

# 國立臺灣海洋大學

## 個人資料表

### 一、基本資料

中文姓名	靳偉君			英文姓名	Chin Wei-Chun (Last Name) (First Name) (Middle Name)		
國籍	美國/台灣	籍貫		性別	<input checked="" type="checkbox"/> 男	<input type="checkbox"/> 女	出生日期 民國 54 年
住宅地址	5200 N Lake Rd, Merced, CA 95343, USA						
服務機關地址	5200 N Lake Rd, Merced, CA 95343, USA						

### 二、主要學歷

Postdoc., 2001 — Biomedical Engineering, Johns Hopkins University

Ph.D., 2000 — Bioengineering, University of Washington

M.S.E., 1996 — Bioengineering, University of Washington

M.S., 1989 — Chemical Engineering, National Tsing-Hua University (Taiwan)

B.S., 1987 — Chemical Engineering, National Tsing-Hua University (Taiwan)

### 三、現職及與專長相關之經歷（按時間先後順序由最近經歷開始填寫）

服務機關	服務部門／系所	職稱	起訖年月
現職：			
University of California, Merced	Bioengineering	教授	民國 108 年迄今
Biotechnology and Bioprocess Engineering (Springer)		Editorial Board	民國 107 年迄今
Pacific Journal of Health		Editorial Board	民國 107 年迄今
Peer J		Academic Editor	民國 101 年迄今
Scientific Reports		Academic Editor	民國 100 年迄今
BMC Research Notes		Associate Editor	民國 100 年迄今
PLoS ONE		Academic Editor	民國 99 年迄今
經歷：			民國 ____ 年 ____ 月 ____ 至 民國 ____ 年 ____ 月 ____ 日
University of California, Merced	Committee for Diversity and Equity	Chair	民國 106 年 ____ 月 ____ 至民國 107 年 ____ 月 ____ 日
University of California, Merced	Bioengineering	副教授	民國 101 年 ____ 月 ____ 至民國 108 年 ____ 月 ____

			日
University of California, Merced	Bioengineering	Undergraduate Chair	民國 103 年 月 至民國 106 年 月 日
Journal of Microbial & Biochemical Technology		Editorial Board	民國 99 年 月 至 民國 102 年 月 日
University of California, Merced	School of Engineering	助理教授	民國 94 年 月 至 民國 101 年 月 日
Florida State University	Chemical & Biomedical Engineering	助理教授	民國 93 年 月 至 民國 94 年 月 日
Florida State University	2002-2005, Department of Biological Science	Affiliated Assistant Professor	民國 91 年 月 至 民國 94 年 月 日
Florida State University	Institute of Molecular Biophysics	Affiliated Assistant Professor	民國 91 年 月 至 民國 94 年 月 日
Florida State University	Chemical & Biomedical Engineering	Visiting Assistant Professor	民國 90 年 月 至 民國 93 年 月 日
Johns Hopkins University	Biomedical Engineering	博士後研究員	民國 89 年 月 至 民國 90 年 月 日

四、專長請自行填寫與研究方向有關之學門及次領域名稱。

1. 海洋化學	2. 奈米毒物	3. 環境醫學	4. 幹細胞
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## 學術著作目錄

五、學術著作目錄

**Publications:**

1. Chin W-C, Orellana MV, Verdugo P. Spontaneous assembly of marine dissolved organic matter into polymer gels. *Nature* 1998. 391:568-572.
2. Nguyen T\*, Chin W-C\*, Verdugo P. Role of Ca<sup>2+</sup>/K<sup>+</sup> ion exchange in intracellular storage and release of Ca<sup>2+</sup>. *Nature* 1998. 395:908-912. \*These authors contributed equally to this work.
3. Dabrowski M J, Chen JP, Shi HQ, Chin W-C, Atkins WM. Strategies for protein-based nanofabrication: Ni<sup>2+</sup>-NTA as a chemical mask to control biologically imposed symmetry. *Chem. Biol.* 1998. 5:689-697.
4. Nguyen T, Chin W-C, O'Brien JA, Verdugo P, Berger AJ. Intracellular regulatory pathways of rat ependymocytes. *J. Physiol. (London)* 2001. 531:131-140.

5. Quesada I, **Chin W-C**, Steed J, Campos-Bedolla P, Verdugo P. Mouse mast cell secretory granules can function as intracellular ionic oscillators. *Biophys. J.* 2001. 80:2133-2139.
6. **Chin W-C**, Quesada I, Nugyen T, Verdugo P. Oscillations of pH inside the secretory granule control the gain of Ca<sup>2+</sup> release for signal transduction in goblet cells exocytosis. Novartis Foundation (Ciba Foundation) Symposium, 2002, 248: 132-141.
7. Quesada I, **Chin W-C**, Verdugo P. ATP-independent luminal oscillations and release of Ca<sup>2+</sup> and H<sup>+</sup> from mast cell secretory granules: implications for signal transduction. *Biophys. J.* 2003. 85: 963-970.
8. Orellana MV, Lessard EJ, Dycus E, **Chin W-C**, Foy MS, Verdugo P. Tracing the source and fate of biopolymers in seawater: application of an immunological technique. *Mar. Chem.* 2003. 83: 89-99.
9. **Chin W-C**, Orellana MV, Quesada I, Verdugo P. Secretion in unicellular marine phytoplankton: demonstration of regulated exocytosis in *Phaeocystis globosa*. *Plant Cell Physiol.* 2004. 45(5): 535-542.
10. **Chin W-C**, Quesada I, Steed J, Verdugo P. Modeling Ca-polyanion crosslinking in secretory networks. Assessment of charge density and bond affinity in polyanionic secretory network. *Macromol. Symp.* 2005. 227:89-96.
11. Quesada I, **Chin, W-C**, Verdugo P. Mechanisms of signal transduction in photo-stimulated secretion in *Phaeocystis globosa*. *FEBS Lett.* 2006. 580: 2201-2206.
12. Zheng J, **Chin W-C**, Khijniak E, Khijniak, E Jr, Pollack GH. Surfaces and interfacial water: Evidence that hydrophilic surfaces have long-range impact. *Adv. Colloid Interface Sci.* 2006. 127: 19-27.
13. Ding Y, Yang K, **Chin W-C**. Ethanol augments elevated-[Ca<sup>2+</sup>]C induced trypsin activation in pancreatic acinar zymogen granules. *Biochem. Biophys. Res. Commun.* 2006. 350: 593-597.
14. Yang K, Ding Y, **Chin W-C**. K<sup>+</sup>-induced ion-exchanges trigger trypsin activation in pancreas acinar zymogen granules. *Arch. Biochem. Biophys.* 2007. 459: 256–263.
15. Ding Y, **Chin W-C**, Verdugo P. Development of a fluorescence quenching assay to measure the fraction of organic carbon present in self-assembled gels in seawater. *Mar. Chem.* 2007. 106: 456-462.
16. Chen C-S, Breslauer DN, Luna JI, Grimes A, **Chin W-C**, Lee LP, Michelle K. Shrinky-Dink microfluidics: 3D polystyrene chips. *Lab. Chip* 2008. 8, 622 – 624. PMID: 18369519
17. Chen C-S, Pegan J, Luna J, Xia B, McCloskey K, **Chin W-C**, Khine M. Shrinky-Dink hanging drops: a simple way to form and culture embryoid bodies. *JOVE*. 2008. 13. (<http://www.jove.com/index/Details.stp?ID=692>)
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22. Ding Y, Hung C, Santschi PH, Verdugo P, Chin W-C. Spontaneous assembly of exopolymers from phytoplankton. *Terr. Atmos. Ocean. Sci. (TAO)* 2009; 20: 741-747.
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61. Tsai S-M, Goshia T, Chen Y-C, Kagiri A, Sibal A, Chiu M-H, Gadre A, Tung V, **Chin W-C**. High-throughput Label-Free Microcontact Printing Graphene-Based Biosensor for Valley Fever. *Colloids Surf B Biointerfaces.* 2018. 170: 219-223.
62. Xu C, Zhang S, Beaver M, Wozniak A, Obeid W, Lin Y, Wade TL, Schwehr KA, Lin, P, Sun L, Hatcher PG, **Chin W-C**, Chiu M-H, Knap AH, Dean K, Quigg A, Santschi PH. Decreased sedimentation efficiency of petro- and non-petro-carbon caused by a dispersant for Macondo surrogate oil in a mesocosm simulating a coastal microbial community. *Mar Chem.* 2018. 206: 34-43.
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70. Chiu M-H, Vazquez CI, Shiu R-F, Le C, Sanchez NR, Kagiri A, Garcia CA, Nguyen CH, Tsai S-M, Zhang S, Xu C, Santschi PH, Quigg A, Chin W-C. Impact of Exposure of Crude Oil and Dispersant (Corexit) on Aggregation of Extracellular Polymeric Substances. *Sci Total Environ*. 2019. 657: 1535-1542.
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72. Xu C, Chin W-C, Lin P, Chen H, Chiu M-H, Waggoner DC, Xing W, Sun L, Schwehr KA, Hatcher PG, Quigg A, Santschi PH. Comparison of microgels, extracellular polymeric substances (EPS) and transparent exopolymeric particles (TEP) determined in seawater with and without oil. *Mar Chem*. 215: 103667.
73. Xu C, Lin P, Zhang S, Sun L, Xing W, Schwehr KA, Chin W-C, Wade TL, Knap AH, Hatcher PG, Yard A, Jiang C, Quigg A, Santschi PH. The interplay of extracellular polymeric substances and oil/Corexit to affect the petroleum incorporation into sinking marine oil snow in four mesocosms. *Sci Total Environ*. 693: 133626.
74. Santschi PH, Xu C, Schwehr KA, Lin P, Sun L, Chin W-C, Kamalanathan M, Quigg A. Can the protein/carbohydrate (P/C) ratio of exopolymeric substances (EPS) be used as a proxy for its ‘stickiness’ and other biophysical properties? *Mar Chem* (submitted 6/28/2019)

75. Shiu R-F, Chiu M-H, Vazquez CI, Tsai Y-Y, Le A, Kagiri A, Xu C, Kamalanathan M, Bacosa H, Doyle S, Sylvan J, Santschi PH, Quigg A, Chin W-C. Protein to carbohydrate (P/C) ratio changes in microbial extracellular polymeric substances induced by oil and Corexit. Mar Chem (submitted 7/16/2019)

#### **Book Editing**

G. P Pollack and Chin W-C. (eds). “Phase Transition in Cell Biology”, 2008, Springer, Amsterdam (ISBN: 978-1-4020-8650-2).