological Resources, Shanghai Fisheries University, p76-84.
- Dai Xinbin, Yu Yong, Zhang Rongxian, Yu Xinjian, **He Peimin**, Xu Chunhe. Relationship between Photosystem II carbonic anhydrase and extrinsic polypeptides, as well as manganese cluster. Sci. Bul. Sin, 45 (17) : 1858-1861.
- He Peimin**, Zhang Rongxian, et al, 2001. Gold immunolocalization of Rubisco in Chloroplast in *Chlorella*. J Experimental Biology, 34(1): 17-23.
- Dai Xinbin, Yu Yong, Zhang Rongxian, Yu Xinjian, **He Peimin**, Xu Chunhe, 2001. Relationship among Photosystem II carbonic anhydrase, extrinsic polypeptides and manganese cluster. Chinese Science Bulletin, 2001, 46(5):406-408.
- He P M**, Zhang R X, Zhang D B, et al. Gold immunolocalization of Rubisco in Chloroplast in *Chlorella*[J]. Acta Biologica Experimentalis Sinica, 2001, 34:17-23.
- He Peimin**, Zhang Rongxian, Zeng Chaoqi, 2001. Algal pyrenoid structure and function. In abstract proceedings of 7th International Phycological Congress, Phycologia, 40 (4): 79. (SCI)
- DAI Xinbin, YU Yong, ZHANG Rongxian, YU Xinjian, **HE Peiming** and XU Chunhe 2001. Relationship among photosystem II carbonic anhydrase, extrinsic polypeptides and manganese cluster. *Chinese Science Bulletin*, 46(5):406-408. (SCI)
- He P M**, Wu W N, Zhao J H, et al. Studies on ultrastructure of pyrenoid from several algae[J]. Acta Hydrobiologica Sinica, 2002, 26:327-334.
- He P M**, Xu C H, Yu J X, et al. Molecular localization and activity inducement of periplasmic carbonic anhydrase in *Chlamydomonas reinhardtii*[J]. Chinese Bulletin of Botany, 2002, 19:317-321.
- HE PEI MIN** and WU WEI NING, 2003. Establishment and cultivation of cell line HB with high temperature resistance and fast growth in *Porphyra yezoensis*. *Acta Biologica Experimentalis Sinica*, 36(3):191-196.
- He Peimin**, Zhang Dabing, Chen Genyun, Wu Weining, Zhang Rongxian, 2003. Pyrenoid ultrastructure and immunogold localization of Rubisco and Rubisco activase in *Chlamydomonas reinhardtii*. *Algae*, 18(2):121-127.
- He PM**, Wu QL, Wu WN, Lu W, Zhang DB, Chen GY, Zhang RX, 2004. Pyrenoid Ultrastructure and Molecular Localization of Rubisco and Rubisco Activase in *Enteromorpha clathrata*. J. Fisheries of China 28(3):255-260.

- Cai CE, Wu QL, Xu CH, **He PM**, 2004, Advance of phycoerythrin as a photosensitizer. *Biotechnology communication*. 15 (6) :629-632.
- Yang L, **He PM**, 2004. Effect of temperature, light intensity, conchocelis density on conchospores release in *Porphyra yezoensis*. *Marine Fisheries*. 26 (3) :205-209.
- Liu F, Gu ZK, **He PM**, 2005. Effect of several factors on *Porphyra* polysaccharide extraction. *J. Shanghai Fisheries University*. 14 (1) :26-29.
- Zhang HY, **He PM**, Chen CF, Dai YQ, Shi, B, Shi, MJ, 2005. Influence of *Porphyra* cultivation on coast ecology environment. *Environment Science and Technology*. 28(4):44-45.
- He PM**, Ying S J, Wu Q L, Zhang R X. 2005. Advance of molecular biology of CCM in algae. *Marine Science*, 29(30):71-75.
- Cai CE, Wu QL, **He PM**, 2005. Extraction and Purification of R-Phycoerythrin in *Porphyra yezoensis*. *Biotechnology communication*. (in Press)
- He PM**, Xu SS, Guo TT, 2005. Macro-seaweeds important bioremedaiton and Development policy . Proceeding of National 863 Plan Resource Environment Technology "3rd Advance Science and Technology Forum on Marine Biotechnology".
- He PM**, Zhang HY, Xu SS, 2005. China marine environment and Fisheries economy sustainable development policy. Proceedings of "China Sustainable Development Forum in 2005".