# Dr Akshat Tanksale

# **Work Experience**

01/2015 – Current: Senior Lecturer (Academic Level C)
 Department of Chemical Engineering, Monash University
 Teaching (40%), Research (40%), Administration (20%) – Director of Graduate Research

# **Research Supervision**

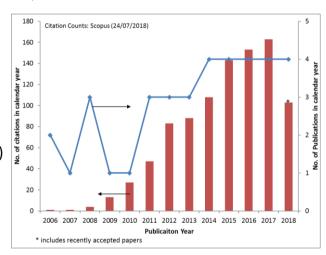
- Supervised 5 PhD students and 1 Research Masters student from commencement to completion
- Currently 1 PhD students are under examination
- Currently supervising 8 PhD students

#### **Selected Awards**

- Selected by the Australian Academy of Science for 2012 Theo Murphy High Flyers Think Tank
- Selected by the Australian Academy of Technological Sciences and Engineering (ATSE) for the 2010
   Australia-Japan Emerging Research Leaders Exchange Program
- Selected by ATSE for the 2010 **Australia-India Science and Technology Award** (sole Australian) to visit National Chemical Laboratories, Pune, India for a period of up to 12 weeks

# **Research Impact**

- Peer Reviewed Papers = 38
- Peer Reviewed Papers (without PhD supervisor) = 23
- Invited Oral Presentations at International
   Conferences = 7, including 1 Keynote Talk
- Citations = 936, with h-index = 15 (Scopus, 23/07/2018)



#### Qualifications

2008: PhD in Chemical Engineering, University of Queensland, Brisbane Australia. **Dean's Award for Outstanding Research Higher Degree Thesis** from the office of Dean, UQ Graduate School

### **Patent Applications**

- 1. A. Tanksale and F.L. Chan, Dimethoxymethane production via direct hydrogenation, Australian Provisional Patent, 2018, PCT/AU2018/050746
- 2. A. Tanksale, Y. Shastri, P. Gholkar, Catalytic conversion of microalgae into hydrogen rich syngas using reactive flash volatilization, Indian Provisional Patent, 2017, Application Number 201721042669
- 3. A. Tanksale, Y. Shastri, P. Gholkar, Catalytic conversion of microalgae into methane rich syngas using reactive flash volatilization, Indian Provisional Patent, 2017, Application Number 201721042668
- 4. A. Tanksale, A. Hoadley, A.M.Bahmanpour, Method and System for Direct Conversion to Formaldehyde, Australian Provisional Patent, 2013, Application number 2013902445

#### **Selected Publications**

#### Journal Publications (\* senior /corresponding author)

- F.L. Chan, G. Altinkaya, N. Fung, A. Tanksale\*, Low temperature hydrogenation of carbon dioxide into formaldehyde in liquid media, Catalysis Today, 2017, Article in Press, DOI: 10.1016/j.cattod.2017.06.012. [IF = 4.636, ranked 6/72 (Applied Chemistry)]
- A.M. Bahmanpour, A. Hoadley, S. Mushrif A. Tanksale\*, Hydrogenation of Carbon Monoxide into Formaldehyde in Liquid Media, ACS Sustainable Chemistry and Engineering, 2016, 4(7), 3970-3977.
   [Cited 7 times, IF = 5.267, ranked 9/135 (Chemical Engineering), 4/29 (Green & Sustainable Science & Technology)]
- F.L. Chan, A. Tanksale\*, Catalytic Steam Gasification of Pinewood and Eucalyptus Sawdust Using Reactive Flash Volatilization, Applied Catalysis B: Environmental, 2016, Volume 187, Pages 310-327
   [Cited 8 times, IF = 8.328, ranked 1/50 (Environmental Engineering), 3/135 (Chemical Engineering)]
- 4. A.M. Bahmanpour, A. Hoadley, **A. Tanksale**\*, Formaldehyde Production via Hydrogenation of Carbon Monoxide in Aqueous Phase, Green Chemistry, 2015, 17 (6), 3500 3507 [Cited 10 times, IF = 6.852, ranked 1/29 (Green & Sustainable Science & Technology), 16/163 (Multidisciplinary Chemistry)]
- 5. **A. Tanksale**, J. N. Beltramini, J. A. Dumesic, G. Q. Lu, "Effect of Pt and Pd Promoter on Ni Supported Catalysts A TPR/TPO/TPD and Microcalorimetry Study", Journal of Catalysis, 2008, 258, 366-377 . [Cited 100 times, IF = 7.354, Ranked 4/135 (Chemical Engineering)]

#### **Selected Grants**

Total grants attracted: AU\$5 million

Chief Investigators	Project Title	Grant Scheme	Amount AU\$('000)
Akshat Tanksale, Alan Chaffee, Samir Mushrif, Andrew Hoadley, Jinghua Guo	A Novel Method for High Purity Formaldehyde Production from Carbon Oxides, 2017 – 2019	ARC Discovery	388
Gil Garnier, Warren Batchelor, George Simon, Akshat Tanksale, Sankar Bhattacharya, Kei Saito, Wei Shen, Prof; Bradley Ladewig, Antonio Patti, Warwick Raverty, Anthony Mackay, Thomas Clark, Tristen Branson, Joseph Tascone, Jacob Chretien,	ARC Research Hub for BioProcessing Advanced Manufacturing, 2014 - 2017	ARC Industry Transformatio n Research Hub	1633
<b>Akshat Tanksale</b> , Gil Garnier, Victoria Haritos	Overcoming current barriers in lignocellulosic advanced biofuels production through a combination of biological and chemical catalysis, 2014 – 2015	CSIRO Flagship Collaboration Fund	200
Mainak Majumder, <b>Akshat</b> <b>Tanksale</b>	Modular Bench Scale Graphene Making Facility, 2014 – 2015	Strategic Energy Resources industry grant	381