

SEUNG IHL KAM, Ph.D

Professor of the Craft & Hawkins Department of Petroleum Engineering
3209-U, Patrick F. Taylor Hall, Louisiana State University (LSU), Baton Rouge, LA 70803
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Full-Time Employment History

Full/Associate/Assistant Prof., Craft & Hawkins Dept. of Petroleum Engr., LSU., since June 2006
Lecturer B (Assistant Prof.), Australian School of Petroleum, U. of Adelaide, May 2002-June 2006
Visiting Senior Research Scientist, Santos, Australia, Nov. 2002 - May 2003
Postdoc, Petroleum & Geosystems Engr., Univ. of Texas at Austin, Jan. 1999 - May 2002

Education

PhD: Petroleum & Geosystems Engr., The Univ. of Texas at Austin, 1998
Dissertation: "Interaction between Bubbles and Solids: Three Applications" (Prof. W.R. Rossen)
MS: Energy and Resources Engr., Seoul National Univ. (Korea), 1994
Thesis: "A Study on Kill Simulation by Combining Transient and Pseudo-Steady States" (Prof. J.M. Kang)
BS: Energy and Resources Engr., Seoul National Univ. (Korea), 1992

Honors, Awards, and Certificates

Promotion to Full Prof., 2017; Tenure (LSU), 2012; Tenure (U. of Adelaide), 2005
Holder of Donald W. and Gayle A. Keller Distinguished Professorship, since Aug. 2007

Elected Council Officer of Energy Division (C2), The Korean American Scientists and Engineers Association (KSEA), 2023-2026

Ewha Global Fellow, Ewha Womans University, 2024-2026.

"Korea Technology Advisory Group (K-TAG)", member, Korea Government, since 2019

"LSU Coastal Directory", member, LSU Energy Coast and Environment, since 2020

"Global Talent", recognition by SK Innovation (EOR, sequestration), since 2013

Adjunct Professor, Graduate School of Engineering Mastership, POSTECH, Korea, 2013-2014

Helping new Subsea Engineering Program (offshore drilling/production facilities; flow assurance)

Adjunct faculty, Australian School of Petroleum (ASP), U. of Adelaide, June 2006 - Aug. 2012

Helping new I/EOR Program (research collaboration; 3 PhD students co-advising)

SPE "A Peer Apart" 2018 Award of Achievement, The Society of Petroleum Engineers, 2018

Achievement of completing more than 100 reviews for SPE's peer-reviewed journals

167 individuals in this elite group as of 2018

Member of the Elite 25-Year Club, The Society of Petroleum Engineers, 2018

SPE HSE Featured paper, with Ms. Thiberville, Dec. 2018

Donald W. Clayton Eng. Exce

LSU "Kudos & Thank You!" recognition, Communication across the Curriculum, Nov. 2022

University-level, based on the feedback from students (professors doing an exceptional job communicating and connecting with them)

Longwell Award for Instructor Excellence, LSU, 2017 and 2020

College-level, based on the contribution to early-year engineering students

Michael R. Mangham Tiger Athletic Foundation Undergraduate Teaching Award, LSU, 2014

University-level, based on teaching philosophy, student evaluation, Dept. support

Zaki Bassiouni Excellence in Instruction Award, PETE department, LSU, 2013

Department-level, voted by senior students in the department

Teaching Excellence Recognition, LSU Baseball Faculty Guest Coach Program, Spring 2010

University-level, nominated by Academic Center for Student Athletes

3-day CxC Institute on Communication Across Curricula, Louisiana State U., May 2009

Three-day Provost's Seminar on Teaching for New Faculty, Louisiana State U., August 2006

Completion of a semester-long "Teaching at University" course, U. of Adelaide, 2004

First prize winner in honor of Dr. J. Earnshaw, Eufoam Conference, Delft, The Netherlands, 2000

Scholarship by Asan Foundation, Hyundai, Korea, 1990-1992

Departmental Alumni Scholarship, Seoul National Univ., Korea, 1989

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Professional and Administrative Activities

College of Engineering Policy Committee, Fall 2011 – Spring 2014

Participating into CoE activities associated with college policy through regular meetings

Performing as PETE liaison on various on-going issues, updates, and feedback

Other Roles as a Faithful PETE citizen

New Research Frontiers (e.g. Subsurface Remediation & Subsea Engineering through Sabbatical Leave Spring 2018; MOU with KRCC, 2009-2015)

Department Promotion & Tenure Committee, since 2012

Coordinator, Department Graduate Seminar (PETE 7999), Fall 2009

Personal Information

Originally from South Korea, married with two children (both in their 20s)
 Big fan of Horrible Science, Horrible Geography, Dead Famous, and Murderous Math series
 Believer of the Magic of Compounding
 Walking/jogging lover with an ambition for Boston Marathon
 Donor to the SNU (Seoul National University) Development Fund, \$1,000/year (2010 - 2013)

Special Skills

Several years of laboratory experience for industry sponsored projects with special emphases on:
 Coreflooding experiments at high P and high T: in a wide range of rock/fluid systems (bead/sand-packs, Berea, Boise, field consolidated/unconsolidated cores, reservoir oils and brines); in presence of chemical additives (polymer, acid, corrosion inhibitor, surfactant) with degradation of chemicals at harsh conditions (precipitation and stability)
 Flow in tubes/pipes: bubble-size distribution for flow characterization; motion of foam films in complicated pore geometries; measurement of interfacial tension and contact angle
 Fundamentals of rock and fluid properties: porosity, permeability (gas, liquid), density, viscosity, resistivity, compressibility, and reservoir parameters
 Ability to independently assemble coreflood apparatus, perform multiphase flow tests, and analyze test results; familiarity with lab safety issues and lab equipment; guiding new graduate students to lab experiments during induction periods
 Experience in simulation and modeling studies including:
 Multiphase flow in porous media: developing mechanistic/dynamic foam simulators in connection with Population Balance technique for foam-assisted recovery processes
 Flow in pipes/annuli: gas-liquid two-phase flow in well control; pipeline leak/plugging
 Use of Eclipse for history matching and future performance forecast: single-well model, sector model, and full field simulation; Use of OLGA for flow assurance
 Modeling of interactions between foams and solids; bubble generation in pore network
 Familiarity with complex computer algorithms, convergence & stability issues, and discretization of hyperbolic, elliptic, and parabolic partial differential equations

Teaching Interest

Enhanced oil recovery and reservoir physics (fractional flow analysis, capillary phenomena, gas and chemical injection, sweep efficiency)
 Petrophysics (rock properties, rock and fluid interactions, interfacial phenomena)
 Reservoir fluid properties (phase behavior with multi-components, equation of state modeling)
 Surface production operations (gas-, oil-, and water-processing facilities and design)
 Near-wellbore production problems (damage control, production enhancement, well deliverability)
 Production engineering (multiphase flow in pipe and annulus, inflow performance, vertical flow performance, nodal system analysis, production optimization, future production forecast)
 Drilling engineering (mud hydraulics, well control, directional drilling, colloidal chemistry, systems)
 Numerical simulation and advanced mathematics (linear algebra, partial differential equation, numerical analysis, reservoir simulation); fundamental engineering courses (fluid mechanics, transport phenomena)

Research Interest (General interest in multi-phase flow in pipes and in porous media)

Improved/enhanced oil recovery, subsurface environmental remediation (eg. surfactant/foam processes, CO₂ foam EOR/sequestration, chemical flooding, adsorption, wettability, polymer-enhanced/gelled foam, well stimulation, gas or water blocking, population balance model)
 Stability and flow of complex fluid system in pipes and slits (eg. foam-solids interactions, foam-oil interactions, foam fracturing for gas shales and tight sands, foam drilling, solid transports)
 Drilling and production facilities including deepwater development and subsea structures
 Fluid assurance, flow in pipes (eg. well control, pipeline leak/plugging detection, liquid unloading)
 Nano-materials (eg. transport of nanoparticles; filtering with nano-porous medium)

Research Group Members

<Current Research Students>

Hazem Fleifel (PhD)
Investigation of Co-Current and Counter-Current Flow Applications in Petroleum Industry

Betty Cepeda (PhD)
Mobility-Control Surfactant/Foam Process for Subsurface Environmental Remediation
Mobility-Control Surfactant/Foam Process for EOR and CCUS Potential

<Previous Research Students>

PhD, MS:

Yanfang Wang (PhD, 2021), Mohammad Izadi (PhD, 2019), Seungjun Lee (PhD, 2014),
Alireza Edrisi (PhD, 2014), Alireza Roostapour (PhD, 2013), Rahul Gajbhiye (PhD, 2011);

Betty Cepeda (MS, 2023); Tooba Riaz (MS, 2021), Caitlyn Thiberville (MS, 2020), Hazem
Fleifel (MS, 2020), Ran Wang (MS, 2019), Doris Ortiz (MS, 2017), Woochan Lee (MS,
2014), Sneha Panchadhara (MS, 2011), Ali Afsharpoor (MS, 2009), Miodrag Bogdanovic
(MS, 2008), Zulfiqar F. Dholkawala (MS, 2006, U. of Adelaide)

Undergraduates:

Haliburton Scholar

Juliana Lang (fall 2021 – spring 2022), Madison Thony (fall 2021 – spring 2022), Marian
Luzier (fall 2020 – spring 2021), Olivia Belle Kilpatrick (fall 2019 – spring 2020), Jacqueline
Gonda (fall 2019 – spring 2020), Kayla Lehmann (fall 2017- spring 2019), Sarah Jones
(fall 2018 - spring 2019), Phuc Perrie Nguyen (fall 2017- spring 2018)

Presidential Future Leader in Research Program

P. Block (fall 2018 - spring 2019); A. Gupta (fall 2006 - spring 2007)

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< Publications >

1. B. Cepeda-Salgado, G.S. Lee, I. Gupta, C. Willson, and S.I. Kam, "Surfactant/Foam Processes in Shallow Subsurface Remediation: Evaluation of Foams as a Blocking Agent," **Transport in Porous Media**, p. 709-732, Vol. 149, 2023.
2. B. Cepeda-Salgado, H. Fleifel (both first authors); G.S. Lee, and S.I. Kam, " A Simulation Study of Pilot-Scale In-Situ NAPL Remediation Treatment by Using Surfactant and Foam Processes in a Military Base South Korea," **Journal of Contaminant Hydrology**, p. 1-16, Vol. 247, 2022.
3. M. Izadi, P. Nguyen, D.P. Ortiz Maestre, H. Fleifel, and S.I. Kam, "An Investigation of Mechanistic Foam Modeling for Optimum Field Development of CO2 Foam EOR Application,"

18. A. Edrisi and S.I. Kam, "A New Foam Model in Pipes for Drilling and Fracturing Applications," **SPE Journal**, p. 576-585, Vol. 19, Issue 1, 2014.
19. A. Edrisi, R.N. Gajbhiye, and S. I. Kam, "Experimental Study of Polymer-free and Polymer-added Foams for Underbalanced Drilling: Are Two Foam-Flow Regimes Still There?" **SPE Journal**, p. 55-68, Vol. 19, Issue 1, 2014.
20. S. Lee and S.I. Kam, "Three-Phase Fractional Flow Analysis for Foam-Assisted Non-Aqueous Phase Liquid (NAPL) Remediation," **Transport in Porous Media**, Vol. 101, Issue 3, p. 373-400, 2014.
21. S. Lee and S.I. Kam, "Enhanced Oil Recovery by Using CO₂ Foams: Fundamentals and Field Applications," a book chapter in "Enhanced Oil Recovery Field Case Studies" (James Sheng), **Gulf Professional Publishing (Elsevier)**, ISBN:9780123865458, May 2013.
22. A. Roostapour and S.I. Kam, "Anomalous Foam Fractional Flow Solutions at High Injection Foam Quality," **SPE Reservoir Evaluation and Engineering**, p. 40-50, February, 2013.
23. A. Edrisi and S.I. Kam, "Mechanistic Leak-Detection Modeling for Single Gas-Phase Pipelines: Lessons Learned from Fit to Field-Scale Experimental Data," **Advances in Petroleum Exploration and Development**, Vol. 5, No. 1, p. 22-36, May 2013.
24. A. Roostapour and S.I. Kam, "Modeling Foam Delivery Mechanisms in Deep Vadose-zone Remediation Using Method of Characteristics," **Journal of Hazardous Materials**, Vol. 243, p. 37-51, December 2012.
25. R.N. Gajbhiye and S.I. Kam, "The Effect of Inclination Angles on Foam Rheology in Pipes," **Journal of Petroleum Science and Engineering**, Vol. 86–87, p. 246–256, May 2012.
26. S. Panchadhara, R.N. Gajbhiye, G.S. Lee, and S.I. Kam, "The Effect of Oil on Foam Stability during Foam Flow in Pipes," Editorial Invitation, **Exploration & Production: The Oil and Gas Review**, Vol. 9, Issue 1, p. 41-44, April 2011.
27. R.N. Gajbhiye and S.I. Kam, "Characterization of Foam Flow in Horizontal Pipes by Using Two-Flow-Regime Concept," **Chemical Engineering Science**, Vol. 66, p. 1536-1549, April 2011.
28. M. Namdar-Zanganeh, S.I. Kam, T. La Force, and W.R. Rossen, "The Method of Characteristics Applied to Oil Displacement by Foam," **SPE Journal**, vol. 16, No. 1, p. 8-23, 2011.
29. G.S. Lee, J.S. Jang, J.Y. Um, E.Y. Kim, and S.I. Kam, "A Field Study of Surfactant-Enhanced In-situ Remediation by Using Horizontal

40. Z.F. Dholkawala, H.K. Sarma, and S.I. Kam, "Application of Fractional Flow Theory to Foams in Porous Media," **Journal of Petroleum Science and Engineering**, Vol. 57, p. 152-165, May 2007. – ***"Top-20 most cited articles," Journal of Petroleum Science and Engineering***
 41. S.I. Kam, W.W. Frenier, S.N. Davies, and W.R. Rossen, "Experimental Study of High-Temperature Foam for Acid Diversion," **Journal of Petroleum Science and Engineering**, Vol. 58, p. 138–160, August 2007.
 42. S.I. Kam, Q.P. Nguyen, Q. Li, and W.R. Rossen, "Dynamic Simulation with an Improved Model for Foam Generation," **SPE Journal**, p. 35–48, March 2007. – ***Considered for the 2008 Cedric K. Ferguson Medal Award***
 43. S.I. Kam and J. Choe, "Implication of Foam Generation Surface on Shallow Groundwater Remediation," **Journal of Korean Geosystem Engineering**, Vol. 43, No. 5, p. 499-508, October, 2006.
 44. S.I. Kam, "Mechanistic Foam Simulation near Limiting Capillary Pressure," **Journal of the Korean Society for Geosystem Engineering**, Vol. 42, No. 2, p.101-112, April, 2005.
 45. S.I. Kam and J. Choe, "Foams for Aquifer Remediation: Two Flow Regimes and Its Implication to Diversion Process," **Journal of Korean Society of Soil and Groundwater Environment**, Vol. 9, No. 1, p. 1-11, March, 2004.
 46. S.I. Kam and W.R. Rossen, "A Model for Foam Generation in Homogeneous Media," **SPE Journal**, p. 417-425, Dec. 2003.
 47. C.K. Mamun, J.G. Rong, S.I. Kam, H.M. Liljestrand, and W.R. Rossen, "Simulating Use of Foam in Aquifer Remediation," **Developments in Water Science**, Vol. 47, No. 1, p. 867-874, June, 2002.
 48. L. Cheng, S.I. Kam, M. Delshad, and W.R. Rossen, "Simulation of Dynamic Foam-Acid Diversion Processes," **SPE Journal**, p. 316-324, Sept. 2002.
 49. P.A. Gauglitz, F. Friedmann, S.I. Kam, and W.R. Rossen, "Foam Generation in Homogeneous Porous Media," **Chemical Engineering Science**, Vol. 57, p. 4037-4052, Oct. 2002.
 50. S.I. Kam, P.A. Gauglitz, and W.R. Rossen, "The Yield Stress of Foamy Sands," **Colloids and Surfaces, A: Physicochemical and Engineering Aspects**, Vol. 202, Issue 1, p. 53-62, March 2002.
 51. S.I. Kam and W.R. Rossen, "The Compressibility of Foamy Sands," **Colloids and Surfaces, A: Physicochemical and Engineering Aspects**, Vol. 202, Issue 1, p. 63-70, March 2002.
 52. S.I. Kam, P.A. Gauglitz, and W.R. Rossen, "Effective Compressibility of a Bubbly Slurry I. Mechanisms of Bubble Growth," **Journal of Colloid and Interface Science**, Vol. 241, No. 1, p. 248-259, 2001.
 53. S.I. Kam, P.A. Gauglitz, and W.R. Rossen, "Effective Compressibility of a Bubbly Slurry II. Fit to Field Measurement and Implications," **Journal of Colloid and Interface Science**, Vol. 241, No. 1, p. 260-268, 2001.
 54. S.I. Kam and W.R. Rossen, "Anomalous Capillary Pressure, Stress, and Stability of Solids-Coated Bubbles," **Journal of Colloid and Interface Science**, Vol. 213, No.2, p. 329-339, 1999.
 55. S.I. Kam and J.M. Kang, "An Efficient Approach for Simulation of Kill," **Journal of Japanese Association for Petroleum Technology**, Vol. 60, No.3, 199-209, May, 1995.
 56. S.I. Kam and J.M. Kang, "A Simulation of Kill Processes Combining Transient and Pseudosteady States," **Journal of Korean Institute of Mineral & Energy Resources Engineers**, Vol. 31, No. 5, 78-82, October, 1994.
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< Presentations >

1. B. Cepeda-Salgado, H. Fleifel, G.S. Lee, and S.I. Kam, " A Field Case Study: In-situ Surfactant and Foam Treatments for Subsurface Remediation of Non-Aqueous Phase Liquids (NAPL)," proceeding; to be presented at **the 37th annual US-Korea Conference on Science, Technology, and Entrepreneurship (UKC 2024)**, San Francisco, CA, 21-24 August 2024.
2. S.I. Kam, "Green and Net Zero," **the 2024 SK Innovation Global Forum**, to participate as a panelist and presenter, San Jose, CA, 13-14 July 2024. **- invitation**
3. M. Zeidouni, R. Hughes, I. Gupta, and S.I. Kam, "CCUS Research, Training, and Outreach activities at Craft & Hawkins Department of Petroleum Engineering, Louisiana State University," to be poster-presented at the 2024 SPE/PEDHA Workshop for "Fueling the Future: Petroleum Engineering Industry/Education in a New Era", University of Houston, Houston, TX, 8-9 Aug. 2024.
4. O. Olorode and S.I. Kam, "Multiscale Simulation of Energy Resources," to be poster-presented at the 2024 SPE/PEDHA Workshop for "Fueling the Future: Petroleum Engineering Industry/Education in a New Era", University of Houston, Houston, TX, 8-9 Aug. 2024.
5. B. Cepeda-Salgado and S.I. Kam, "Fractional Flow Analysis for Supercritical CO2 Injection for Enhanced Oil Recovery and Underground Storage," presented at the 2nd Graduate Research Conference (podium), Baton Rouge, LA, 30 April 2024.
6. H. Fleifel and S.I. Kam, "Downward Displacement of a Long Gas Bubble in a Vertical Well," presented at the 2nd Graduate Research Conference (poster), Baton Rouge, LA, 30 April 2024.
7. B. Cepeda-Salgado and S.I. Kam, "Evaluation of CO2 Foam Process for Enhanced Oil Recovery and CO2 Storage Potential," presented at **Energy Transition Research Symposium**, Baton Rouge, LA, 6 October 2023.
8. S.I. Kam, " CO2 EOR and Carbon Capture Utilization and Storage (CCUS): Field-Scale Application of Mobility-Control CO2 Foams," proceeding; presented at **the 36th annual US-Korea Conference on Science, Technology, and Entrepreneurship (UKC 2023)**, Dallas, TX, 2-5 August 2023.
9. B. Cepeda-Salgado and S.I. Kam, "Analysis of Saturation Wave Propagation during Supercritical CO2 EOR and Storage Processes: With and Without Foaming Agents," presented at **the 26th Annual Gulf of Mexico Deepwater Technical Symposium**, New Orleans, LA, 22-24 July 2023.
10. H. Fleifel and S.I. Kam, "Understanding Mechanisms of Bullheading Well Control Process by Using Transient Numerical Simulations" presented at **the 26th Annual Gulf of Mexico Deepwater Technical Symposium**, New Orleans, LA, 22-24 July 2023.
11. S.I. Kam, "Now We Have Two Challenges – Meeting the Energy Demands and Helping the Environment with Sustainability," presented at **the 1st World Conference of Korean Scientists and Engineers**, Seoul, South Korea, 4-7 July 2023. **- invitation**
12. B. Cepeda-Salgado, G.S. Lee, and S.I. Kam, " Evaluation of Pilot-Scale Surfactant and Foam Remediation Processes for LNAPL Removal," presented at **the 18th Annual International Symposium on Environment (Athens Institute for Education and Research)**, Athens Greece, 10-13 July 2023.
13. H. Fleifel and S.I. Kam, "Lessons learned from Simulation Fit to Field-scale Bullheading Experiments" presented at **the 2023 AADE National Tech Conference & Exhibition**, Midland, TX, 4-5 April, 2023. **- invitation; Second Prize Winner of the Student Presentation**

Mexico Deepwater Technical Symposium, New Orleans, LA, 22-24 August 2022. **– First Prize Winner of the Student Presentation**

18. S.I. Kam, "Green and Net Zero," **the 2022 SK Innovation Global Forum**, Panelist, San Jose, CA, 11-12 June 2022. **– invitation**
19. M. Izadi, B. Cepeda-Salgado, and S.I. Kam, "Mechanistic Modeling of Foam-Assisted EOR Simulations: Comparing Two Key Foam Generation Mechanisms," **OTC 31885** presented at **the 2022 Offshore Technology Conference**, Houston, TX, 2-5 May 2022.
20. H. Fleifel, C.J. Thiberville, and S.I. Kam, "Multi-valued Problems Associated with Liquid-assisted Gas-lift Processes and Its Implication for Production Enhancement," **OTC 32075** presented at **the 2022 Offshore Technology Conference**, Houston, TX, 2-5 May 2022.
21. H. Fleifel, Y. Wang, and S.I. Kam, "Modeling and Transient Simulation of Foam-Assisted Bullheading Processes in MPD and UBD Applications," presented at **the 2022 AADE National Fluids Conference & Exhibition**, Houston, TX, 9-10 April, 2022. **– invitation**

35. R. Wang, Y. Wang, M. Tyagi, Y. Chen, and S.I. Kam, "Predicting Transient Wellbore Temperature Profile by Using Multi-Dimensional CFD Analysis for Offshore Wells," presented at **the 23rd Annual Gulf of Mexico Deepwater Technical Symposium**, New Orleans, LA, 26-28 August 2019.
36. S.I. Kam, "CO2 capture, Storage and Utilization," **the Annual SK Global Forum**, panelist, Jersey City, New Jersey, 15-16 June 2019. – *invitation*
37. C. Thiberville, invited IADC student ambassador promoting research group's activities on "Foam-Assisted Drilling and Unloading Processes," **the IADC World Drilling 2019 Conference and Exhibition**, Milan, Italy, 19-20 June, 2019. – *invitation*
38. C. Thiberville, P. Waltrich, W. Williams, and S.I. Kam, "Novel Technology of Smart Pigging for Pipeline Leak Detection: Mathematical Formulation of the Concept," presented at **the 2019 Pipeline Simulation Interest Group (PSIG) Conference**, London, UK, 14-17 May, 2019. – *special invitation to the 2019 Recipient of the Don Schroeder PSIG Scholarship*
39. S.I. Kam, "Shaping the Energy Future: The St

**Gulf of Mexico Deepwater Technical Symposium, New Orleans, LA, 21-23 August 2017. =
Honorable Mention (Student Oral Presentation)**

53. M. Izadi and S.I. Kam, "A Guide to Supercritical CO₂ Foam Field Design and Implementation," presented at the **21st Annual Gulf of Mexico Deepwater Technical Symposium**, New Orleans, LA, 21-23 August 2017. **-Honorable Mention (Student Oral Presentation)**

70. A. Roostapour, paper contest, "Foam-Assisted Deep Vadose Zone Remediation," the **2013 Regional SPE Student Paper Contest**, University of Texas at Austin, April 2013. **- Represented LSU PE PhD division**
71. A. Edrisi and S.I. Kam, "How to Improve Current Foam Drilling Hydraulics Calculations Using a New Concept of Two Foam Flow Regimes," presented at the **AADE National Technical Conference and Exhibition**, Oklahoma City, OK, 26-27 Feb 2013. **- invitation**
72. A. Edrisi and S.I. Kam, "Leak-Detection Modeling for Early Warning System: How to Identify a Leak Location Using Steady-State Leak-Detection Modeling for in Long Gas Pipelines," presented at the **2013 SPE Americas E&P Health, Safety, Security & Environmental Conference**, Galveston, TX 18-20 March 2013. **-invitation; First Prize Winner of the Student Paper Contest (poster and oral)**
73. S.I. Kam, "Addressing the Challenges of Future Offshore Projects," presented at the **1st Offshore Korea Conference and Exhibitions**, Busan Korea 14-16 Nov., 2012. **- also an invited panelist**
74. A. Edrisi, R.N. Gajbhiye, and S.I. Kam, "Experimental Study of Polymer-free and Polymer-added Foams for Underbalanced Drilling: Are Two Foam-Flow Regimes Still There?" SPE 162712 presented at the **2012 SPE Canadian Unconventional Resources Conference**, Calgary, Canada, 30 Oct. – 1 Nov., 2012.
75. A. Edrisi and S.I. Kam, "A New Foam Rheology Model for Shale-Gas Foam Fracturing Applications," SPE 162709 presented at the **2012 SPE Canadian Unconventional Resources Conference**, Calgary, Canada, 30 Oct. – 1 Nov., 2012. **- OnePetro Top-5 Downloads in the past 30 days (450+ counts), May 2013**
76. S. Lee, G.S. Lee, and S.I. Kam, "Modeling Foam Displacement in a Multi-layer System Using Three-phase Fractional Flow Analysis," presented at the **16th Annual Gulf of Mexico Deepwater Technical Symposium**, New Orleans, LA, 15-16 August, 2012.
77. A. Edrisi and S.I. Kam, "New Concept of Two Foam Flow Regimes in Pipes: How to Build a Foam Model Consistently?" presented at the **16th Annual Gulf of Mexico Deepwater Technical Symposium, New Orleans**, LA, 15-16 August, 2012.
78. G.S. Lee, J.Y. Uhm, Y.I. Kim, and S.I. Kam, "Demonstration of In-situ Remediation Using a Low Concentration Surfactant in a Shallow Aquifer," presented at **the 2012 International Conference on Environmental Science and Technology**, Houston TX, June 25-29, 2012.
79. A. Edrisi and S.I. Kam, "Modeling Foam Flow in Pipes Using Two Foam-Flow Regime Concept in Drilling Application," presented at **the AADE Technical Conference and Exhibitions**, Houston, 9-11 April, 2012. **-invitation**
80. A. Roostapour and S.I. Kam, "Anomalous Foam Fractional Flow Solutions at High Injection Foam Quality," SPE 152907 presented at the **48th SPE Improved Oil Recovery Symposium**

87. R.N. Gajbhiye and S.I. Kam, "The Effect of Oil on Foam-Assisted Underbalanced Drilling Processes," poster-presented at the **14th Annual Gulf of Mexico Deepwater Technical Symposium**, New Orleans, LA, 18-19 August, 2010.
88. A. Roostapour and S.I. Kam, "Anomalous Fractional Flow Solutions for Foams in Improved and Enhanced Oil Recovery Processes," poster-presented at the **14th Annual Gulf of Mexico Deepwater Technical Symposium**, New Orleans, LA, 18-19 August, 2010. **– Second Prize**

- Market: An Integrated and Global Optimisation Approach to Finding Petroleum Engineering and Geoscience Solutions," Adelaide, Australia, 16-17 Sep, 2005.
105. S.I. Kam and J. Choe, "Implication of Foam Generation Surface on Shallow Groundwater Remediation," presented at the **5th International Symposium on Advanced Environmental Monitoring**, Seoul, Korea, 28-30 April, 2004.
 106. S.I. Kam, Q.P. Nguyen, Q. Li, and W.R. Rossen, "Dynamic Simulation with an Improved Model for Foam Generation," SPE 90938 presented at the **SPE Annual Technical Conference and Exhibition**, Houston, TX, USA, 26-29 Sept., 2004.
 107. S.I. Kam, Q.P. Nguyen, Q. Li, and W.R. Rossen, "Dynamic Simulation of Foam Generation in Porous media," presented at the **European Conference on Foams, Emulsions and Applications**, Paris, France, 5-8 July, 2004.
 108. S.I. Kam, W.W. Frenier, S.N. Davies, and W.R. Rossen, "Experimental Study of High-Temperature Foam for Acid Diversion," SPE 82266 presented at the **SPE European Formation Damage Conference**, The Hague, The Netherlands, 13-14 May 2003.
 109. S.I. Kam and W.R. Rossen, "A Model for Foam Generation in Homogeneous Media," SPE 77698 presented at the **SPE Annual Technical Conference and Exhibition**, San Antonio, TX, USA, 29 Sept.-2 Oct., 2002.
 110. C.K. Mamun, J.G. Rong, S.I. Kam, H.M. Liljestrand, and W.R. Rossen, "Extending Foam Technology from Improved Oil Recovery to Environmental Remediation," SPE 77557 presented at the **SPE Annual Technical Conference and Exhibition**, San Antonio, TX, USA, 29 Sept.-2 Oct. 2002.
 111. C.K. Mamun, J.G. Rong, S.I. Kam, H.M. Liljestrand, and W.R. Rossen, "Simulating Use of Foam in Aquifer Remediation," presented at the **14th International Conference on Computational Methods in Water Resources**, Delft, The Netherlands, 23-28 June 2002.
 112. P.A. Gauglitz, F. Friedmann, S.I. Kam, and W.R. Rossen, "Foam Generation in Porous Media," SPE 75177 presented at the **SPE/DOE 13th Symposium on Improved Oil Recovery**, Tulsa, OK, USA, 13-17 April 2002.
 113. L. Cheng, S.I. Kam, M. Delshad, and W.R. Rossen, "Simulation of Dynamic Foam-Acid