

Pacelli L. J. Zitha is a **Professor and Chair of Oil and Gas Production Engineering** at the Delft University of Technology Department of Geoscience and Engineering. From 2002 to 2007 he was Scientific Director of the Dietz Laboratory at the Department of Geotechnology. From 2006 to 2010 he worked as a Senior Research Advisor with Shell. He is the founder of Binga Energy B.V., an energy firm based in the Netherlands which provides technical and reservoir management services for oil and gas field development and invests in renewable energies. He holds an MSc degree in Theoretical Fluid Physics (1991) and a PhD degree in Condensed Matter Physics (2004), from the University Pierre et Marie Curie (Paris VI). For more than 18 years he conducted research water management and IOR/EOR. He published over 105 technical and scientific papers. He lectured various short courses including Formation Damage and Natural Gas Engineering, Production Engineering. He served in various committees including the SPE R&D Advisory Committee (2007-2010) and as Chairman of the European Formation Damage Conference (2009, 2011).

Personal information

Name:	Pacelli Lidio Jose ZITHA	Tel.:	+31-15-278 84 37
Address:	Wielengahof 44 2625 LK Delft The Netherlands	Mob.:	+31-6 20 61 66 71
		Fax:	+31-15-278 11 89
		E-mail:	p.l.j.zitha@tudelft.nl

Expertise

Reservoir management	Conventional and unconventional
Improved and enhanced oil recovery (IOR/EOR)	Natural Gas Geological CO ₂ storage
Produced water management	Complex reservoir fluid flow modelling

Skills

Visionary, entrepreneurial and inspirational	Planning, budgeting, scheduling and reporting
Programme initiation and management	Stakeholder management

Languages

Dutch	fluent: read, written, spoken
English	fluent: read, written, spoken
Portuguese	fluent: read, written, spoken
French	fluent: read, written, spoken

Academic Career

2007-present: Professor, Chair of Oil and Gas Production
Delft University of Technology; Department of Geotechnology; Delft, The Netherlands

2003-2007: Associate Professor of Oil and Gas Production
Delft University of Technology; Department of Geotechnology; Delft, The Netherlands

1997-2003: Assistant Professor of Oil and Gas Production
Delft University of Technology; Department of Geotechnology; Delft, The Netherlands

Management Experience

2002-2007: Scientific Director, Laboratory of Geotechnology
Delft University of Technology; Department of Geotechnology; Delft, The Netherlands

2004-2005: Chairman, Students Recruitment Committee ('Voorlichtingscommissie-VOCO')
Delft University of Technology; Department of Geotechnology; Delft, The Netherlands

Industrial Experience

2013- present Founder of Binga Energy, B.V.

2010- present Senior Consultant: Staatsolie, Shell, Wintershall, TAQA Energy, Petronas, Petrochina, 3M, E.ON, Chevron

2007-2010: Senior Research Advisor (on partial secondment from the Delft University of Technology)
Shell International E&P, Improved/Enhanced Oil Recovery Division, Rijswijk, The Netherlands

2006-2007: Senior Research Advisor (on partial secondment from the Delft University of Technology)
Shell International E&P, Exploratory Research, Rijswijk, The Netherlands

Membership

American Physical Society (APS)
Society of Rheology (SoR)
Society of Petroleum Engineers (SPE)
International Association of Colloid and Surface Scientists (IACIS)

Professional achievements

- 1997-present:** Assistant/Associate/Full Professor and Scientific Director for the Dietz-Laboratory
Delft University of Technology; Department of Geotechnology; Section Petroleum Engineering:
- Administrated the Dietz Laboratory (6 scientists, 12 PhD students, 15 MSc students and 9 technicians)
 - Supervised or co-supervised more than 15 Msc students and 8 PhD students
 - Lecturing of petroleum engineering, polymer rheology and X-ray computed tomography courses
 - Scientific, Administrative and Financial Co-ordination of multi-client and international upstream research projects:
 1. 2015-2019: "FA-WAG optimization for heterogeneous Reservoirs" (Duration: 4 years, Funding: 350 kEuro, Sponsor: Shell & Petronas). Ongoing (1 PhD student)
 2. 2013-2015: "Chemical EOR Core-flooding Experiments and Numerical Simulations" (Duration: 3 years, Funding: 800 kEuro, Sponsor: Shell). (3 Post-Doctoral Fellows)
 3. 2009-2015: "Reservoir Behaviour during CO₂ Storage into Depleted gas Reservoirs and Deep Saline Aquifers" (Duration: 5 years, Funding: 1800 kEuro, Sponsor: CATO II). (3 PhD student; 3 Post-Doctoral Fellows)
 4. 2008-2010: "Immiscible Foam Enhanced Oil Recovery" (Duration: 18 years, Funding: 200 kEuro, Sponsor: Shell). (1/2 PhD student)
 5. 2007-2009: "Feasibility Study of Foam Injection for the Draugen Field" (Duration: 2 years, Funding: 200 kEuro, Sponsor: Shell). (1/2 PhD student)
 6. 2007-2009: "Investigation of the Stability and Gas hydrates" (Duration: 4 years, Funding: 300 kEuro, Sponsor: Shell). Ongoing (1 PhD student)
 7. 2006-2010: "Investigation of the Stability and Gas hydrates" (Duration: 4 years, Funding: 300 kEuro, Sponsor: Shell). Ongoing (1 PhD student)
 8. 2004-2008: "Screening Criteria for Water Control in Carbonaceous Formations: an MRI and X-Ray Computed Tomography study", (Duration: 4 years, Funding: 266 kEuro, Sponsor: Saudi-Aramco). Ongoing (1 PhD Student)
 9. 2004-present: "Dynamics of complex fluids in porous media", (Duration: 4 years, Funding: 208 kEuro, Source: Delft Research Centre). Ongoing (1 PhD Student)
 10. 2003-present: "Effect of Gels on Geological Heterogeneity of Porous Media: an MRI and X-Ray Computer-Aided Tomography Study (DELFGEL)", project (Duration: 4 years, Total budget: 1 700 kEuro; Funding source: Dutch Technology Foundation (STW) 65%, Oil and Service Companies 20%, Research Institutes 15%). Ongoing (2 PhD students)
 11. 1999-present: "Magnetic fluids for the oil industry", (Internal budget). Patented the application of magneto-rheological fluids in oil and gas production. (4 MSc students)
 12. 2000-2002: "Well Treatment and Water Shutoff by Polymer Gels (WELGEL II)", joint industrial project (Duration: 2 years, Total budget: 600 kEuro; Funding source: Consortium of Oil and Service Companies 85%, Research Institutes 15%). Developed self-selective chemical for water shutoff and undertook technical planning, budgeting, scheduling of field scale water shutoff pilot test in the industry
 13. 1999-2004: "Foam dynamics in porous media", joint industry project (Duration: 4 years, Funding: 400 kEuro; Source: Shell 40%, Halliburton 40%, Delft University of Technology 20%). Research revealed new aspects of foam behaviour in porous media using X-ray computer tomography. (1 PhD Student: Graduated *Cum Laude*, 4 Msc students)
 14. 1997-1999: "Well Treatment and Water Shutoff by Polymer Gels (WELGEL I)", European Cooperation project (Duration: 2 years, Funding: 2 000 kEuro; Source: European Commission 50%, Oil and Service Companies 25%, Research Institutes 25%). Identified chemical for water shutoff in oil and gas wells and developed a new polymer gel for confinement of ground water contaminants. (1 PhD Student)
- 1995-1997:** Associate Researcher, Delft University of Technology;
Department of Applied Earth Sciences; Section Petroleum Engineering:
- Conducted two polymer research projects:
 1. Polymers and Gels for (a) Enhanced oil Recovery and Water Shutoff (Budget: 30 kEuro, 100% Shell) and (b) The Confinement of Ground Water Contaminants (Budget: NOVEM 45%; European Commission 55%)
 2. Foams for acid diversion and Gas shutoff (Budget: 9 kEuro, 100% Shell)
 - Co-supervised 4 Msc students and 2 PhD students
 - Lectured three petroleum engineering courses
- 1994-1995:** Post-Doctoral Researcher, Delft University of Technology;
Department of Applied Earth Sciences; Section Petroleum Engineering:
- Co-ordinated experimental research within European Commission project on "Screening Criteria for Polymer Flooding" expanded research programme on polymer rheology in porous media.
 - Co-Supervised of 3 MSc students and 1 PhD student
 - Lectured reservoir engineering course

Publications**Patents**

- Zitha, P.L.J., A method for oil recovery using magneto-rheological fluids, PCT
 Zitha, P.L.J., A method for drilling a well using magneto-rheological fluids, PCT
 Zitha, P.L.J. and Jansen, J.-D., Control of gas migration during cementing using magneto-rheological fluids, PCT

White papers

Zitha P., Felder R., Zornes D., Brown K., and Mohanty K., Increasing Hydrocarbon Recovery Factors, <http://www.spe.org/industry/increasing-hydrocarbon-recovery-factors.php>

Refereed Journal Papers

1. Peksa, AE, Wolf, KHAA and Zitha, PLJ. Bentheimer sandstone revisited for experimental purposes. *Marine and Petroleum Geology*, 67(November), 701-719 (2015)
2. Sacramento, RN, Yang, B, You, Z, Waldmann, A, Vaz, ASL, Zitha, PLJ and Bedrikovetsky, P. Deep bed and cake filtration of two-size particle suspension in porous media. *Journal of Petroleum Science and Engineering*, 126 (February), 201-210 (2015)
3. Simjoo, M and Zitha, PLJ. Modeling of foam flow using stochastic bubble population model and experimental validation. *Transport in Porous Media*, 107(3), 799-820. (2015)
4. Talebian, S.H.; Masoudi, R.; Tan, I.Mohd. and Zitha, P.L.J., Foam assisted CO₂-EOR: A review of concept, challenges, and future prospects, *Journal of Petroleum Science and Engineering*, 120, 202-215 (2014)
5. Roels, S.M., Ott, H. and Zitha, P.L.J., μ -CT analysis and numerical simulation of drying effects of CO₂ injection into brine-saturated porous media. *International Journal of Greenhouse Gas Control*, 27, 146-154 (2014)
6. Soroush, S. , Breure, B. , Loos, Th.W. de, Zitha, P.L.J. and Peters, C.J., High-pressure phase behaviour of two poly-aromatic molecules in the presence of toluene and carbon dioxide., *The Journal of Supercritical Fluids*, 94, 59-64 (2014).
7. Guo, H., Voncken, J., Opstal, T., Dams, R. and Zitha, P. L.J., Investigation of the Mitigation of Lost Circulation in Oil-Based Drilling Fluids by Use of Gilsonite, *SPE Journal*, Paper 1–8 (2014)
8. Soroush, S., Straver, E.J.M., Rudolph, E.S.J. , Peters, C.J. , Loos, Th.W. de, Zitha, P.L.J. , Vafaie-Sefti, M.. Phase behavior of the ternary system carbon dioxide + toluene + asphaltene., *Fuel: the science and technology of fuel and energy*, 137 (1), 405-411 (2014).
9. Simjoo, M., Rezaei, T., Andrianov, A. and Zitha, P.L.J., Foam stability in the presence of oil: Effect of surfactant concentration and oil type. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 438, 148-158 (2013).
10. Simjoo, M., Dong, Y., Andrianov, A., Talanana, M. and Zitha, P.L.J., Novel insight into foam mobility control. *SPE Journal*, 18(3), 416-427 (2013).
11. Simjoo M., Dong Y., Andrianov, A., Talanana M., and Zitha P.L.J., CT Scan Study of Immiscible Foam Flow in Porous Media for Enhancing Oil Recovery, *Ind. Eng. Chem. Res.*, 52 (18), 6221–6233 (2013)
12. Simjoo, M., Dong, Y., Andrianov, A., Talanana, M. and Zitha, P.L.J., Novel Insight Into Foam Mobility Control, *SPE Journal*, June, 416-427 (2013)
13. Ranganathan P., Frajzadeh R., Bruining, J. and Zitha P.L.J., Numerical Simulation of Natural Convection in Heterogeneous Porous media for CO₂ Geological Storage, *Transport in Porous Media*, 95(1), 25-54 (2012)
14. Guo H., Zitha P.L.J., Faber R. and Buijse M., A Novel Alkaline/Surfactant/Foam Enhanced Oil Recovery Process, *SPE Journal*, 17(4), 1186-1195 (2012)
15. Valiollahi H., Ziabakhsh Z., Zitha P.L.J., Mathematical modeling of chemical oil-soluble transport for water control in porous media, *Computers & Geosciences*, 45, 240–249 (2012)
16. Simjoo M., Nguyen Q. P., and Zitha P. L. J., Rheological Transition during Foam Flow in Porous Media, *Ind. Eng. Chem. Res.*, 51 (30), 10225–10231(2012)
17. Andrianov A., Farajzadeh R., Mahmoodi-Nick M., Talanana M., and Zitha P. L. J., Immiscible Foam for Enhancing Oil Recovery: Bulk and Porous Media Experiments, *Ind. Eng. Chem. Res.*, 51(5), 2214–2226 (2012)
18. Ranganathan P., van Hemert, P., Rudolph S., Zitha P.L.J., Numerical Modeling of CO₂ Mineralization during Storage in Deep Saline Aquifers, *Energy Procedia*, 4, 4538-4545 (2011)
19. He, Y., Rudolph, E. S. J. , Zitha, P.L.J. and Golombok, M., Kinetics of and methane hydrate formation: An experimental analysis in the bulk phase, *Fuel*, 90(1), 272-280 (2011)
20. Farajzadeh R., Ranganathan P., Zitha P.L.J. and Bruining J., The Effect of Heterogeneity on the Character of Density-Driven Natural Convection of CO₂ Overlying a Brine Layer, *Advances in Water Resources* 34, 327-339 (2011)
21. Du D. X., Zitha P. L. J. and Vermolen F. J., Numerical Analysis of Foam Motion in Porous Media Using a New Stochastic Bubble Population Model, *Transport in Porous Media*, 86, 2, 461-474 (2011)
22. Farajzadeh R., Andrianov A., Zitha P. L. J., Investigation of Immiscible and Miscible Foam for Enhancing Oil Recovery, *Ind. Eng. Chem. Res.*, 49(4), 1910-1919 (2010)
23. Zitha P. L. J. and Du D. X., A New Stochastic Bubble Population Model for Foam Flow in Porous Media, *Transp Porous Med*, 83, 603–621 (2010)
24. Golombok, M., Ineke, E., Luzardo, J.-C.R., He, Y.Y. and Zitha, P.L.J., Resolving CO₂ and Methane Hydrate Formation Kinetics, *Environmental Chemistry Letters*, 7(4), 325-330 (2009)
25. Farajzadeh R., Krastev, R. and Zitha P.L.J., Gas Permeability of Foam Films Stabilized by an α -Olefin Sulfonate Surfactant, *Langmuir*, 25(5), 2881-2886 (2009)
26. Farajzadeh, R., Andrianov, A., Bruining, J. and Zitha P. L. J., Comparative Study of CO₂ and N₂ Foams in Porous Media at Low and High Pressure–Temperatures, *Ind. Eng. Chem. Res.* 48(9), 4542-4552 (2009)

27. Farajzadeh R., Zitha P. L. J., Bruining J., Enhanced Mass Transfer of CO₂ into Water: Experiment and Modeling *Ind. Eng. Chem. Res.*, 48(13), 6243-6431 (2009)
28. Zinati F. F., Farajzadeh R., Currie P. K. and Zitha P. L. J., Modeling of External Filter Cake Build-up in Radial Geometry, *Petroleum Science and Technology*, 27(7), 746-763 (2009)
29. Vermolen F. J., Gholami Gharasoo M., Zitha, P. L. J. and Bruining J., Numerical Solutions of Some Diffuse Interface Problems: The Cahn-Hilliard Equation and the Model of Thomas and Windle, *International Journal for Multiscale Computational Engineering*, 7(6)523–543(2009)
30. Al-Muntasheri, G.A., Nasr-El-Din, H.A. and Zitha, P.L.J., Gelation Kinetics and Performance Evaluation of an Organically Cross-linked Gel at High Temperature and Pressure, *SPEJ*, (2008).
31. Al-Muntasheri, G.A., Zitha, P.L.J. and Nasr-El-Din, H.A., A New Organic Gel for Water Control: A Computed Tomography Study, *SPEJ*, (2008).
32. Al-Muntasheri, G.A., Nasr-El-Din, H.A., Peters, J.A. and Zitha, P.L.J.: Thermal Decomposition and Hydrolysis of Polyacrylamide Co-tert-butyl Acrylate, *European Polymer J.*, 44, 1225-1237 (2008).
33. Farajzadeh R., Krastev R., Zitha P. L. J., Foam films stabilized with alpha olefin sulfonate (AOS), *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 324: 1-3. 35-40 (2008)
34. Castelijn H. J., Huinink H. P., Zitha P. L. J., Characterization of interfacial effects during reactive transport with MRI methods, *Coll. Surf. A*, 309 (1-3), 151-158 (2007)
35. Castelijn H. J., Scherer G. W., Pel L., Zitha P. L. J., Permeability reduction in porous materials by in situ formed silica gel, *J. Appl. Phys.*, 102, 114901 (2007)
36. Castelijn H. J., Huinink H. P., Pel L., Zitha P. L. J., The effect of pH on coupled mass transfer and sol-gel reaction in a two-phase system, *J. Phys. Chem. B*, 111, 12383-12388 (2007)
37. Elewaut K. and Zitha P. L.J., Coupled mass transfer and reaction in water of an oil soluble chemical: A CT scan study, *Coll. and Surf. A: Phys. and Eng. Aspects*, 310, (1-3), 46-54 (2007)
38. Al-Muntasheri, G.A., Nasr-El-Din, H.A., Peters, J.A. and Zitha, P.L.J., Investigation of a High Temperature Organic Water Shut-off Gel: Reaction Mechanisms, *SPE Journal*, 11(4), pp. 497-504 (2006).
39. Farajzadeh, R. Salimi, H. Zitha, P.L.J. and Bruining J., Numerical simulation of density-driven natural convection in porous media with application for CO₂ injection projects, *International Journal of Heat and Mass Transfer*, 50 (25-26). 5054-5064 (2007).
40. Farajzadeh R., Barati A., Delil H.A., Bruining J., Zitha P.L.J., Enhanced mass transfer of CO₂ into water and surfactant solutions, *Petroleum Science and Technology*, 25(12), 1493-1511(2007)
41. Al-Muntasheri, G.A., Nasr-El-Din, H.A., P.L.J. Zitha, P.L.J.: Gelation Kinetics of an Organically Cross-linked Gel at High Temperature and Pressure, *Society of Petroleum Engineers' Journal*, accepted, (2007).
42. Castelijn, H.J., Huinink, H.P., Pel, L., and Zitha, P.L.J., Analysis of coupled mass transfer and sol-gel reaction, *J. Appl. Phys.*, 100 (2007)
43. Farajzadeh, R. Krastev R. and Zitha, P. L.J., Foam film and monolayer permeability: Theory and experiments, in press, *Advances in Colloids and Surfaces*, 137(1), 27-44 (2008)
44. Elewaut, K. and Zitha, P.L.J., Coupled mass transfer and reaction in water of an oil soluble chemical: a CT scan study, *Colloids Surf. A: Physicochemi. Eng. Aspects* 310 (1–3), 46–54 (2007)
45. Castelijn, H.J., Huinink, H.P. and Zitha, P.L.J., Characterization of interfacial effects during a reactive transport with MRI methods, in press, *Colloids Surf. A: Phys.-Chemi. Eng. Aspects* (2007)
46. Du, D.-X. Beni, A.-N. and Zitha P. L.J., Effect of Water Solubility on Carbon Dioxide Foam Flow in Porous Media: an X-Ray Computed Tomography Study, in press, *J. of Petroleum Science and Engineering*, (2007)
47. Nguyen, Q. P., Currie, P. K., Buijse, M. and Zitha, P. L. J. Mapping of Foam Mobility in Porous Media, in press, *J. of Petroleum Science and Engineering*, (2007)
48. Castelijn, H. J., Huinink H. P., Pel L., Zitha P. L. J., Analysis of coupled mass transfer and sol-gel reaction in a two-phase system, *J. Appl. Phys.* 100, 024916/1–9 (2006)
49. Zitha, P.L.J. and Vermolen, F.J., Self-Similar Solutions for the Foam Drainage Equation, *Transport in Porous Media*, 63(1), 195-200 (2006)
50. Al-Muntasheri, G.A., Nasr-El-Din, H.A., Peters, J.A. and Zitha, P.L.J.: Investigation of a High Temperature Organic Water Shut-off Gel: Reaction Mechanisms, *SPEJ*, 11(4), 497-504 (2006).
51. Zitha, P.L.J., Nguyen, Q.P., Currie, P.K., and Buijs, M.A., Coupling of foam drainage and viscous fingering in porous media revealed by X-ray computed tomography, *Transport in Porous Media*, 64(3), 301-313 (2006)
52. Al-Abduwani, F.A.H., Farajzadeh, R., van den Broek, W.M.G.T., Currie, P.K., and Zitha, P.L.J., Filtration of micron-sized particles in granular media revealed by X-ray Computed Tomography, *Rev. of Scientific Inst.*, 76 (2005)
53. Nguyen, Q.P., Currie, P.K., and Zitha, P.L.J., Effect of Cross-Flow on Foam-Induced Diversion in Layered Formations, *Soc. Petrol. Eng. Journal*, March, 54-65, (2005)
54. Nguyen, Q.P., Zitha, P.L.J., and Currie, P.K., Motion of foam film in diverging-converging channels, *Journal of Colloid and Interface Science*, 271, 473-484 (2004)
55. Darwish, M.I.M., Rowe, R., van der Maarel, J.R.C., Pel, L., Huinink, H., and Zitha, P.L.J., Contaminant Containment using Polymer Gel Barriers, *The Canadian Geotechnical Journal*, 41, 106-117 (2004)
56. Darwish, M.I.M., van der Maarel, J.R.C. and Zitha, P.L.J., Ionic transport in polyelectrolyte gels: model and NMR investigations, *Macromolecules*, 37, 2307-2312 (2004)
57. Darwish, M.I.M., McCray, J.E., Currie, P.K., and Zitha, P.L.J., Polymer-Enhanced DNAPL Flushing From Low Permeability Media: An Experimental Study, *Ground Water Monitoring and Remediation*, 23(2), 92-101 (2003)
58. Te Nijhenhuis, K., Menert, A., and Zitha, P.L.J., Viscoelastic behavior of partly hydrolyzed polyacrylamide/chromium(III) gels, *Rheologica Acta*, 42, 132-141 (2003)
59. Zitha, P.L.J., Foam Drainage in Porous Media, *Transport in Porous Media*, 52, 1-16 (2003)
60. Zitha, P.L.J., Botermans, C.W., van der Hoek, J., and Vermolen, F.J., Control of Flow through Porous Media using Polymer Gels, *Journal of Applied Physics*, 92(2), 1143-1153 (2002)

61. Boukhelifa, L., Zitha, P.L.J., and Vermolen, F., Numerical Analysis of Layer and Bridging Adsorption of Flexible Polymers in Porous Media, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 204, 153-168 (2002)
62. Nguyen, Q.P., Zitha, P.L.J., and Currie, P.K., Effect of Foam Films on Gas Diffusion, *Journal of Colloid and Interface Science*, 248, 467-476 (2002)
63. Darwish, M.I.M., van der Maarel, J.R.C., Pel, L., Huinink, H., and Zitha, P.L.J., Polymer Gel Barriers for Contaminant Containment, in *Environmental Geotechnics*, L.G. de Mello and M. Almeida (Eds.), Balkema Publisher, Vol.1, 77-82 (2002)
64. Zitha, P.L.J., Chauveteau, G., and Léger, L., Unsteady-State Flow of Water Soluble Polymers in Porous Media, *Journal of Colloid and Interface Science*, 234(2), 269-283 (2001)
65. Vermolen, F.J., Zitha, P.L.J., and Bruining, J., A model for a viscous pre-flush prior to gelation in a porous medium, *Journal of Computation and Visualization in Science*, 4, 205-212 (2001)
66. Darwish, M.I.M., van der Maarel, J.R.C., Pel, L., Huinink, H., and Zitha, P.L.J., Polymer Gel Barriers for Waste Disposal Facilities, in *Geotechnical Engineering: Meeting Society's Needs*, edited by K.K.S. Ho and K.S. Li (Eds.), Balkema Publisher, Vol. 1, 225-230 (2001)
67. Zitha, P.L.J., Kinetics of the bridging adsorption of flexible chains in porous media, *C.R. Acad. Sci. Paris*, t. 2, Série IV, 787 (2001)
68. Zitha, P.L.J. and Botermans, C.W., Bridging adsorption of flexible polymers in low-permeability porous media, *SPE Production & Facilities*, 13 (1), 15-20 (1998)
69. Zitha, P.L.J., Effects of bridging-adsorption of macromolecules on the flow of linear flexible polymer solutions in porous media, *C.R. Acad. Sci.*, Paris, t. 320, Série IIb, p. 447-453 (1995)

Refereed Conference Papers

1. Overveldt, A. S. (van), Guo H., de Blok G., Bedrikovetsky, P., Zitha P. L.J., A CT Scan Study of the Leakoff of Oil-Based Drilling Fluids, Paper SPE 151856 in Proc. SPE International Symposium and Exhibition on Formation Damage Control, Lafayette, Louisiana, USA, 15-17 February (2012)
2. Guo H., Voncken J., Opstal T., Dams R., Zitha P.L.J., Investigation of the Mitigation of Lost Circulation in Oil-Based Drilling Fluids Using Additives, Paper SPE 151751 in Proc. SPE International Symposium and Exhibition on Formation Damage Control, Lafayette, Louisiana, USA, 15-17 February (2012)
3. Simjoo M., Dong, Y., Andrianov A., Talanana M., and Zitha P. L.J., Novel Insight into Foam Mobility Control, Paper SPE 15338 in Proc. International Petroleum Technology Conference, Bangkok, Thailand, 7-9 February (2012)
4. Simjoo M., Dong Y., Andrianov A., Talanana, M. and Zitha P.L.J., A CT Scan Study of Immiscible Foam Flow in Porous Media for EOR, Paper SPE 155633 in Proc. SPE EOR Conference at Oil and Gas West Asia, Muscat, Oman, 16-18 April (2012)
5. Andrianov, A., Farajzadeh R., Mahmoodi Nick, M., Talanana, M. and Zitha P.L.J., Foam for enhancing oil recovery: bulk and porous media experiments, Paper SPE 143578, Proc. SPE Enhanced Oil Recovery Conference, Kuala Lumpur, Malaysia, 19-21 July (2011).
6. Simjoo, M., Nguyen Q.P. and Zitha, P.L.J., Rheological Transition during Foam Flow in Porous Media, Proc. 2011 SPE Saudi Arabia Section Technical Symposium and Exhibition, Al-Khobar, Saudi Arabia, 15-18 May 2011
7. Guo H., Faber R., Buijse M. and Zitha P. L. J., A Novel Alkaline-Surfactant-Foam EOR process, Proc. SPE Enhanced Oil Recovery Conference, Kuala Lumpur, Malaysia, 19-21 July 2011.
8. Farajzadeh R., Ranganathan P., Zitha P.L.J., and Bruining J., The Effect of Heterogeneity on the Character of Density-Driven Natural Convection of CO₂ Overlying a Brine Layer, Paper SPE 138168 in Proc. Canadian Unconventional Resources and International Petroleum Conference, Calgary, Alberta, Canada, 19-21 October (2010)
9. Zhou J., Dong Y., de Pater, C.J., and Zitha P. L.J., Experimental Study of Hydraulic Fracturing Caused by Polymer Injection in Unconsolidated Heavy Oil Reservoirs, Paper SPE 131261 in Proc. International Oil and Gas Conference and Exhibition in China, Beijing, China 8-10 June (2010)
10. Zhou J., Dong Y., de Pater, C.J., and Zitha P. L.J., Experimental Study of the Impact of Shear Dilatation and Fracture Behavior During Polymer Injection for Heavy Oil Recovery in Unconsolidated Reservoirs, Paper SPE 137656 in Proc. Canadian Unconventional Resources and International Petroleum Conference, Calgary, Alberta, Canada, 19-21 October (2010)
11. Delavarmoghaddam A., Mirhaj S.A. and Zitha P.L.J., Gas Condensate Productivity Improvement by Chemical Wettability Alteration, Paper SPE 122225 in Proc. 8th European Formation Damage Conference, Scheveningen, The Netherlands, 27-29 May (2009)
12. Simjoo M., Mahmoodi-Nick M., and Zitha P. L. J., Effect of Oil Saturation on Foam for Acid Diversion, Paper SPE 122152 in Proc. 8th European Formation Damage Conference, Scheveningen, The Netherlands, 27-29 May (2009)
13. New Insights into Application of Foam for Acid Diversion
14. Farajzadeh R., Andrianov A., Bruining H. and Zitha P.L.J., Paper SPE 122133 in Proc. 8th European Formation Damage Conference, Scheveningen, The Netherlands, 27-29 May (2009)
15. Dorp Q. T. (van), Slijkhuys M., and Zitha P.L.J., Salt Precipitation in Gas Reservoirs, Paper 12214 in Proc. 8th European Formation Damage Conference, , Scheveningen, The Netherlands, 27-29 May (2009)
16. Al-Muntasheri G.A. and Zitha, P.L.J., Gel under Dynamic Stress in Porous Media: New Insights using Computed Tomography Source SPE Saudi Arabia Section Technical Symposium, AlKhobar, Saudi Arabia, 9-11 May (2009)
17. M. Simjoo, A. Dadvand Koochi, M. Vafaie-Sefti, and P. L. J. Zitha, Water Shut-Off in a Fractured System Using a Robust Polymer Gel Paper SPE in Proc. 8th European Formation Damage Conference, Scheveningen, The Netherlands, 27-29 May (2009)

18. Farajzadeh R., Zitha P.L.J. and Bruining H., Enhanced Mass Transfer of CO₂ into Water: Experiment and Modeling, Paper SPE 121195 in Proc. EUROPEC/EAGE Conference and Exhibition, Amsterdam, The Netherlands, 8-11 June (2009)
19. Farajzadeh, R., Andrianov, A. and P.L.J. Zitha, Foam assisted oil recovery at miscible and immiscible conditions, Paper SPE 126410 in Proc. Kuwait International Petroleum Conference and Exhibition, Kuwait City, Kuwait, 14-16 December (2009)
20. Farshbaf Zinati, F. Farajzadeh, R. and Zitha P.L.J., Foam Modeling in Heterogeneous Reservoirs Using Stochastic Bubble Population Approach, Paper SPE 113358 in Proc. SPE/DOE Symposium on Improved Oil Recovery, Tulsa, Oklahoma, USA, 20-23 April (2008)
21. Farajzadeh, R. H. Salimi, P.L.J. Zitha, J. Bruining, Numerical simulation of density-driven natural convection in porous media with application for CO₂ injection projects, SPE 107381, EUROPEC London, The UK (2007)
22. Farajzadeh, R. Delil, H.A. Zitha, P.L.J. Bruining. J. Enhanced mass transfer of CO₂ into water and oil by natural convection, SPE 107380, EUROPEC London, The UK (2007)
23. Farshbaf Zinati F., Farajzadeh R., Currie P.K., Zitha P.L.J., Modeling of external filter cake build-up in radial geometry, SPE 107638, European Formation Damage Conference, The Netherlands (2007)
24. Farshbaf Zinati, F. Farajzadeh R., P.L.J. Zitha, Modeling and CT scan study of the effect of core heterogeneity on foam flow for acid diversion, SPE 107790, European Formation Damage Conference, The Netherlands (2007)
25. M.D. Carretero Carralero, R. Farajzadeh, D.X. Du, P.L.J. Zitha, Modeling and CT scan study of foams for acid diversion", SPE 107795, European Formation Damage Conference, The Netherlands (2007)
26. Zitha, P.L.J., Du D.-X. and Vermolen, F.J., Numerical Analysis of Foam Motion in Porous Media Using a New Stochastic Bubble Population Model, ECMOR (2006)
27. Zitha, P.L.J., Du D.-X., Uijttenhout, M.G.H. and Nguyen, Q.P., Numerical Analysis of a New Stochastic Bubble Population Foam Model, Paper SPE 99747 presented at the 2006 SPE/DOE Symposium on Improved Oil Recovery held in Tulsa, Oklahoma, U.S.A., 22–26 April 2006.
28. Zitha, P. L.J., A new stochastic bubble population model for foam in porous media, SPE 98976 presented at the SPE/DOE Symposium on Improved Oil Recovery, Tulsa, Oklahoma, U.S.A., 22–26 April 2006.
29. Du, D.-X., Carbon Dioxide Foam Rheology in Porous Media: a CT Scan Study, SPE 97552 for the *SPE International Improved Oil Recovery Conference in Asia Pacific (IIORC)*, Kuala Lumpur, Malaysia, 5-6 December 2005
30. Al-Muntasheri, G. A., Nasr-El Din, H. A., Peters J. and Zitha P.L.J., Investigation of a High Temperature Organic Water Shutoff Gel: Reaction Mechanisms, SPE 97552 for the *SPE International Improved Oil Recovery Conference in Asia Pacific (IIORC)*, Kuala Lumpur, Malaysia, 5-6 December 2005
31. van der Net, A. and Zitha, P.L.J., New Method for the Determination of Foam Capillary Pressures in Porous Media, SPE 96988 for the *SPE Annual Technical Conference and Exhibition*, Dallas, TX, USA, 9-12 October 2005
32. Castelijn, H.J., Pel, L., Huinink, H.P., and Zitha, P.L.J., Investigation of reactive transport phenomena for modification of two-phase flow using NMR, SPE 94559 presented at the *SPE 6th European Formation Damage Conference*, Scheveningen, The Netherlands, 25-27 May 2005
33. Elewaut, K., Stavland, A., Zaitoun, A., Krilov, Z., and Zitha, P.L.J., Investigation of a Novel Chemical for Bullhead Water Shutoff Treatments, SPE/IADC 94660, 6th European Formation Damage Conference, Scheveningen, The Netherlands, 25-27 May 2005
34. Nguyen, Q.P., Zitha, P.L.J., Currie, P.K., and Rossen, W.R., CT Study of Liquid Diversion with Foam, SPE 93949 presented at the 2005 SPE Production and Operations Symposium held in Oklahoma City, OK, USA, 17–19 April 2005
35. Elewaut, K. and Zitha, P.L.J., Water Shutoff Using Oil-Soluble Chemicals: an X-ray CT study, Proceedings EAGE IOR Conference, 13th European Symposium on Improved Oil Recovery, Budapest, Hungary, 25-27 April 2005
36. Nguyen, Q.P., Currie, P.K., and Zitha, P.L.J., Determination of Foam Induced Fluid Partitioning in Porous Media using X-ray Computed Tomography, SPE 80245 prepared for presentation at the SPE International Symposium on Oilfield Chemistry held in Houston, Texas, USA, 5–8 February 2003
37. Zitha, P.L.J., Nguyen, Q.P., and Currie, P.K., Effect of Flow Velocity and Rock Layering on Foam Flow: an X-ray Computed Tomography Study, SPE 80530, presented at the SPE Asia Pacific Oil and Gas Conference and Exhibition held in Jakarta, Indonesia, 15–17 April 2003
38. Zitha, P.L.J., Mandzi, D., Vermolen, F., and Darwish, M.I.M., Modeling of polymer adsorption under near-wellbore flow conditions, SPE 82256 presented at the SPE European Formation Damage Conference held in The Hague, The Netherlands 13-14 May 2003
39. Darwish, M.I.M., Zitha, P.L.J., van der Maarel, J.R.C., and Pel, L., Polymer Gel Barriers for Waste disposal Facilities, Proceed. 14th Southeast Asian Geotechnical Conference, 10-14 December 2001
40. Zitha, P.L.J., In-Depth Filtration of Macromolecules Induced by Bridging Adsorption in Porous Media, SPE 68680, Proceed. Soc. Petrol. Eng. European Formation Damage Conference, The Hague, The Netherlands, 21-22 May 2001
41. Zitha, P.L.J., Prediction of Polymer Viscosity Reduction in Pores Using an Exact Depletion Profile, SPE 68681, Proceed. Soc. Petrol. Eng. European Formation Damage Conference, The Hague, The Netherlands, 21-22 May 2001
42. van der Hoek, J., Botermans, C.W., and Zitha, P.L.J., Full Blocking Mechanism of Polymer Gels for Water Control, SPE 68982, Proceed. Soc. Petrol. Eng. European Formation Damage Conference, The Hague, The Netherlands, 21-22 May 2001
43. Zitha, P.L.J., Chauveteau, G., Zaitoun, A., Permeability dependent Propagation of Polyacrylamides under Near-Wellbore Flow Conditions, SPE 28955, paper presented at the Intern. Symposium on Oilfield Chemistry (1995), San Antonio, TX, 14-17 February 1995
44. Denijs, K.F.J., Zitha, P.L.J., Hensens, H.C., and te Nijenhuis, K., Near-Wellbore Formation Damage by Polyacrylates: Effects of pH and salinity, SPE 39465. Proceedings SPE Int. Symp. on Formation Damage Control,

- 18-19 February 1998, Lafayette, Louisiana, USA. Society of Petroleum Engineers (SPE), Richardson, TX, USA, 1998, p.431-440
45. Zitha, P.L.J., van Os, K.G.S., Denijs, K.F.J., Adsorption of Linear Flexible Polymers During Laminar Flow Through porous media: effect of the concentration, SPE 39675. Proceedings SPE/DOE Improved Oil Recovery Symposium, 19-22 April 1998, Tulsa Okla. USA. Society of Petroleum Engineers (SPE), Richardson, TX USA, 1998, p. 225-237.
 46. Alexandrov, A.V., Zitha, P.L.J., and Currie, P.K., Current Status and Challenges in Modeling of Foam Flow in Porous Media. In: Foams and Films (Eds. F. Weaire and J. Banhart). International Workshop on Foams and Films, Leuven, Belgium, 5-6 March 1999 p.105-110
 47. Alexandrov, A.V., Currie, P.K. Nguyen, Q.P., and Zitha, P.L.J., Modeling of Foam Flow in Porous Media Based on Multivariate Statistics, In: Proceedings of the 2000 SPE/DOE Improved Oil Recovery Symposium, Tulsa, Oklahoma, USA, 3-5 April 2000 SPE paper 59288.
 48. Nguyen, Q.P., Alexandrov, A.V., Zitha, P.L.J., and Currie, P.K., Experimental and Modeling Studies on Foam in Porous Media: a Review. In: Proceedings of 2000 SPE International Symposium on Formation Damage Control, 23-24 February 2000, Lafayette, Louisiana, USA
 49. Zitha, P.L. J. and Darwish; M., Effect of the Bridging Adsorption on the Placement of Gels for Water Control, In: Proceedings of Apiorc 99, SPE Asia Pacific Improved Oil Recovery Conference, 25-26 October 1999, Kuala Lumpur, Malaysia

Books Editor

1. Foams, Emulsions and their Applications, Eds. Zitha, P.L.J., Banhart, J., and Verbist, G., Verlag MIT, Bremen (2000)
2. Well Treatment and Water Shutoff by Polymer Gels, Ed. Zitha, P.L.J., Delft University Press, Delft (2000)

Honorary Activities

1. Member, Malaysian Petroleum Club, July 2013-present, Kuala-Lumpur, Malaysia
2. Invited Speaker, Discussion Leader, Foam and Chemical EOR, Kota Kinabalu, Malaysia, 8 – 11 March (2015)
3. Chairman, SPE European Formation Damage Conference, 8-11 June 2011, Noordwijk, The Netherlands
4. Chairman, SPE European Formation Damage Conference, 25-27 May 2009, Scheveningen, The Netherlands
5. Member of the CSS Task force, 2007- present
6. Member of the Board of the Royal Academy of Engineers (KIVI-NIRIA), The Netherlands, 2007-present
7. Member of the SPE Research and Development Advisory Committee, November 2007 – November 2010
8. Member of the Scientific Programme Committee SPE Research and Development Conference, August 2009, 2011
9. Member of the Carbon Capture and Sequestration (CCS) Task force at the Delft University of Technology, 2007 – 2008, Laxenburg, Austria
10. Invited Speaker and Discussion Leader, Vulnerability and Opportunity of Methane Hydrates Workshop, 13-14 March 2008, Laxenburg, Austria
11. Scientific Programme Committee Member, SPE ATW on "Chemical Methods of Reducing Water Production", March 4-7, 2007
12. Programme Committee Member SPE European Formation Damage Conference, 25-27 May 2007, Scheveningen, The Netherlands
13. Keynote speaker at the EUFOAM 2006 6th European Conference on Foams, Emulsions and Applications, July 02-06, 2006, Potsdam, Germany
14. Invited Speaker at the Work 19 on the Big Future Picture of the Petroleum Engineering, June 5-9, 2006
15. Scientific Committee Member, International Symposium on Formation Damage Control, 15-17 Feb 2006, Lafayette, Louisiana, USA
16. Invited Speaker/Discussion Leader at the SPE ATW on 'Oilfield Chemistry', 12-15 December 2004, Bahrain
17. Invited Speaker/Discussion Leader at the SPE ATW on 'Matrix Stimulation', 31 October – 3 November 2005, Moscow, Russia
18. Scientific Programme Committee Member, SPE European Formation Damage Conference, 25-27 May 2005, Scheveningen, The Netherlands
19. Invited Speaker at the PEA WGSO Forum, 15-16 November 2005, Sunbury, UK
20. Invited Lecture 'Water Management: Challenges and Opportunities', 3rd GCC-EU Advanced Oil and Gas Technology Conference, Kuwait city, Kuwait, December 2005
21. Organizer and Chairman of the 3rd European Conference on Foams Emulsions and their Applications held 4-8 Jun 2000
22. Review of several articles for *Transport in Porous Media* Review of several articles for *Langmuir*
23. Review of several articles for *Colloids and Surfaces A: Physico-Chemical and Engineering Aspects*
24. Review of several for the *SPE Journal*
25. Technical Editor of *SPE Production & Facilities*
26. Review of Research Proposals for *American Chemical Society, Norwegian Research Council*