

CURRICULUM VITAE

Dr. SANGHYUN JEONG

Name in full SANGHYUN JEONG
Nationality Republic of Korea
Current Address 2, Busandaehak-ro 63 gil, Geunjeong-gu, Busan,
46241, Republic of Korea
Job title (Associate) Professor
E-mail sh.jeong@pusan.ac.kr/ sh.jeong82@gmail.com
Phone Office: +82-(0)51-510-2895, Mobile: +82-(0)10-3297-3412



Education

2010.03-2013.06 **University of Technology Sydney (UTS), NSW, Australia**
Doctor of Philosophy (PhD) of Environmental Engineering
2007.03-2009.08 **Korea University of Science & Technology (KUST), Daejeon, Korea** (at
Korea Institute of Construction & Technology)
Master of Construction Environment Engineering
2001.03-2005.08 **Hong-ik University, Seoul, Korea**
Bachelor of Chemical engineering

Job and Research Experiences

2023.09-Present **Pusan National University (PNU), Busan, South Korea**
Associate Professor of Civil and Environmental Engineering
2019.09-2023.08 **Pusan National University (PNU), Busan, South Korea**
Assistant Professor of Civil and Environmental Engineering
2017.03-2019.08 **Sungkyunkwan University (SKKU), Suwon, South Korea**
Research Professor of Graduate School of Water Resources (Advisor:
Am Jang)
2015.04-2017.03 **King Abdullah University of Science and Technology (KAUST), Saudi Arabia**
Postdoc of Water Desalination and Reuse Center (WDRC) (Advisor:
TorOve Leiknes)
2015.09-2016.09 **University of Technology Sydney (UTS), Australia**
Visiting Fellow of Centre for Technology in Water and Wastewater
(CTWW) (Advisor: Saravanamuthu Vigneswaran)
2013.10-2018.09 **University of New South Wales (UNSW), Australia**
Visiting Academic Scholar of Centre of Marine Bio-Innovation (CMB)
(Advisor: Scott A. Rice)

2013.07-2015.03	University of Technology Sydney (UTS), Australia Postdoctoral Research Fellow (Research Associate) (Advisor: Saravanamuthu Vigneswaran)
2012.06-2012.08	Gwang-ju Institute of Science and Technology (GIST), South Korea Visiting Researcher of Bio-Environmental Engineering Lab (BEEL) (Advisor: In S. Kim)
2012.05-2012.06	King Abdullah University of Science and Technology (KAUST), Saudi Arabia Visiting Researcher of Water Desalination and Reuse Center (WDRC) (Advisor: Gary Amy and Jean-Philippe Croue)
2011.03-2011.06	Gwang-ju Institute of Science and Technology (GIST), South Korea Visiting Researcher of Bio-Environmental Engineering Lab (BEEL) (Advisor: In S. Kim)
2010.03-2013.06	University of Technology Sydney (UTS), Australia Research Assistant and core member of Centre for Technology in Water and Wastewater (CTWW) (Advisor: Saravanamuthu Vigneswaran)
2006.12- 2008.12	Korea Institute of Construction & Technology (KICT), South Korea Student Researcher of Advanced Environment Technology Research Division (Advisor: Kwang Soo Kim)

Research Interests

Biofouling, Desalination, Filtration, Membrane technologies, Pretreatment, Fouling analysis, Membrane characterization, Membrane Bioreactor, Reverse Osmosis, Membrane Distillation, Forward Osmosis, Water Reuse, Advanced Oxidation Process, Resource Recovery.

Publications (2011-2024 Apr.) (Scopus H-index = 41, Total citations = 4700)

- [1] **Jeong S.**, Nguyen T.V., Vigneswaran S. Submerged membrane coagulation hybrid system as pretreatment to organic matter removal from seawater. *Water Science and Technology: Water Supply*. 11(3): 352-357, 2011 Jul.
- [2] **Jeong S.**, Nateghi F., Nguyen T.V., Vigneswaran S., Tu T.A. Pretreatment for seawater desalination by flocculation: Performance of modified poly ferric silicate (PFSi- δ) and ferric chloride as flocculants. *Desalination*. 283: 106–110, 2011 Dec.
- [3] **Jeong S.**, Nguyen T.V., Shon H.K., Vigneswaran S. The performance of contact flocculation–filtration as pretreatment of seawater reverse osmosis. *Desalination and Water Treatment*. 43(1-3): 246-252, 2012 Apr.
- [4] **Jeong S.**, Kim L.H., Kim S.-J., Nguyen T.V., Vigneswaran S., Kim I.S. Biofouling potential reductions using a membrane hybrid system as a pre-treatment to seawater reverse osmosis. *Applied Biochemistry and Biotechnology*. 67(6): 1716-1727, 2012 Jul.

- [5] **Jeong S.**, Choi Y.J., Nguyen T.V., Vigneswaran S., Hwang T.M. Submerged membrane hybrid systems as pretreatment in seawater reverse osmosis (SWRO): Optimization and fouling mechanism determination. *Journal of Membrane Science*. 411–412: 173–181, 2012 Sep.
- [6] Naidu G., **Jeong S.**, Vigneswaran S., Rice S.A. Microbial activity in biofilter used as a pretreatment for seawater desalination. *Desalination*. 309: 254-260, 2013 Jan.
- [7] **Jeong S.**, Naidu G., Vigneswaran S. Submerged membrane adsorption bioreactor as a pretreatment in seawater desalination for biofouling control. *Bioresource Technology*. 141: 57-64, 2013 Jan.
- [8] **Jeong S.**, Kim S.-J., Kim C.M., Vigneswaran S., Nguyen T.V., Shon H.K., Kandasamy J., Kim I.S. A detailed organic matter characterization of pretreated seawater using low-pressure microfiltration hybrid systems. *Journal of Membrane Science*. 428: 290-300, 2013 Feb.
- [9] **Jeong S.**, Kim S.-J., Kim L.H., Shin M.S., Vigneswaran S., Nguyen T.V., Kim I.S. Foulant analysis of a reverse osmosis membrane used pretreated seawater. *Journal of Membrane Science*. 428: 434–444, 2013 Feb.
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- [12] **Jeong S.**, Vigneswaran S. Assessment of biological activity in contact flocculation filtration as a pretreatment in seawater desalination. *Chemical Engineering Journal*. 228: 976-983, 2013 Jun.
- [13] **Jeong S.**, Bae H., Naidu G., Jeong D., Vigneswaran S. Bacterial community structure in a biofilter used as a pretreatment for seawater desalination. *Ecological Engineering*. 60: 370-381, 2013 Nov.
- [14] **Jeong S.**, Sathasivan A., Kastl G., Shim W.G., Vigneswaran S. Experimental investigation and modeling of dissolved organic carbon removal by coagulation from seawater. *Chemosphere*. 95: 310-316, 2014 Jan.
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- [16] Naidu G., **Jeong S.**, Vigneswaran S. Influence of feed/permeate velocity on scaling development in a direct contact membrane distillation. *Separation and Purification Technology*. 125: 291-300, 2014 Apr.

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potential. *Desalination*. 379: 68-74, 2016 Feb.

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- on the crystallization of calcium sulfate in seawater reverse osmosis brine. *Desalination*. 426: 78-87, 2018 Jan.
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- Ca-sepiolite for phosphate removal. *Membrane and Water Treatment*. 11(1): 69-77, 2020 Jan.
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