

News from TPR Group Collaborator-Dr. Hong-Wei Xiao (CAU)

With the great help and encouragement of Prof. Mujumdar, Dr Xiao Hong-Wei (China Agricultural University, Beijing, China) received a lucky and productive year.

Highlights of his past 2017:

- After several failures, Dr. Hong-Wei Xiao's research proposal with a total budget of RMB 610,000.00 was finally supported by the National Natural Science Foundation in 2017.
- In terms of publication, in 2017 Dr. Xiao and his team published **1** book chapters, and **23** journal papers. According to the Web of Science, **2** articles are highly cited paper, according to the newest Google Scholar Citation, his publication citations reached over **1600** times and H-index is **24**.
- With Prof. Mujumdar's great recommendation, Dr. Xiao's first PhD student Jun Wang went to McGill University and joined Prof. Raghavan's team as a visiting student supported by the China Scholarship Council this October.
In addition, his first graduated master student, Ms Hai-Yan Zhao has got a faculty job in Hebei University of Economics and Business.
- In 2017, Dr. Hong-Wei Xiao was invited by three universities to communicate and deliver a lecture.

The three universities and related reports are as following (in Chinese):

Shanxi Normal University, <http://www.snnu.edu.cn/xshds-3471.htm>

Henan University of Science and Technology, <http://www.haust.edu.cn/info/1049/27995.htm>

Shaanxi University of Science and Technology, <http://yjsxy.www.sust.edu.cn/info/1087/2995.htm>

- Professional service: In 2017, Dr. Hong-Wei Xiao was invited by Prof. Mujumdar Arun S., the chief Editor of Drying Technology to arrange a special issue about "Drying research in China" cooperated with Prof. Min Zhang from Jiangnan University; He was also invited by Journal of Food Quality to be a leading Guest Editor and launch a special issue in this journal, namely "Innovative and emerging drying technologies for enhancing food quality"; During ADC 2017, he was invited by Prof. Min Zhang to join the International Advisory Panel of the 9th Asia-Pacific Drying Conference and service as a co-chair for the "Oral Session 4 Innovative drying & dewatering techniques" cooperate with Prof. Jinfeng Bi from Institute of Food Science and Technology, CAAS;
As a peer referee, he provided over **80** manuscripts review service for **15** international journals in 2017.

Dr. Xiao's publication list in 2017:

One book chapter:

- [1]. Wang Jun, Law Chung-Lim, Mujumdar, A.S., **Xiao Hong-Wei***. Chapter 11: The degradation mechanism and kinetics of vitamin C in fruits and vegetables during thermal processing. In Drying Technologies for Foods: Fundamentals & Applications (Part III) edited by Prabhat K. Nema, Barjiinder Pal Kaur, and Arun S. Mujumdar. Printed in 2017 by New India Publishing Agency, New Delhi, India. pp227-253.

23 journal papers:

- [1]. Deng Li-Zhen, Mujumdar A.S., Zhang Qian, Yang Xu-Hai, Wang Jun, Zheng Zhi-An, Gao Zhen-Jiang, **Xiao Hong-Wei***. Chemical and physical pretreatments of fruits and vegetables:

- effects on drying characteristics and quality attributes-a comprehensive review. *Critical Reviews in Food Science and Nutrition*, doi:10.1080/10408398.2017.1409192 (SCI, 5-IF6.705)
- [2]. Wang Jun, Fang Xiao-Ming, Mujumdar Arun S., Qian Jing-Ya, Zhang Qian, Yang Xu-Hai, Liu Yan-Hong, Gao Zhen-Jiang, **Xiao Hong-Wei*** (2017). Effect of high-humidity hot air impingement blanching (HHAIB) pretreatment on drying characteristic and quality attributes of red pepper (*Capsicum annuum* L.). *Food Chemistry*, 220, 145-152 (SCI, 5-IF4.498), [the highly cited paper by ESI](#).
- [3]. Wang Jun, Yang Xu-Hai, Mujumdar Arun S., Wang Dong, Zhao Jin-Hong, Fang Xiao-Ming, Zhang Qian, Xie Long, Gao Zhen-Jiang, **Xiao Hong-Wei*** (2017). Effects of various blanching methods on weight loss, enzymes inactivation, phytochemical contents, antioxidant capacity, ultrastructure and drying kinetics of red bell pepper (*Capsicum annuum* L.). *LWT-Food Science and Technology*, 77, 337-347(SCI, 5-IF 2.929), [the highly cited paper by ESI](#).
- [4]. Wang Jun, Mu Wei-Song, Fang Xiao-Ming, Mujumdar Arun S., Yang Xu-Hai, Xue Ling-Yang, Xie Long, **Xiao Hong-Wei***, Gao Zhen-Jiang, Zhang Qian (2017). Pulsed vacuum drying of Thompson seedless grape: effects of berry ripeness on physicochemical properties and drying characteristics. *Food and Bioproducts Processing*,106, 117-126 (SCI, 5-IF 2.966).
- [6]. Xie Long, Mujumdar Arun S., Fang Xiao-Ming, Wang Jun, Dai Jian-Wu, Du Zhi-Long, **Xiao Hong-Wei***, Liu Yanhong, Gao Zhen-Jiang* (2017). Far-infrared radiation heating assisted pulsed vacuum drying (FIR-PVD) of Wolfberry: effects on drying kinetics and quality attributes. *Food and Bioproducts Processing*, 2017, 102: 320-331 (SCI, 5-IF 2.966)
- [7]. Xie Long, Mujumdar Arun S., Zhang Qian, Wang Jun, Liu Shuxiang, Deng Lizhen, Wang Dong, **Xiao Hong-Wei***, Liu Yan-Hong, Gao Zhen-Jiang* (2017). Effects of pulsed vacuum drying on infrared radiation heating (PVD-FIR) and electronic panel contact heating (PVD-EPC) on drying kinetics, colour and volatile compounds of wolfberry. *Drying Technology*, 35(11), 1312-1326 (SCI, IF 1.976).
- [8]. **Xiao Hong-Wei**, Pan Zhongli, Deng Li-Zhen, El-Mashad Hamed M., Yang Xu-Hai, Mujumdar Arun S., Gao Zhen-Jiang, Zhang Qian (2017). Recent developments and trends in thermal blanching-a comprehensive review. *Information Processing in Agriculture*, 4(2), 101-127 (EI).
- This review article has been read and downloaded more than 6000 times according to the stats of Elsevier <https://www.mendeley.com/stats/articles/2-s2.0-85019054265>
- [9]. **Xiao Hong-Wei**, Mujumdar Arun S. (2017). Role of expert reviews in guiding future drying R&D. *Drying Technology*, 35(5), 525-526 (SCI, IF 1.976).
- [10]. **Xiao Hong-Wei**, Zhang Min (2017). Blooming drying research in China. *Drying Technology*, 35(11), 1290 (SCI, IF 1.976).
- [11]. **Xiao Hong-Wei** (2017). Handbook of drying of vegetables and vegetables product. *Drying Technology*, doi: 10.1080/07373937.2017.1370769 (SCI, IF 1.976).
- [12]. Xie Long, Zheng Zhi-An, Mujumdar Arun S., Fang Xiao-Ming, Wang Jun, Zhang Qian, Ma Qin, **Xiao Hong-Wei***, Liu Yan-Hong, Gao Zhen-Jiang (2017). Pulsed vacuum drying (PVD) of wolfberry: drying kinetics and quality attributes. *Drying Technology*, doi: 10.1080/07373937.2017.1414055(SCI, IF 1.976).

- [13]. Deng Li-Zhen, Yang Xu-Hai, Mujumdar Arun S., Zhao Jin-Hong, Wang Dong, Zhang Qian*, Wang Jun, Gao Zhen-Jiang, **Xiao Hong-Wei*** (2017). Red pepper (*Capsicum annuum* L.) drying: effects of different drying methods on drying kinetics, physicochemical properties, antioxidant capacity, and microstructure. *Drying Technology*, doi: 10.1080/07373937.2017.1361439 (SCI, IF 1.976).
- [14]. Yu Xianlong, Gao Zhenjiang, Dai Jianwu, Xue Lingyang, Wang Dong, Wang Jun, Deng Lizhen, Xie Yongkang, Zhang Xiaolin, **Xiao Hong-Wei*** (2017). Design and experiment of air-impingement jet combined with normal temperature ventilation dryer for alfalfa. *Transactions of the Chinese Society of Agricultural Engineering*, 33(15), 293-300 (EI).
- [15]. Zhang Yu, Zhao Jin-Hong, Ding Yang, **Xiao Hong-Wei**, Sablani S.S., Nie Ying, Wu Shu-Juan, Tang Xuan-Ming (2018). Changes in the vitamin C content of mango with water state and ice crystals under state/phase transitions during frozen storage. *Journal of Food Engineering*, 222, 49-53 (SCI, 5-IF3.585).
- [16]. Xie Yucen, Gao Zhen-Jiang, Liu Yanhong, **Xiao Hong-Wei** (2017). Pulsed vacuum drying of rhizoma dioscoreae slices. *LWT-Food Science and Technology*, 80, 237-249 (SCI, 5-IF 2.929).
- [17]. Zhang Weipeng, Pan Zhongli, **Xiao Hong-Wei**, Zheng Zhi-An*, Chen Chang, Gao Zhen-Jiang, (2017). Pulsed vacuum drying (PVD) technology improves drying efficiency and quality of Poria cocos Cubes. *Drying Technology*, doi: 10.1080/07373937.2017 (SCI, IF 1.976).
- [18]. Zhang Yu, Zhao Jin-Hong, Ding Yang, Nie Ying, **Xiao Hong-Wei**, Zhu Zhen, Tang Xuan-Ming (2017). Effects of state/phase transitions on the quality attributes of mango (*Mangifera indica* L.) during frozen storage. *International Journal of Food Science and Technology*, 52(1), 239-246 (SCI, IF 1.64).
- [19]. Zhao Jin-Hong, **Xiao Hong-Wei**, Ding Yang, Nie Ying, Zhu Zhen, Tang Xuan-Ming (2017). Effect of osmotic dehydration pretreatment and glassy state storage on the quality attributes of frozen mangoes under long-term storage. *Journal of Food Science and Technology*, 54(6), 1527-1537 (SCI, 5-IF1.597).
- [20]. Wang Jun, Wang Dong, Luo Qing-Song, **Xiao Hong-Wei**, Zhang Xiao-Lin, Fang Xiao-Ming, Gao Zhen-Jiang, Han Sheng-Ming (2017). Lipid oxidation and color degradation kinetics under different storage conditions of pollen. *Transactions of the Chinese Society of Agricultural Engineering*, 33(Supp. 1), 367-373 (EI).
- [21]. **Xiao Hong-Wei**, Pan Zhongli, Martynenko Alex, Law Chung-Lim, Nema Prabhat K. Call for papers: Special Issue on innovative and emerging drying technologies for enhancing food quality. *Journal of Food Quality*, <https://www.hindawi.com/journals/jfq/osi/> (SCI, 0.976)
- [22]. Bai Junwen, Zhou Cunshan, Cai Jianrong, **Xiao Hong-Wei**, Gao Zhenjiang, Ma Haile (2017). Vacuum pulse drying characteristics and moisture content prediction of pumpkin slices. *Transactions of the Chinese Society of Agricultural Engineering*, 33(17), 290-297 (EI).
- [23]. Li Xiaoming, Gao Zhenjiang, Jin Hongwei, **Xiao Hong-Wei**, Wang Jun, Zhang Weiwei (2017). Effect of vacuum degree of milking machine on milk somatic cell counts (SCC) and test and wall thickness. *Transactions of the Chinese Society of Agricultural Engineering*, 33(9), 308-314 (EI).