Michael J. King

Education

1980 Ph.D., Physics, Syracuse University, NY
1977 M.S., Physics, Syracuse University, NY
1976 B.S., Summa Cum Laude, Physics & Mathematics, Cooper Union, NYC

Experience

2012-present Assistant Department Head (Administration), Petroleum Engineering
2009-present Professor, Petroleum Engineering, Texas A&M University
2009-present Co-Director, Model Calibration & Efficient Reservoir Imaging JIP
1999-2009 BP America/BP Amoco E&P Upstream Technology Group:
- 2007-2009 Discipline Technical Authority, Reservoir Performance Prediction
- 2005-2009 Senior Advisor, Reservoir Modeling & Simulation
- 2002-2009 Reservoir Performance Prediction R&D Project Management
- 2002-2007 Technology Network Leader, Reservoir Performance Prediction
- 2002-2005 Advisor, Reservoir Modeling & Simulation
- 1999-2001 Technology Network Leader, Reservoir Modeling & Characterization

1996-1999 Consultant & Senior Reservoir Engineer, BP Exploration Operating Co, Ltd.
1991-1995 Research Positions, BP Research & Exploration, Sunbury-on-Thames, UK
1982-1990 Research Positions, Sohio/Standard Oil/BP Research, Warrensville, OH
1980-1982 Postdoctoral Fellow, Department of Physics, Michigan State University

Professional Registration

Professional Memberships

2011-present American Geophysical Union (AGU)
2011-present SIAM
2010-present Interpore
1982-present Society of Petroleum Engineers
1980-present Sigma Xi Scientific Research Society
1979-1989 Sigma Pi Sigma Physics Honorary Society
1979-1989 American Physical Society

Awards

2015 Energistics RESQML SIG 25 Year Volunteer Recognition Award
2014 Karen and Larry A. Cress ’76 Excellence in Teaching Award
2013 SPE Distinguished Member
2013 Foundation CMG Chair in Robust Reduced Order Modeling
2012 LeSuer Chair in Reservoir Management
2012, 2013 Energistics Volunteer Recognition Program Award
2011 Petroleum Engineering Department Award for Excellence in Teaching
2011 SPE Reservoir Description and Dynamics Award
2010 John and Debbie Bethancourt Professor in Petroleum Engineering
2007 E&P DCT BP Helios Award Finalist “Reservoir Management Co-Visualization”
2006-2007 SPE Distinguished Lecturer

2005 BP Helios Award Finalist “Top Down Reservoir Modeling”
2000 BP Helios Award Submission “3D Reservoir Modeling applied to fast track development of the CrazyHorse reservoir”
1982 American Physical Society Industrial Post-Doctoral Fellowship
1976-1980 Graduate Fellowship, Syracuse University
1976 Honorable Mention, National Science Foundation Fellowship
1976 The Henry D. Dickinson and Harry W. Reddick fund prizes
1973 The Day Class of 1907 Award, The Cooper Union

Refereed Publications (list 10-15 top publications)

“Streamline Simulation: Theory and Practice”, SPE Textbook #11 (2007) (w/ Akhil Datta-Gupta).

“From Streamlines to Fast Marching: Rapid Simulation and Performance Assessment of Shale Gas Reservoirs Using Diffusive Time of Flight as a Spatial Coordinate" SPE Journal (May 2016) (w/ Zhang, Y., Bansal, N., Fujita, Y., Datta-Gupta, A., & Sankaran, S.)

“Depth of Investigation and Depletion in Unconventional Reservoirs With Fast-Marching Methods” SPE Journal (Jan. 2015), (w/ Xie, J., Yang, C., Gupta, N., & Datta-Gupta, A.)

“Integration of Shale-Gas-Production Data and Microseismic for Fracture and Reservoir Properties With the Fast Marching Method” SPE Journal (July 2014) (w/ Xie, J., Yang, C., Gupta, N., & Datta-Gupta, A.)

“Reservoir Modeling: From RESCUE To RESQML™,” SPE 135280 SPE Reservoir Evaluation & Engineering Volume 15, Number 2 (April 2012) (w/ Paulo Ballin, Chakib Bennis, David Heath, Allan Hiebert, William McKenzie, Jean-Francois Rainaud, and Jana Schey).

“Full Field Streamline Tracing in Complex Faulted Systems With Non-Neighbor Connections," SPE 113425, SPE Journal, Volume 15, Number 1 (March 2010) (w/ Eduardo Jimenez and Akhil Datta-Gupta).

“Spatial Error and Convergence in Streamline Simulation,” SPE Reservoir Evaluation & Engineering, Volume 10, Number 3, pp. 221-232, June 2007 (w/ Eduardo Jimenez, Kamran Sabir, and Akhil Datta-Gupta).

“Recent Advances in Upgridding” in Oil & Gas Science and Technology - Rev. IFP, Vol. 62, No. 2, pp. 195-205, 2007.

“A Rigorous Compressible Streamline Formulation for Two- and Three-Phase Black-Oil Simulation,” SPE Journal, Volume 11, Number 4, pp. 407-417, December 2006 (w/ Hao Cheng, Ichiro Osako, and Akhil Datta-Gupta).

“Optimal Coarsening of 3D Reservoir Models for Flow Simulation,” SPE Reservoir Evaluation & Engineering, Volume 24, Number 10, pp. 317-334, August 2006 (w/ Karam S. Burn, Pengju Wang, Venkataramanan Muralidharan, Freddy Alvarado, Xianlin Ma and Akhil Datta-Gupta).

“Upgridding and Upscaling: Current Trends and Future Directions,” SPE Distinguished Lecture during 2006-2007, SPE 112810-DL, 2007.

“Simulation and Theory of Two Phase Flow in Porous Media,” Physical Review A 46 7680-7699, 1992 (w/ Blunt, M., and Scher H.).

“Geometric Dispersion and Unstable Flow in Porous Media,” Phys Rev A 41, 874, 1990 (w/ Scher H.).