# NAGU DARABOINA

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EDUCATION	
MBA-Collins College of Business	2016-2019
University of Tulsa, OK, USA	
Ph.D. – Chemical & Biological Engineering	2008-2012
University of British Columbia (UBC), Vancouver, BC, Canada	
Master of Engineering (M.E.) - Chemical Engineering	2006-2008
Indian Institute of Science (IISc), Bangalore, India	
Bachelor of Technology (B.Tech.) - Chemical Engineering	2002-2006
Jahawarlal Nehru Technological University (JNTU, GVPCOE), Visakhapatnam, India	

# **PROFESSIONAL EXPERIENCE**

August 2018-Present
January 2016-Present
May-June 2019
January 2016-August 2018
December 2014-December 2015
August 2012-December 2014
March-August 2012
June 2009- August 2010

### **AWARDS & HONORS**

Outstanding Reviewer Award, JNGSE Journal	2017, 2018
Outstanding Reviewer Award, Fuel Journal	2017
Outstanding Reviewer Award, Energy Journal	2017
Most cited paper (Chemical Engineering Science)	2015,2016 and 2017
Otto Monsted award	DTU-2014
John R. Grace Graduate Scholarship	UBC-2011-2012
Carbon Management Canada Award	CMC-2012
Four-Year Fellowships (FYF)	UBC- 2009-2012
West Coast Energy Inc Jack Davis Scholarship	UBC-2009-2011
Kumar Gandhi Award	IISc-2008
17th Rank in All India Graduate Aptitude Test in Engineering (GATE)	2005
Gold Medalist	2006

### **TEACHING EXPERIENCE**

The courses I teach include regular lectures integrated with active-learning and peer-to-peer instruction activities, and informal discussion sessions.

### **Courses taught at TU:**

- ENS 3053 -Thermodynamics
- ENS 3073 Heat Transfer
- CHE 3063 Equilibrium Thermodynamics
- CHE 7043 Heat and Mass Transfer

### 2

#### Team leader in Biodiesel synthesis Project-Chemical & Biological Engineering

• Lead the team of undergraduate students to synthesis of eco-friendly Biodiesel from domestic resources in UBC with the help of sustainability club in Chemical and Biological Engineering.

#### Graduate Teaching Assistant – Chemical & Biological Engineering, UBC

- Instructed group of 90 students on laboratory techniques, established lab manuals, and evaluated lab reports critically.
- Teaching assistant for undergraduate courses- conducted tutorials and provided students with critical comments to improve the students' problem solving skills.

# **GRADUATE STUDENTS SUPERVISON**

### Ph.D. Degree Advisor and Co-Advisor

- 1. Niranjan Kumar Loganathan (Current); "Experimental investigation into the role of gelation on wax deposition to guide scale-up and the design of wax inhibitors treatment programs" PhD Dissertation. The University of Tulsa, Tulsa, Oklahoma (Advisor)
- 2. Chandradeep Bollineni (Current); "Produced water purification by novel hydrate technology" PhD Dissertation. The University of Tulsa, Tulsa, Oklahoma (Advisor)
- 3. Ahmed Alhosani. (Current); "Mechanistic modeling of asphaltene deposition in single and multiphase flow". PhD Dissertation. The University of Tulsa, Tulsa, Oklahoma. (Advisor)
- 4. Hanxiao Zhang (current); "Predicting phase equilibrium of salts using electrolyte CPA-EOS" PhD Dissertation. The University of Tulsa, Tulsa, Oklahoma. (Advisor)
- 5. Gabriel Nemesis(current); "Mechanstic Understanding of Paraffin deposition behavior" The University of Tulsa, Tulsa, Oklahoma. (Co-Advisor)
- 6. Elio Triago (current); "The effect of surface wettability on the observed rheology of complex fluid flow in microcapillaries" The University of Tulsa, Tulsa, Oklahoma. (**Co-Advisor**)
- 7. Yuandao Chi (2019); "Wax Deposition under Two-Phase Gas-Oil Stratified Flow" PhD Dissertation. The University of Tulsa, Tulsa, Oklahoma. (**Co-Advisor**)
- 8. Sriram Ravichandran (2018); "Mechanistic Study of Wax Deposition-Effect of Super Saturation" Dissertation. The University of Tulsa, Tulsa, Oklahoma. (Co-Advisor)

### M.Sc Degree Advisor and Co-Advisor.

- 9. Alhejaili, Aziz (Current); "to be determined" M.S. Thesis, The University of Tulsa, Oklahoma (Advisor)
- Elijah Bell. (Current); "Thermal removal of Paraffin deposition in oil gas production lines") M.S. Thesis, The University of Tulsa, Oklahoma. (Advisor
- Jinghao Yang (2019); "Paraffin Deposition Mechanism-Influence of Thermal Driving Force" M.S. Thesis, The University of Tulsa, Oklahoma. (Advisor)
- 12. Arjun Janamatti (2018); "Influence of Thermal and Hydrodynamic conditions on long duration wax deposition" M.S. Thesis, The University of Tulsa, Oklahoma. (Advisor)

#### **UBC-2012**

#### 2008-2012

### M.E Degree Advisor.

13. Mina Daneshvar (2019); "Investigating the effect of droplet size and water cut on wax deposition phenomenon" The University of Tulsa, Oklahoma.

#### **GRADUATE THESIS EXAMINATION COMMITTEES SERVED**

- 2018-Maziad Alsanea," Effect of water cut on onset of liquid loading and foam lift" (M.Sc., TU, USA)
- 2017- Jean-Sebastian Renault Crispo "The effects of mixed promoters on gas hydrate formation" (Ph.D., *Mcgill University*, Montreal, Canada).
- 2016- Hongfei Xu "Study on ice formation and its effect in pipelines" (M.Sc., TU, USA)

### **ARTICLES PUBLISHED OR ACCEPTED IN REFEREED JOURNALS**

Google Scholar profile: https://scholar.google.com.sg/citations?user=SFjuqzEAAAAJ&hl=en

- P-1. Ponnivalavan Babu; Abhishek Nambiar; Zheng Rong Chong; <u>Daraboina, N</u>; Mohammad Albeirutty; Omar A Bamaga; Praveen Linga., "Hydrate-based desalination (HyDesal) process employing a novel prototype design" *Chemical Engineering Science*, 2020, Accepted FEB 8.
- P-2. Alhosani A; and **Daraboina**, N\*, "Unified model to predict asphaltene deposition in production pipelines", Energy&Fuels, 2020, accepted Jan 28.
- P-3. Ravcichandran, S; and <u>Daraboina, N\*,</u> Mechanstic model to prdict hydrate deposition under stratified conditions, Energy&Fuels, 2019,. 33 (10), 9510-9519
- P-4. Janamatti, A., Lu. Y., Ravcichandran, S; Sarica, C. and <u>Daraboina, N\*</u>, Influence of operating temperatures on longduration wax deposition in flow lines, Journal of Petroleum Science and Engineering, 2019, 183, 106373
- P-5. Chi, Y; Yang, J; Sarica, C. and <u>Daraboina, N\*</u>, A critical review of controlling paraffin deposition in production lines using chemicals, Energy&Fuels, 2019, 33 (4), 2797-2809.
- P-6. Chi, Y; Sarica, C. and **Daraboina**, N\*, Experimental investigation of two-phase gas-oil stratified flow wax deposition in pipeline" 2019, Fuel, 247, 113-125.
- P-7. Khurana, M ; Veluswamy, H; **Daraboina**, N\*, and Linga P\*., Thermodynamic and kinetic modelling of mixed CH<sub>4</sub>-THF hydrate for methane storage application. 2019, Chemical Engineering Journal, 370, 760-771.
- P-8. S Navaneetha Kannan, <u>Daraboina, N\*</u>, R Venkatesan, Sarica, C., Settling and re-entrainment of wax particles in neargelling systems" 2018, AICHE, 64 (2), 765-772.
- P-9. Chi, Y; **Daraboina**, N\*, and Sarica, C., "Effect of flow field on the Wax deposition and performance of wax Inhibitors: Cold finger and Flow loop Testing". Energy&Fuels, 2017, 31 (5), 4915-4924.
- P-10. Soedarmo, A, <u>Daraboina, N\*</u>, and Sarica, C., "Validation of wax deposition models with recent laboratory scale flow loop experimental data" 2017, Journal of Petroleum Science and Engineering, 149,351-366.
- P-11. Chi, Y; <u>Daraboina, N\*</u>, and Sarica, C., Invetigation of Inhibitors Efficacy in wax deposition mitigation using a Laboratory Scale Flow Loop. 2016, AICHE, 62 (11), 4131-4139
- P-12. Kumar, A; <u>Daraboina, N</u>; Kumar, R and Linga, P ., Experimental Investigation To Elucidate Why Tetrahydrofuran Rapidly Promotes Methane Hydrate Formation Kinetics: Applicable to Energy Storage" 2016, J. Phys. Chem. C, 2016, 120 (51), pp 29062–29068
- P-13. Soedarmo, A, <u>Daraboina, N\*</u>, and Sarica, C., Microscopic Study of Wax Deposition: Mass Transfer Boundary Layer and Deposit Morphology, Energy&Fuels, 2016, 30 (4), 2674-2686.
- P-14. Soedarmo, A , <u>Daraboina, N\*</u>, Lee, H, and Sarica, C., Microscopic Study of Wax Precipitation-Static Conditions, Energy&Fuels, 2016, 30 (2), 954-961.
- P-15. <u>Daraboina, N</u>, Malmos, C, N von Solms., Testing Antifreeze Protein from the longhorn beetle Rhagium mordax as a kinetic gas hydrate inhibitor using High pressure micro differential scanning calorimeter, Canadian Journal of Chemistry, 2015, 93, 1025-1030.
- P-16. **Daraboina**, N, S Pachitsas, N von Solms., Experimental validation of kinetic inhibitor strength on natural gas hydrate nucleation ; Fuel, 2015, 139, 554-560
- P-17. **Daraboina**, N, S Pachitsas, N von Solms., Natural gas hydrate formation and inhibition in gas/crude oil/aqueous systems; Fuel, 2015 148, 186-190

- P-18. Virginia K. Walker, Huang Zeng, Hiroshi Ohno, <u>Daraboina</u>, N, Hassan Sharifi, S. Alireza Bagherzadeh, Saman Alavi and Peter Englezos., Antifreeze proteins as gas hydrate inhibitors, Canadian Journal of Chemistry, 2015, 93 (999), 1-11
- P-19. Perfeldt, C. M.; Chua, P. C.; <u>Daraboina, N</u>.; Friis, D.; Kristiansen, E.; Ramlov, H.; Woodley, J. M.; Kelland, M. A.; von Solms, N., Inhibition of Gas Hydrate Nucleation and Growth: Efficacy of an Antifreeze Protein from the Longhorn Beetle Rhagium mordax. Energy& Fuel 2014, 28, (6), 3666-3672.
- P-20. Hersuland, P. H., <u>Daraboina N.</u>, Thomsen, K., von Solms, N., "Measuring and modelling of the combined thermodynamic promoting effect of tetrahydrofuran and cyclopentane on carbon dioxide hydrates" Fluid phase equlibria, 2014 381,20-27.
- P-21. **Daraboina**, N.: von Solms, N, "The combined effect of thermodynamic promoters tetrahydrofuran and cyclopentane on the kinetics of flue gas hydrate formation" Journal of Chemical & Engineering Data 60 (2), 247-251
- P-22. Daraboina, N.; Malmos, C.; von Solms, N., Investigation of Kinetic Hydrate Inhibition Using a High Pressure Micro Differential Scanning Calorimeter. Energ Fuel 2013, 27, (10), 5779-5786.
- P-23. Zhong, D. L.; <u>Daraboina, N</u>.; Englezos, P., Coal Mine Methane Gas Recovery by Hydrate Formation in a Fixed Bed of Silica Sand Particles. Energ Fuel 2013, 27, (8), 4581-4588.
- P-24. Daraboina, N.; Christine Malmos,; Nicolas von Solms. (2013) "Investigation of Kinetic Hydrate Inhibition using a High Pressure Micro Differential Scanning Calorimeter" Energy & Fuels; 27, 5779-5786
- P-25. <u>Daraboina, N.;</u>Christine Malmos,; Nicolas von Solms. (2013) "Synergistic Inhibition of Natural Gas Hydrate Formation" *Fuel*, 108,749-757.
- P-26. **Daraboina**, N\*.: Ripmeester, J. A.; Englezos, P., (2013) "The Impact of SO<sub>2</sub> on the Hydrate Formation Kinetics of Post Combustion Carbon Capture in Bed of Silica Sand" *Int. J. Greenhouse Gas Control*, 15, 97-103
- P-27. Zhong, D.; **Daraboina**, N.; and Englezos, P. (2013) "Recovery of CH<sub>4</sub> from coal mine model gas mixture (CH4/N-2) by hydrate crystallization in the presence of cyclopentane". *Fuel*, 106, 425-430.
- P-28. Daraboina, N., Linga, P., Ripmeester, J., and Englezos, P. (2013) "Experimental investigation of the effect of poly-N-vinyl pyrrolidone on methane/propane clathrate in the presence of silica sand". *Chemical Engineering Science*, 93, 387-394.
- P-29. <u>Daraboina, N.</u>, Ripmeester, J., Moudrakowski, I., Walker, V.K. and Englezos, P. (2013). "Assessing the performance of commercial and biological gas hydrate inhibitors using Nuclear magnetic resonance spectroscopy and stirred autoclave" *Fuel*, 105, 630-635.
- P-30. Linga, P.; Daraboina, N.; Ripmeester, J. A.; Englezos, P., (2012) "Enhanced rate of hydrate formation in a fixed bed column filled with sand compared to a stirred vessel". *Chemical Engineering Science*, 68(1), 617-623. ["Most Cited Paper" award by Chem. Eng. Sci. in 2015 (for 2010-2014) & 2016 (2011-2015); Contributed to the "h5 index" of the journal Google Scholar Metrics in 2015 & 2016].
- P-31. <u>Daraboina, N.</u>, Linga, P., Ripmeester, J., Walker, V. K., and Englezos, P. (2011a). "Natural Gas Hydrate Formation and Decomposition in the Presence of Kinetic Inhibitors. 2. Stirred Reactor Experiments." *Energy & Fuels*, 25(10), 4384-4391. [Contributed to the "h5 index" of the journal in Google Scholar Metrics in 2016].
- P-32. <u>Daraboina, N.,</u> Ripmeester, J., Walker, V. K., and Englezos, P. (2011b). "Natural Gas Hydrate Formation and Decomposition in the Presence of Kinetic Inhibitors. 1. High Pressure Calorimetry." *Energy & Fuels*, 25(10), 4392-4397.
- P-33. <u>Daraboina, N.,</u> Ripmeester, J., Walker, V. K., and Englezos, P. (2011c). "Natural Gas Hydrate Formation and Decomposition in the Presence of Kinetic Inhibitors. 3. Structural and Compositional Changes." *Energy & Fuels*, 25(10), 4398-4404.
- P-34. **Daraboina**, N., and Madras, G. (2009) Kinetics of the ultrasonic degradation of poly (alkyl methacrylates). *Ultrasonics Sonochemistry*. 16 (2): 273-279.
- P-35. Shukla, N.B., Daraboina, N., and Madras, G. (2009) Oxidative and photo oxidative degradation of poly (acrylic acid). *Polymer Degradation and Stability*. 94 (8): 1238-1244.
- P-36. **Daraboina**, N., and Madras, G. (2008) Thermal and photocatalytic degradation of poly (methyl methacrylate), poly (butyl methacrylate) and their copolymers. *Industrial & Engineering Chemistry Research*. 47(18): 6828-6834.
- P-37. Shukla, N.B., Darabonia, N., and Madras, G. (2008) Ultrasonic degradation of poly (acrylic acid). Journal of Applied Polymer Science. 112 (2): 991-997.

#### **CONFERENCE PRESENTATIONS (FULL ARTICLES)**

P-38. <u>Daraboina, N,</u> Chi, Y; Eduardo, P: Scott, S: and Sarica, C.,(2018) "Effect of High Pressure on the Performance of Existing Two –phase Models in Well bores", SPE Annual Technical Conference and Exhibition, 24-26 September, Dallas, Texas, USA.

- P-39. Chi, Y; <u>Daraboina, N</u>, and Sarica, C., (2018) "Experimental Study of Wax Deposition under Two-phase Gas-Oil Startified Flow" 11<sup>th</sup> North American Conference on Multiphase Production Technology, 6-8 June, Banff, Canada.
- P-40. A Dubey, Y Chi, <u>Daraboina</u>, N (2017)., Investigating the Performance of Paraffin Inhibitors under Different Operating Conditions" SPE Annual Technical Conference and Exhibition, 9-11 October, San Antonio, Texas, USA.
- P-41. Kumar A, <u>Daraboina, N</u>, Kumar, R and Linga, P (2017)., "Studies of THF –CH4 MixeHydrates Using High Pressure DSC" Proceedings of the 9<sup>th</sup> Int'l Conference on Gas Hydrates Colarado, USA.
- P-42. J Agarwal, S Ravichandran, <u>Daraboina, N.</u>, C Sarica (2017) "Effect of Hydrodynamic Parameters on the Wax Mass Density: Scale Up from Laboratory Flow Loop to Crude Production Pipelines" Offshore Technology Conference, Houston, May 2017.
- P-43. <u>Daraboina, N.</u> Soedarmao, A and Sarica, C. (2016) "Microscopic study of Wax inhibition Mechanism" Offshore Technology Conference, Houston, May 2016.
- P-44. <u>Daraboina, N.</u>, Linga, P., Ripmeester, J.A., Walker, V. K. and Englezos, P. (2014) "The Unusual Growth Behavior of Methane/Ethane/Propane Hydrate Crystals in the Presence of Inhibitor at low pressure" Proceedings of the 8<sup>th</sup> Int'l Conference on Gas Hydrates, Beijing, China.
- P-45. Hersuland, P. H., <u>Daraboina N.</u>, von Solms, N., (2014) "Modeling and Measuring Hydrate Promotion for CO<sub>2</sub> capture" Proceedings of the 8<sup>th</sup> Int'l Conference on Gas Hydrates, Beijing, China.
- P-46. **Daraboina**, N., von Solms, N (2014). "Evaluation of Kinetic Inhibitors for Gas Hydrate Formation in the presence of n-heptane." Proceedings of the 8<sup>th</sup> Int'l Conference on Gas Hydrates, Beijing, China.
- P-47. Perfeldt, C. M.; Chua, P. C.; <u>Daraboina, N.;</u> Friis, D.; Kristiansen, E.; Ramlov, H.; Woodley, J. M.; Kelland, M. A.; von Solms, N.,(2014) Inhibition of Gas Hydrate Formation With a Hyperactive AFP". Proceedings of the 8<sup>th</sup> Int'l Conference on Gas Hydrates, Beijing, China.
- P-48. Daraboina, N., Linga, P., Ripmeester, J.A. and Englezos, P. (2011) Experimental investigation of the effect of poly-N-vinyl pyrrolidone on methane/propane clathrate in the presence of silica sand. Proceedings of the 7<sup>th</sup> Int'l Conference on Gas Hydrates, Edinburgh Scotland.
- P-49. <u>Daraboina, N.</u>, Ripmeester, J.A., Walker, V.K. and Englezos, P. (2011) Multi-scale assessment of the performance of kinetic hydrate inhibitors. Proceedings of the 7<sup>th</sup> Int'l Conference on Gas Hydrates, Edinburgh, Scotland.

#### **BOOK CHAPTERS**

B-1.Duo Sun; **Daraboina**, N; Ripmeester, J., and Englezos, P., "Gas Injection for Disposal and Enhanced Recovery". Chapter 17; 2014; ISBN: 978-1-118-93857-7.

#### LIST OF CONFERENCE PRESENTATIONS (PUBLISHED ABSTRACTS)

- C-1. Ahmed Al-hosani, and <u>Daraboina, N</u>; "Modeling Asphaltene Deposition in Production Pipelines" AIChE Anuual Meeting, Orlando, USA, November 10-15, 2019
- C-2. Yingda Lu, Jinghao Yang, Cem Sarica, Elijah Bell and <u>Daraboina, N.</u> "Paraffin Deposition Modeling Is the Current Methodology Sufficient?" AIChE Annual Meeting, Orlando, USA, November 10-15, 2019
- C-3.Ponnivalavan Babu, Zheng Chong, Abhishek Nambiar, Praveen Linga and <u>Daraboina, N</u>, "Techno-Economic Analysis of Clathrate Hydrate Based Desalination (HyDesal) Process Utilizing LNG Cold Energy" AIChE Anuual Meeting, Orlando, USA, November 10-15, 2019
- C-4. Aziz Alhejali, Samuel Limon, Ponnivallavan Babu and <u>Daraboina, N.,</u> "Desalination of contaminated water via clathrate hydrates" IPEC 2019, San Antonio, October 7-9, 2019.
- C-5. <u>Daraboina, N\*</u>, and Sarica, C., "The current state of knowledge:wax deposition modeling and upscaling challenges" AIChE Anuual Meeting, Pittsburg, PA, USA, October 28-November 2, **2018**
- C-6.Ravichandran, S; <u>Daraboina, N\*</u>, and Sarica, C., Existence of supersaturatipon and its effects on wax deposition behavior" AIChE Anuual Meeting, Pittsburg, PA, USA, October 28-November 2, **2018**
- C-7. Daraboina, N\*, Chi, Y; and Sarica, C., "Experimental and Modeling Study of Gas-Oil Stratified Flow Wax Deposition" Perophase, Utha, USA, July 8-12, 2018.
- C-8. Daraboina, N\*, Navaneetha Kannan, S; Rama Venkatesan and Sarica, C., Settling and Re-Entrainment of Wax Particles in Near Gelling Systems", AIChE Anuual Meeting, San Francisco, CA, USA, November 13-18, 2016.
- C-9. Daraboina, N\*, Alexander Koltveit and Nicolas von Solms., Performance of Biodegradable Kinetic Inhibitors on Natural Gas Hydrate Formation, AIChE Anuual Meeting, San Francisco, CA, USA, November 13-18, 2016.
- C-10. **Daraboina**, N\*, Chi, Y; and Sarica, C., Inhibitors Efficacy in Wax Mitigation Using a Laboratory Scale Flow Loop. Spring Meeting and 12th Global Congress on Process Safety, Houston, April **2016**
- C-11. <u>Daraboina, N</u>. and von Solms, N., "CO2 Capture By Gas Hydrate Formation: Combined Effect of Thermodynamic and Kinetic Promoters" AIChE Annual Meeting, Global Challenges for Engineering a Sustainable Future, San Francisco, CA, USA, November 3-8, **2013**

- C-12. <u>Daraboina, N</u>.; Malmos, C.; von Solms, N., "Inhibition of hydrate formationwith hyperactive antifreeze protein " AIChE Annual Meeting, Global Challenges for Engineering Sustainable Future, San Francisco, CA, USA, November 3-8, 2013
- C-13. Duo Sun; <u>Daraboina, N</u>; Ripmeester, J., and Englezos, P., "Capture of CO2 and Storage in Depleted Gas Reservoirs in Alberta as Gas Hydrate" presented, Fourth International Acid Gas Injection Symposium. Calgary, Canada, September 24- 27, 2013.
- C-14. Sharifi, H.; <u>Daraboina, N.</u>; Ripmeester, J., and Englezos, P., "Nucleation, Growth and Dissociation of Gas Hydrates in Gas/Water and Gas/Oil/Water Type Systems" presented, Fourth International Acid Gas Injection Symposium. Calgary, Canada, September 24- 27, **2013**
- C-15. <u>Daraboina, N</u>.; Malmos, C.; von Solms, N., "Experimental evaluation of the efficacy of ice structuring proteins as natural gas hydrate inhibitors". Presented, Properties and Phase Equilibria for P-roduct and Process Design. Iguazu Falls, Argentina-Brazil, May 26-30, **2013**
- C-16. **Daraboina**, N.; Malmos, C.; von Solms, N., Enhanced kinetic inhibition of natural gas hydrate formation. Presented, 9th European Federation of Chemical Engineering (EFCE). The Hague, Netherlands, April 21-25, **2013**
- C-17. Duo Sun; <u>Daraboina, N</u>; Englezos, P. "Secure Storage of Impure CO2 in the Form of Solid Hydrate in Depleted Gas Pool in Northern Alberta". presented, 62nd Canadian Society Chemical Engineering conference. Vancouver, BC, Canada. October 14-17, 2012.
- C-18. **Daraboina**, N; Ripmeester, J. A.; "Englezos, P. "New insights into gas hydrate decomposition in the presence of synthetic and biological inhibitors". presented, 61st Canadian Society Chemical Engineering conference. London, Ontario, Canada. October 23-26, **2011**.
- C-19. Walker, V.K; **Daraboina**, N; Gordienko, R., Ohno, H.; Ripmeester, J. A.; Englezos, P., Green gas hydrate inhibitors?" Ice -Binding Protein conference. Kingston, Ontario, Canada, August 3-6, 2011.
- C-20. **Daraboina**, N; Ripmeester, J. A.; Walker, V.K.; Englezos, P., "Multi-scale assessment of the performance of kinetic hydrate inhibitors", 7th International Conference on Gas Hydrates Edinburgh, Scotland, United Kingdom, July 17-21, **2011**.
- C-21. **Daraboina**, N; Ripmeester, J. A.; Linga P.; Englezos, P., "Experimental investigation of the effect of poly-N-vinyl pyrrolidone on methane/propane clathrate in the presence of silica sand", 7th International Conference on Gas Hydrates Edinburgh, Scotland, United Kingdom, July 17-21, **2011**.
- C-22. **Daraboina**, N; Ripmeester, J. A.; Walker, V.K.; Englezos, P., "Inhomogeneous hydrate formation induced by kinetic hydrate inhibitors". Presented, American Chemical Society conference, Anaheim, USA, March 27, 2011.
- C-23. **Daraboina**, N.: Alireza B and Englezos, P., Energy and flow assurance aspects of gas hydrate". Presented. Clean energy research center, UBC, December 8, **2010**.
- C-24. <u>Daraboina, N</u>; Ripmeester, J. A.; "Englezos, P. Understanding the Action of kinetic hydrate inhibitors". presented, 60th Canadian Society Chemical Engineering conference. Saskatoon, Saskatchewan, Canada. October 26,2010

#### **INVITED PRESENTATIONS**

- I-1. Chi, Y; <u>Daraboina, N\*</u>, and Sarica, C., "Investigating of thermal effects on two-phase gas oil stratified flow wax deposition" Ocean, Offshore and Arctic Engineering Conference (OMAE), of the American Society of Mechanical Engineers (ASME) in Fort Lauderdale, FL, USA, June 28 - July 3, 2020.
- I-2. <u>Daraboina, N;</u> "Novel desalination Technology" Sustaining Oklahoma's Energy Resources (SOER), Oklahoma City, April 9, 2019.
- I-3. <u>Daraboina, N;</u> "Gas hydrates and its appications" AIChE SLS Annual Conference, National University of Singapore, 18 May 2018.
- I-4. <u>Daraboina, N.,</u> "Industrial perspective on managing hydrate issues in subsea developments" Indian Institute of Teschnology, Madras (IIT). July 2018

### **MEMBERSHIP IN PROFESSIONAL AFFILIATIONS**

- 2010: Canadian Society for Chemical Engineering (CSCHE)
- 2011: American Chemical Society(ACS)
- 2012: Carbon Management Canada (CMC)
- 2013-current : American Institute of Chemical Engineers (AICHE)
- 2015-current: Society of Petroleum Engineers (SPE)

• 2019-current: Offshore Technology Conference sub committee member (OTC)

# **REVIEWER FOR THE FOLLOWING JOURNALS (ACTIVE)**

- Chemical Engineering Science
- Int. J. Greenhouse Gas Control
- Industrial & Engineering Chemistry Research
- Energy
- Materials Chemistry and Physics
- Energy& Fuels
- Fuel
- Fluid Phase Equilibria
- Journal of Natural Gas Science & Engineering
- Canadian Journal of Chemical Engineering
- Journal of Petroleum Science & Engineering
- Energies
- SPE Journals
- Petroleum