



请输入关键字



首页 海工装备与水下技术研究所

## 薛米安

发布人：港航院 发布时间：2020-11-05 访问次数：1060



薛米安，男，教授/博导，研究生学历，博士学位

四川省优秀博士学位论文获得者

邮箱：mi-anxue@163.com

### 简历

2020.05~至今 河海大学港口海岸与近海工程学院教授/博导  
2015.11~2016.08 英国City, University of London访问学者  
2015.08~2015.11 英国Newcastle University访问学者  
2013.09~2020.04 河海大学港口海岸与近海工程学院副研究员、副教授（2014.06获聘硕导）  
2011.09~2013.09 河海大学水利工程博士后（特优成绩出站并于2013年7月特聘为副研究员）  
2006.09~2011.07 四川大学港口、海岸及近海工程专业博士生（2014年获四川省优秀博士学位论文）

### 研究方向

船舶与海洋工程水动力学（固定或浮式海洋平台的动态响应与减振控制）

液体晃荡力学（大型运动容器中的液舱晃荡与减晃机制、液舱晃荡与船舶运动耦合模拟、分层流晃荡、多相流数值仿真水池开发及应用）

流（破碎波）致结构振动声辐射及控制技术

传感器研制（数字点压强传感器、数字波高仪、基于图像的复杂波面测量系统）

### 主讲课程

本科生课程：海岸动力计算软件应用、海洋工程概论、海岸动力学实验

研究生课程：海洋工程、船舶水动力学

## 科研项目

- [1] 国家自然科学基金面上项目：“分层流晃荡界面波间相互作用及与防晃隔板耦合机制的研究”(批准号：51679079, 2017.01~2020.12, 项目负责人)
- [2] 中国船舶重工集团公司第七〇二研究所委托项目：“液舱内自由液面晃荡引起结构振动声辐射及控制技术研究”(批准号：20198149416, 2019.11~2020.04, 项目负责人)
- [3] 中央高校基本科研业务费：“液舱底部结构形状影响表面波生成机制的实验研究”(批准号：B200202055, 2020.01~2021.12, 项目负责人)
- [4] 南京市高层次创业人才项目：“液舱晃荡一体化测试装置产业化”(2018.10~2021.10, 项目负责人)
- [5] 国家自然科学基金青年基金：“波浪作用下大型LNG舱内液体晃荡及隔板减晃机理研究”(批准号：51209080, 2013.01~2015.12, 项目负责人)
- [6] 中央高校基本科研业务费：“新型分层流体调谐阻尼器及其对海洋平台的减振机理研究”(批准号：2018B12814, 2018.01~2019.12, 项目负责人)
- [7] 天津大学水利工程仿真与安全国家重点实验室开放基金：“密度分层流晃荡中界面波间非线性相互作用研究”(批准号：HESS-1703, 2017.05~2020.05, 项目负责人)
- [8] 国家自然科学基金面上项目：“海岸植物消浪机理与减低波浪冲高的试验研究和数值模型开发”(批准号：51279120, 2013.01~2016.12, 参与人)
- [9] 国家自然科学基金面上项目：“沙波地形上水流对波浪布拉格共振的影响机理研究”(批准号：51379071, 2014.01~2017.12, 参与人)
- [10] 国家自然科学基金委员会与荷兰科学研究中心合作研究项目：“耦合大尺度波浪模型的锚固浮体波浪响应研究”(批准号：51061130547, 2011.01~2013.12, 参与人)
- [11] 水沙科学与水灾害防治湖南省重点实验室开放基金：“耦合激励下液舱中防晃隔板的减晃机理研究”(批准号：2015SS03, 2015.01~2016.12, 项目负责人)
- [12] 中央高校基本科研业务费：“分层流液体晃荡中内波与表面波的相互作用及生成机制研究”(批准号：2014B17314, 2014.11~2017.11, 项目负责人)
- [13] 四川大学水力学与山区河流开发保护国家重点实验室开放基金：“纵摇、横摇和升沉运动下减少LNG舱内液体晃荡措施研究”(批准号：1213, 2013.03~2015.05, 项目负责人)
- [14] 大连理工大学海岸和近海工程国家重点实验室开放基金：“分层流晃荡的数值模拟与试验研究”(批准号：LP1207, 2012.09~2014.08, 项目负责人)
- [15] 中国博士后科学基金：“纵摇与升沉激励下隔板对液舱晃荡影响的机理分析”(批准号：2012M511192, 2012.05~2013.09, 项目负责人)

---

## 论文论著

- [1] Obai Kargbo, Mi-An Xue, Jinhai Zheng. Multiphase fluid dynamics in storage tanks of varying geometry. *Journal of Fluids Engineering-Transactions of the ASME*, 2021, 143(1): 011405, Paper No: FE-20-1275(SCI)
- [2] Mi-An Xue, Zhouyu Jiang, Ya-An Hu, Xiaoli Yuan. Numerical study of porous material layer effects on mitigating sloshing in a membrane LNG tank. *Ocean Engineering*, 2020, 218: 108240 (SCI)
- [3] Mi-An Xue, Obai Kargbo, Jinhai Zheng, Seiche oscillations of layered fluids in a closed rectangular tank with wave damping mechanism. *Ocean Engineering*, 2020, 196: 106842. (SCI)
- [4] Liting Yu, Mi-An Xue, Zhouyu Jiang. Experimental investigation of parametric sloshing in a tank with vertical baffles. *Ocean Engineering*, 2020, 213:107783. (SCI)
- [5] Peng Dou, Mi-An Xue, Jinhai Zheng, Chi Zhang, Ling Qian, Numerical and experimental study of tuned liquid damper effects on suppressing nonlinear vibration of elastic supporting structural platform. *Nonlinear Dynamics*, 2020, 99(4): 2675-2691. (SCI)
- [6] Jinhai Zheng, Obai Kargbo, Mi-An Xue, Zhouyu Jiang. Numerical study of the interfacial sloshing wave interaction with a porous bottom layer in a partially filled rectangular tank. *Ocean Engineering*, 2020, 217:107990. (SCI)
- [7] Liting Yu, Mi-An Xue, Aimeng Zhu. Numerical investigation of sloshing in rectangular tank with permeable baffle. *Journal of Marine Science and Engineering*, 2020, 8(9): 671. (SCI)
- [8] Mi-An Xue, Xiaoli Yuan, Cheng Zhong, Peng Wan, First principles calculations on elastic, thermodynamic and electronic properties of Co<sub>2</sub>Zr and Co<sub>2</sub>Ti at high temperature and pressure. *Applied Sciences*, 2020, 10(6): 1-15. (SCI)
- [9] Xiaoli Yuan, Weikang Li, Peng Wan, Mi-An Xue. First-principle studies on the mechanical and electronic properties of Al<sub>x</sub>Ni<sub>y</sub>Zr<sub>z</sub> (x=1~3, y=1, 2, z=1~6) alloy under pressure. *Materials*, 2020, 13(21). (SCI)
- [10] Mi-An Xue, Yichao Chen, Jinhai Zheng, Ling Qian, Xiaoli Yuan, Fluid dynamics analysis of sloshing pressure distribution in storage vessels of different shapes. *Ocean Engineering*, 2019, 192: 106582. (SCI)
- [11] Obai Kargbo, Mi-An Xue, Jinhai Zheng. Multiphase sloshing and interfacial wave interaction with a baffle and a submersed block. *Journal of Fluids Engineering-Transactions of the ASME*, 2019, 141(7): 071301. (SCI)

- [12] Liting Yu, Mi-An Xue, Jinhai Zheng. Experimental study of vertical slat screens effects on reducing shallow water sloshing in a tank under horizontal excitation with a wide frequency range. *Ocean Engineering*, 2019, 173:131-141. (SCI)
- [13] Hao Chen, Ling Qian, Wei Bai, Zhihua Ma, Zaibin Lin, Mi-An Xue. Oblique focused wave group generation and interaction with a fixed FPSO-shaped body: 3D CFD simulations and comparison with experiments. *Ocean Engineering*, 2019, 192: 106524. (SCI)
- [14] 薛米安, 陈奕超, 苑晓丽, 邢建建, 张冠卿, 朱瑞虎. 低载液率液体晃荡冲击压力的试验研究. *振动与冲击*, 2019, 38(14): 239-245. (EI)
- [15] 薛米安, 邢建建, 苑晓丽, 陈奕超, 罗柳钧. 水平运动模拟器复演随机海浪谱实验. *振动、测试与诊断*, 2019, 39(2): 346-352. (EI)
- [16] 薛米安, 邢建建, 陈奕超, 罗柳钧. 基于振动台实验的液体晃荡激励参数敏感性研究. *大连理工大学学报*, 2019, 59(2): 162-171.
- [17] 陈奕超, 薛米安, 彭天成, 苑晓丽, 朱爱蒙. 液体晃荡压力分布规律OpenFOAM模拟研究. *大连理工大学学报*, 2019, 59(4): 400-408.
- [18] Yichao Chen, Mi-An Xue. Numerical simulation of liquid sloshing with different filling levels using OpenFOAM and experimental validation. *Water*, 2018, 10(12): 1-18. (SCI)
- [19] 薛米安, 陈奕超, 苑晓丽, 邢建建. 不同海浪谱激励下矩形液舱内液体晃荡试验研究. *大连理工大学学报*, 2018, 58(3): 261-268.
- [20] Mi-An Xue, Jinhai Zheng, Pengzhi Lin, Xiaoli Yuan, Experimental study on vertical baffles of different configurations in suppressing sloshing pressure. *Ocean Engineering*, 2017, 136:178-189. (SCI)
- [21] Mi-An Xue, Jinhai Zheng, Pengzhi Lin, Zhong Xiao. Violent transient sloshing-wave interaction with a baffle in a three-dimensional numerical tank. *Journal of Ocean University of China*, 2017, 16 (4): 661-673. (SCI)
- [22] Mi-An Xue, Pengzhi Lin, Jinhai Zheng, Yu-xiang Ma, Xiao-li Yuan, Viet-Thanh Nguyen, Effects of perforated baffle on reducing sloshing in rectangular tank: experimental and numerical study. *China Ocean Engineering*, 2013, 27(5):615-628. (SCI)
- [23] Mi-An Xue, Jinhai Zheng, Pengzhi Lin, Numerical simulation of sloshing phenomena in cubic tank with multiple baffles. *Journal of Applied Mathematics*, 2012, 2012(245702):1-21. (SCI)
- [24] Mi-An Xue, Pengzhi Lin, Numerical study of ring baffle effects on reducing violent liquid sloshing. *Computers & Fluids*, 2011, 52:116-129. (SCI)
- [25] Mi-An Xue, Xiaoli Yuan, Xiaoying Fu, Jinghe Wu, Pengzhi Lin, Dong Hu, Song Ye, Wenjun Zhu, Yanping Wang, Zhongwei Huang, Effects of copper micro-particles on the detonation characteristics of RDX powder. *Journal of Physics D: Applied Physics*, 2009, 42(4):045504. (SCI)
- [26] Mi-An Xue, Jinghe Wu, Song Ye, Dong Hu, Xiangdong Yang, Yanping Wang, Wenjun Zhu, Chengbing Li, Shock-induced fast reactions of zinc nanoparticles and RDX. *Journal of Physics D: Applied Physics*, 2008, 41:045501. (SCI)
- [27] Xiao-Li Yuan, Mi-An Xue, Wen Chen, Tian-Qing An, A first-principle study on the phase transition, electronic structure, and mechanical properties of three-phase ZrTi<sub>2</sub> alloy under high pressure. *The European Physical Journal B*, 2016, 89:246 (1-8). (SCI)
- [28] Xiao-Li Yuan, Mi-An Xue, Wen Chen, Tian-Qing An, Concentration-dependent crystal structure, elastic constants and electronic structure of ZrxTi<sub>1-x</sub> alloys under high pressure. *Frontiers of Physics*, 2014, 9(2):219-225. (SCI)
- [29] Xiao-Li Yuan, Mi-An Xue, Wen Chen, Tian-Qing An, First-principles study of structural, elastic, electronic, magnetic and thermoproperties of Ni<sub>2</sub>ZrX (X = Sn, Sb) Heusler alloys under pressure. *Computational Materials Science*, 2014, 82:76-85. (SCI)
- [30] Xiao-Li Yuan, Mi-An Xue, Wen Chen, Tian-Qing An, Yan Cheng, Investigations on the structural, elastic and electronic properties of the orthorhombic Zirconium–Nickel alloy under different pressure. *Computational Materials Science*, 2012, 65:127-132. (SCI)
- [31] Ye Song, Wu Jing-He, Xue Mi-An, Wang Yan-Ping, Hu Dong, Yang Xiang-Dong, Spectral investigations of the combustion of pseudo-nanoaluminized micro-cyclic- [CH<sub>2</sub>N(NO<sub>2</sub>)<sub>3</sub>] in a shock wave. *Journal of Physics D: Applied Physics*, 2008, 41:235501(1-7). (SCI)
- [32] Mi-An Xue, Yichao Chen, Xiaoli Yuan, Peng Dou. A study on effects of the baffles in reducing sloshing in a container under earthquake excitation. *Proceedings of the Twenty-ninth (2019) International Ocean and Polar Engineering Conference*, Honolulu, Hawaii, USA, June 16-21, 2019, pp3393-3397.
- [33] Mi-An Xue, Xiaoli Yuan, Yichao Chen, Ruihu Zhu, Jianjian Xing. Investigation on effects of vertical baffle on sloshing in a tank under random excitation. *Proceedings of the 28th International Ocean and Polar Engineering Conference*, Sapporo, Japan, June 10-15, 2018, pp1476-1481.
- [34] Mi-An Xue, Jinhai Zheng, Xiaoli Yuan, Liting Yu, Obai Kargbo, Effects of an upper mounted baffle on reducing liquid sloshing in a container, *Proceedings of the Twenty-sixth International Ocean and Polar Engineering Conference*, Rhodes, Greece, June 26-July 1, 2016, pp939-943.

[35] Mi-An Xue, Jinhai Zheng, Xiaoli Yuan, Pengzhi Lin, Yuxiang Ma, Wei Zhang. Numerical simulation of shallow water sloshing characteristics in a rectangular tank. Proceedings of the 24th International Ocean and Polar Engineering Conference, Busan, Korea, June 15-20, 2014, pp150-156.

[36] Mi-An Xue, Jinhai Zheng, Pengzhi Lin, Yu-xiang Ma, Xiaoli Yuan, Experimental investigation on the layered liquid sloshing in a rectangular tank. Proceedings of the 23rd International Offshore and Polar Engineering Conference, Anchorage, Alaska, USA, June 30 - July 5, 2013, pp202-208.

[37] Mi-An Xue, Experimental study of liquid sloshing in a tank under irregular wave excitation. 34th IAHR World Congress, 26 June - 1 July 2011, Brisbane, Australia, pp1255-1262.

[38] Liting Yu, Jinhai Zheng, Mi-An Xue. Parametric sensitivity study on liquid sloshing in partially filled tank by numerical simulation. Proceedings of the 24th International Ocean and Polar Engineering Conference, Busan, Korea, June 15-20, 2014, pp265-271.

[39] Jinhai Zheng, Obai Kargbo, Xiaoli Yuan, Mi-An Xue, Pengzhi Lin, An Experimental Study of Nonlinear Liquid Sloshing in a Rectangular Tank. Proceedings of the 23rd International Offshore and Polar Engineering Conference, Anchorage, Alaska, USA, June 30 - July 5, 2013, pp171-177.

[40] 薛米安, 苑晓丽, 郑金海, 马玉祥, 自由表面处垂直隔板抑制液体晃荡的数值研究. 第十六届中国海洋(岸)工程学术讨论会论文集, 中国大连, 2013, pp21-27.

[41] 窦朋, 薛米安, 郑金海, 调谐液体阻尼器对导管架海洋平台振动控制的试验与数值研究. 第十九届中国海洋(岸)工程学术讨论会论文集, 中国重庆, 2019, pp25-30.

### 学术专著

[1] 薛米安, 林鹏智, 简谐波激励下液体晃荡的数值模拟与物模试验研究. 河海大学出版社, 2013年4月.

### 授权发明专利

[1] 薛米安, 陈奕超, 苑晓丽. 一种配置吃水调节及智能化减振装置的超大型浮体, 专利号: ZL201811450231.7, 授权日: 2020-7-2

[2] 薛米安, 江洲煜, 苑晓丽. 一种装配式消波层及其在薄膜型LNG减晃液舱中的应用, 专利号: ZL201911190616.9, 授权日: 2020-8-6

[3] 薛米安, 窦朋, 郑金海. 一种带有调谐水箱的智能调控漂浮式防波堤, 专利号: ZL201910564929.X, 授权日: 2020-XX-X

[4] 王昊, 薛米安, 杜畅, 张晔, 苑晓丽, 程林. 一种储液罐用智能调频防震装置, 专利号: ZL201811311244.6, 授权日: 2020-03-06

[5] 郑金海, 窦朋, 薛米安, 张弛, 严士常, 栗珂. 一种实验港池内船舶水流力快速测量装置, 专利号: ZL201811213962.X, 授权日: 2020-7-28

### 授权实用新型专利

[1] 薛米安, 窦朋, 郑金海, 程林. 一种强抗浪型可调谐浮式防波堤, 专利号: ZL201920978637.6, 授权日: 2020-03-03

[2] 薛米安, 陈奕超, 苑晓丽, 程林, 张冠卿. 一种基于运动平台的油舱溢油研究的实验装置, 专利号: ZL201821689670.9, 授权日: 2019-04-26

[3] 薛米安, 罗柳钧, 苑晓丽. 一种根据水位自动调节高度的自旋转式丁坝, 专利号: ZL201821505431.3, 授权日: 2019-05-24

[4] 薛米安, 罗柳钧, 苑晓丽. 一种智能化调高丁坝, 专利号: ZL201821504946.1, 授权日: 2019-05-24

[5] 陈奕超, 薛米安, 苑晓丽, 程林, 张冠卿. 一种可集成发电的浮式防波堤, 专利号: ZL201821708514.2, 授权日: 2019-07-12

[6] 陈奕超, 薛米安, 苑晓丽, 彭天成, 朱爱蒙, 罗柳钧. 一种配置防浪翼的双圆筒式浮式防波堤, 专利号: ZL201822023268.3, 授权日: 2019-09-10

[7] 王昊, 薛米安, 杜畅, 张晔. 一种复合式隔板液体阻尼器, 专利号: ZL201822155922.6, 授权日: 2019-09-24

[8] 薛米安, 罗柳钧, 苑晓丽. 一种加长版折叠式金属鼠标垫, 专利号: ZL201821614004.9, 授权日: 2019-04-30

[9] 丁坚, 罗柳钧, 薛米安, 苑晓丽. 一种加长版拼装式金属鼠标垫, 专利号: ZL201821615494.4, 授权日: 2019-04-30

[10] 罗柳钧, 薛米安, 施立地. 一种水力学教学有压渗流的水电比拟实验装置, 专利号: ZL20162128334.7, 授权日: 2017-07-11

### 表彰奖励

[1] 教育部博士研究生学术新人奖, 2010

[2] 四川省优秀博士学位论文, 2014

[3] 江苏省高等学校优秀科技创新团队“河口海岸综合治理与保护”骨干成员, 2014

[4] 河海大学优秀创新人才, 2014

[5] 南京市高层次创业人才, 2018

- [6] 第二届南京市科协青年会员创新创业大赛优秀奖 (2018, 排名1/4)
- [7] “海岸动力学国家精品资源共享课的建设实践”获得高等学校水利类专业教学成果奖一等奖 (2017, 排名6/8)
- [8] 河海大学第二十六届教师讲课竞赛普通组二等奖, 2019
- [9] 论文《Numerical study of ring baffle effects on reducing violent liquid sloshing》被评为“Top25 Hottest Articles”, 2012
- [10] 论文《Experimental study on vertical baffles of different configurations in suppressing sloshing pressure》入选“Most Cited Ocean Engineering Articles” Top25, 位列第三, 2019-2020
- [11] 指导研究生窦朋和陈奕超分别荣获江苏省研究生“极地科学与海洋工程”学术创新论坛暨“极地船舶与海洋工程”国际研讨会一等奖和二等奖, 2019
- [12] 指导研究生陈奕超获批江苏省研究生科研创新计划项目1项, 2019
- [13] 指导本科生江洲煜获河海大学本科生优秀毕业论文并被推荐参评江苏省优秀毕业论文, 2020

---

#### 学术兼职

- [1] 国际SCI检索期刊《Shock and Vibration》Lead Guest Editor (<https://www.hindawi.com/journals/sv/si/909838/>)
- [2] ISOPE International Hydrodynamics Committee (IHC) Session Organizer
- [3] Coastlab2020国际会议LOC委员 (<http://www.coastlab2020.com/>)
- [4] 国家自然科学基金通讯评审人
- [5] 30余种国内外学术期刊审稿人: Ocean Engineering(杰出审稿人), Thin-walled Structure(杰出审稿人), Applied Ocean Research, China Ocean Engineering, Engineering Computations, Engineering Optimization, Journal of Hydraulic Research, Journal of Ocean University of China, Ships and Offshore Structures, International Journal of Offshore and Polar Engineering, Journal of the Brazilian Society of Mechanical Sciences and Engineering, Meccanica, Structures, Water, Molecules, Fluids, Mathematical Problems in Engineering, Shock and Vibration, Journal of the Chinese Society of Mechanical Engineers, Journal of Shanghai Jiaotong University (Science), International Journal of Environmental Research and Public Health, Environmental Fluid Mechanics, International Journal of Dynamics and Control, International Journal of Fluid Mechanics Research, Multidiscipline Modeling in Materials and Structures, Infrastructures, 振动与冲击, 海洋工程, 大连理工大学学报, 上海交通大学学报, 力学学报等。

---

#### 联系方式

邮箱: mi-anxue@163.com

---

港航院

 关闭窗口