

## Biographical Data

Institute of Engineering,  
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อาจารย์ ดร.อรุณศรี นุชิตประสิทธิ์ชัย  
**Aroonsri Nuchitprasittichai, Ph.D.**

### Education and Qualifications:

- 2006 B.Sc. (*First Class Honors*) (Petrochemical Technology), King Mongkut's Institute of Technology, Ladkrabang (KMITL), Thailand
- 2009 M.Eng. (Chemical Engineering), The University of Tulsa, USA
- 2013 Ph.D. (Chemical Engineering), The University of Tulsa, USA

### Present Position:

Lecturer, School of Chemical Engineering, Suranaree University of Technology.

### Work Experiences:

- 2016 – Present Lecturer, School of Chemical Engineering, Suranaree University of Technology
- 2013 – 2016 Process Engineer & Productivity Specialist, Praxair (Thailand) Co., Ltd.
- 2012 – 2013 Research Assistant, The University of Tulsa, USA
- 2008 – 2011 Teaching Assistant, The University of Tulsa, USA

### Recognitions and Prestige:

- 2013 Computers & Chemical Engineering Most Download Articles, Sept 2012 – Aug 2013
- 2012 – 2013 Research Assistantship, The University of Tulsa, USA
- 2010 – 2013 ConocoPhillips Doctoral Fellowship

### Research of interest:

CO<sub>2</sub> capture and CO<sub>2</sub> treatment processes,  
Simulation-based optimization

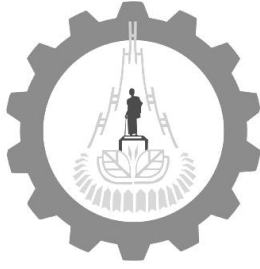
### Computational skills:

Aspen HYSYS, UNISIM, GAMS

### Academic Output:

#### International Publications:

1. **Nuchitprasittichai A.** and Cremaschi S. (2011) "Optimization of CO<sub>2</sub> capture process with aqueous amines using response surface methodology" *Computers & Chemical Engineering*, 35, 1521 – 1531.



**Dr. Aroonsri Nuchitprasittichai**

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2. **Nuchitprasittichai A.** and Cremaschi S. (2013) "An algorithm to determine sample sizes for optimization with artificial neural networks" *AIChE Journal*, 59, 805-812.
3. **Nuchitprasittichai A.** and Cremaschi S. (2013) "Sensitivity of amine-based CO<sub>2</sub> capture cost: the influences of flue gas composition and utility cost fluctuations" *International Journal of Greenhouse Gas Control*, 13, 34 – 43.
4. **Nuchitprasittichai A.** and Cremaschi S. (2013) "Optimization of CO<sub>2</sub> capture process with aqueous amines – a comparison of two simulation-optimization approaches" *Industrial & Engineering Chemistry Research*, 52, 10236 - 10243.
5. Fahmi I.; **Nuchitprasittichai A.**; Cremaschi S. (2014) "A new representation for modeling biomass to commodity chemicals development for chemical process industry" *Computers & Chemical Engineering*, 61, 77 – 89.

#### Conference Proceedings:

1. **Nuchitprasittichai A.** and Cremaschi S. (2011) " Sensitivity analysis for the optimum amine-based CO<sub>2</sub> capture plant: the influences of the flue gas feed composition and utility cost fluctuations" *the 86<sup>th</sup> Annual Meeting of the American Association for the advancement of Science – Southwestern and Rocky Mountain Region*, Oklahoma, USA, March 2012.
2. **Nuchitprasittichai A.** and Cremaschi S. (2011) "Optimization of CO<sub>2</sub> capture process with aqueous amines – a comparison of two simulation – optimization approaches" *2011 AIChE Annual Meeting*, Minneapolis, Minnesota, USA, October 16 – 21, 2011.
3. **Nuchitprasittichai A.** and Cremaschi S. (2012) "Surrogate – based optimization of CO<sub>2</sub> capture process with aqueous amines" *2012 AIChE Annual Meeting*, Pittsburgh, Pennsylvania, USA, October 28 – November 2, 2012.