

F12 RECENT SIGNIFICANT PUBLICATIONS (SINCE 2005): CI King

(a) Scholarly Books

(b) Scholarly Book Chapters

2012

1. ***King, R.**, Backé, G., Tingay, M., **Hillis, R.** and Mildren, S. 2012. Stress deflections around salt diapirs in the Gulf of Mexico. In: Healy, D. & Butler, R. (Eds.). *Faulting, Fracturing and Igneous Intrusion in the Earth's Crust*. The Geological Society of London Special Publication 367, 141-154.
2. *MacDonald, J., Backé, G., **King, R.**, **Holford, S.** and **Hillis, R.** 2012. Geomechanical modelling of fault reactivation in the Ceduna Sub-basin, Bight Basin, Australia. In: Healy, D. & Butler, R. (Eds.). *Faulting, Fracturing and Igneous Intrusion in the Earth's Crust*. The Geological Society of London Special Publication 367, 71-90.
3. MacDonald, J., **Holford, S.** and **King, R.** 2012. Structure and prospectivity of the Ceduna Delta-Deepwater Fold-Thrust Belt Systems, Bight Basin, Australia. *GCSSPEM*, 779-816.
4. *Tuitt, A., **King, R.**, Hergert, T., Tingay, M. and **Hillis, R.** 2012. Modelling of sediment wedge movement along low-angle detachments using ABAQUSTM. In: Healy, D. & Butler, R. (Eds.). *Faulting, Fracturing and Igneous Intrusion in the Earth's Crust*. The Geological Society of London Special Publication 367, 171-184.

2009

5. **King, R.C.**, Hodgson, D.M., Flint, S., Potts, G.J. and van Lente, B., 2009. Development of subaqueous fold belts as a control on the timing and distribution of deepwater sedimentation: an example from the southwest Karoo Basin, South Africa. In: Kneller, B., Martinsen, O.J. & McCaffrey, B. (Eds.). *External Controls on Deep-Water Depositional Systems*. SEPM Special Publication **92**, 261-278.

(c) Refereed Journal Articles

In Press

6. *Bailey, A., **King, R.**, **Holford, S.**, Sage, J., **Hand, M.** and Backe, G. 2015. The Australian Structural Permeability Map. *Australian Petroleum Production and Exploration Association Journal*, accepted 14/01/2015.
7. *Tassone, D., **Holford, S.**, **King, R.**, Tingay, M., **Hillis, R.** 2015. Contemporary stress and neotectonics in the Otway Basin, southeastern Australia. *Tectonophysics*, accepted 20/02/2015

2014

8. Arboit, F., Collins, A.S., **King, R.**, Morley, C.K. and Hansberry, R. 2014. Structure of the Sibumasu-Indochina collision, central Thailand: A section through the Khao Khwang Fold and Thrust Belt. *Journal of Asian Earth Sciences*, **95**, 182-191.
9. *Bailey, A., **King, R.**, **Holford, S.**, Sage, J., Backe, G. and **Hand, M.** 2014. Remote sensing of subsurface fractures in the Otway Basin, South Australia. *Journal of Geophysical Research*, **119**(8), 6591-6612; doi:10.1002/2013B010843.
10. Hansberry, R.L., **King, R.**, Collins, A.S., Morley, C.K. 2014. Complex structure of an upper-level shale detachment zone: Khao Khwang fold and thrust belt, Central Thailand. *Journal of Structural Geology*, **67**, 140-153.

2013

11. *Swierczek, E., Zhen-Dong, C., **Holford, S.P.**, Backe, G., **King, R.C.** and Mitchell, A. 2013. Quantifying fault reactivation risk along the Rosedale Fault System, Gippsland Basin, using

geomechanical modelling. *Australian Petroleum Production and Exploration Association Journal*, **53**, 255-272.

12. MacDonald, J.D., **Holford, S.P.**, Green, P.F., Duddy, I.R., **King, R.C.** and Backe, G. (2013). Detrital zircon data reveal the origin of Australia's largest delta system. *Journal of the Geological Society of London*, **170**, 3-6.

2012

13. *Abul Khair, H., Backé, G., **King, R.**, **Holford, S.**, Tingay, M., Cooke, D., **Hand, M.**, 2012. Factors influencing fractures networks within Permian shale intervals in the Cooper Basin, South Australia. *Australian Petroleum Production and Exploration Association Journal*, **52**, 213-228.
14. *Abul Khair, **King, R.**, **Hand, M.**, Tingay, M., 2012. Preliminary workflow for subsurface fracture mapping using 3D seismic surveys: A case study from the Cooper Basin. *Transactions of the Geothermal Resources Council*, **36**, 339-349.
15. *Backé, G., Swierczek, E., MacDonald, J., Bailey, A., Tassone, D., Abul Khair, H., **Holford, S.** and **King, R.**, 2012. Seismic attributes and structural interpretation - it takes two to tango... *Australian Petroleum Production and Exploration Association Journal*, **52**, 437-454.
16. *Bailey, A., **King, R.** and Backé, G., 2012. Integration of structural, stress, and seismic data to define secondary permeability networks through deep-cemented sediments in the Northern Perth Basin. *Australian Petroleum Production and Exploration Association Journal*, **52**.
17. ***King, R.**, **Holford, S.** **Hillis, R.**, Tuitt, A., Swierczek, E., Backé, G., Tassone D. and Tingay, M., 2012. Reassessing the in-situ stress regimes of Australia's Petroleum Basins. *Australian Petroleum Production and Exploration Association Journal*, **52**, 415-426.
18. *MacDonald, J.D., Backé, G., **King, R.C.** and **Hillis, R.R.**, 2012. The Hammerhead delta—deepwater fold-thrust belt, Bight Basin, Australia: 2D Geomechanical and Kinematic Reconstructions (Extended Abstract). *Australian Petroleum Production and Exploration Association Journal*, **52**.

2011

19. *Backé, G., Abdul Khair, H., **King, R.** and **Holford, S.**, 2011. Fracture mapping and modelling in shale-gas target in the Cooper basin, South Australia. *Australian Petroleum Production and Exploration Association Journal*, **51**, 397-410.
20. Morley, C.K., **King, R.**, **Hillis, R.**, Tingay, M.R.P. and Backé, G., 2011. Deepwater fold and thrust belt classification, tectonics, structure and hydrocarbon prospectivity: A review. *Earth Science Reviews*, **104**, 41-91.

2010

21. **King, R.C.** and Backé, G., 2010. A balanced 2D structural model of Hammerhead Delta—Deepwater Fold-Thrust Belt, Bight Basin, Australia. *Australian Journal of Earth Sciences* **57**(7), 1005-1012.
22. **King, R.C.**, Backé, G., Morley, C.K., **Hillis, R.R.** and Tingay, M.R.P., 2010. Balancing deformation in NW Borneo: Quantifying plate-scale vs gravitational tectonics in a Delta and Deepwater Fold-Thrust Belt System. *Marine and Petroleum Geology*, **27**, 238-246.
23. ***King, R.C.**, **Hillis, R.**, Tingay, M.R.P. and Damit, A., 2010. Present-day stresses in Brunei, NW Borneo: superposition of deltaic and active margin tectonics. *Basin Research*, **22**, 236-247.
24. ***King, R.C.**, Neubauer, M.C., **Hillis, R.R.** and Reynolds, S.D., 2010. Vertical Stress Magnitudes in the Carnarvon Basin, NW Shelf, Australia. In: *Frontiers of Stress Research*, Heidbach, O., Tingay, M. & Wenzel, F. (Eds.). *Tectonophysics* **482**, 73-81, doi:10.1016/j.tecto.2009.06.018.

25. ***King, R.C.**, Tingay, M.R.P., **Hillis, R.**, Morley, C.K. and Clark, J., 2010. Present-day stress orientations and tectonic provinces of the NW Borneo collisional margin: more than plate boundary forces. *Journal of Geophysical Research*, **115**, B10415, doi:10.1029/2009JB006997.
26. MacDonald, J.D., **King, R.C.**, **Hillis, R.R.** and Backé, G., 2010. Structural style of the white pointer and Hammerhead Delta—Deepwater Fold-Thrust Belts, Bight Basin, Australia: Implications for hydrocarbon migration and accumulation. *Australian Petroleum Production and Exploration Association Journal*, **50**, 487-510.
27. *Tingay, M., Morley, C., **King, R.**, **Hillis, R.**, Coblenz, D. and Hall, R., 2010. Present-day stress field of Southeast Asia. In: *Frontiers of Stress Research*, Heidbach, O., Tingay, M. & Wenzel, F. (Eds.). *Tectonophysics* **482**, 92-104, doi:10.1016/j.tecto.2009.06.019.

2009

28. ***King, R.C.**, **Hillis, R.R.**, Tingay, M.R.P. and Morley, C.K., 2009. Present-day stress and neotectonic provinces of the Baram Delta and deepwater fold-thrust belt. *Journal of the Geological Society, London*, **166**, 197-200.
29. *Tingay, M.R.P., **Hillis, R.R.**, Morley, C.K., **King, R.C.**, Swarbrick, R.E. and Damit, A.R., 2009. Present-day stress and neotectonics of Brunei: implications for petroleum exploration and production. *American Association of Petroleum Geologists Bulletin*, **93**, 75-100.

2008

30. ***King, R.C.**, **Hillis, R.R.** and Reynolds, S.D., 2008. In situ stresses and natural fractures in the Northern Perth Basin, Australia. *Australian Journal of Earth Sciences* **55**, 685-701.
31. Morley, C.K., Tingay, M.R.P., **Hillis, R.R.** and **King, R.C.**, 2008. Relationship between structural style, overpressures and modern stress, Baram Delta province, NW Borneo. *Journal of Geophysical Research*, **113**, B09410, doi:10.1029/2007JB005324.

(d) Refereed Conference Papers

2013

32. MacDonald, J.D., **Holford, S.P.** and **King, R.C.**, 2013. Structure and Prospectivity of the Ceduna Delta-Deepwater Fold-Thrust Belt Systems, Bight Basin, Australia. *Proceedings of GCSSEPM Foundation Bob F. Perkins Research Conference – New understanding of the petroleum systems of the continental margins of the world*, 32, 779-816.

2012

33. *Abul Khair, H., Cooke, D., Backé, G., **King, R.**, Hand, M., Tingay, M., **Holford, S.**, 2012. Subsurface mapping of natural fracture networks; a major challenge to be solved. Case study from the shale intervals in the Cooper Basin, South Australia. *Proceedings of the Thirty-Seventh Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California*, January 30 - February 1, 2012.

2011

34. ***King, R.**, Abul Khair, H., Bailey, A., Backe, G., **Holford, S.** and Hand, M., 2011. Integration of in-situ stress analysis and three-dimensional seismic mapping to understand fracture networks in Australian basins. In: Budd, A.R. (ed) *Proceedings of the 2011 Australian Geothermal Energy Conference, 16-18 November, Melbourne*. Geoscience Australia, Record 2011/43, 129-134.

2007

35. *Neubauer, M.C., **Hillis, R.R., King, R.C.** and Reynolds, S.D., 2007. The contemporary stress field of the offshore Carnarvon Basin, North West Shelf, Western Australia. *Proceedings of 1st Canada-US Rock Mechanics Symposium – Rock Mechanics Meeting Society's Challenges and Demands*, 1, 705-711.

(e) Other

2009

36. *Tingay, M.R.P., Morley, C., **King, R., Hillis, R.,** and Coblenz, D., 2009. Southeast Asian stress map: implications for petroleum exploration and production. *First Break*, 27(11), 81-88.

ARC GRANTS AWARDED IN THE LAST 10 YEARS

Project Id	CI/PI/Fellow Name/s	Amount Funded	Amount of Years	Project Title	Outputs
DP120101460	RC King , AS Collins, M Tingay, C Morley, G Backé	\$260,000	3 (2012-2014)	Detachments in Evaporites and Shales: Their Controls on Fold-Thrust Belt Style and Wedge Geometry	1-4, 8, 10, 12, 18, 32

Project Id	CI/PI/Fellow Name/s	Amount Funded	Amount of Years	Project Title	Outputs
LP120200086	MJ Kennedy, RC King , DN Dewhurst, SP Holford	\$750,000	4 (2012-2015)	From organo-mineral nanocomposite to Australian basins; an integrated approach to unconventional gas exploration and development	6-7, 9, 11, 13-17, 33