

Simon George
Professor
School of Natural Sciences
Macquarie University Marine Research Centre
MQ Centre for Energy and Environmental Contaminants
Email: simon.george@mq.edu.au
Phone: 0298504424



Biography

BSc (Hons), St Andrews, Scotland
PhD, Newcastle upon Tyne, England

Professor Emeritus Simon George is the leader of the organic geochemistry group, School of Natural Sciences, Macquarie University in Sydney, Australia. He was the Interim Head of Department of Earth and Environmental Sciences, Oct2020-Dec2021, Acting Head of the EPS Department from Jan 2014 until 1st February 2015, and was Deputy Head of the EPS Department, 2018-2019. He also was the Director of the Macquarie University Marine Research Centre, 2015–2019. He was the Director of the Bachelor of Marine Science, 2020-2021.

Simon George has more than 35 years experience in organic geochemistry, including 15 years specialising in petroleum geochemistry at CSIRO. Organic geochemistry involves the study of the chemical and isotopic signatures in rocks and sediments, which tell us information about the past. We can reconstruct the nature and timing of important events in the evolution of life. Biomarkers are hydrocarbons that retain the structural information from the original lipids from which they were derived. Biomarkers and other hydrocarbons in oils, rocks and sediments provide us the ability to understand source inputs, subsequent burial and heating history (thermal maturity) and alteration events (such as oil biodegradation). The chemistry of insoluble fractions of organic matter, such as kerogen and asphaltenes, provides further useful information.

Contacts:

Phone: +61 2 9850 4424
Mobile: +61 4 1842 8217
Email: simon.george@mq.edu.au

Biography

Teaching responsibilities

Main Undergraduate teaching

GEOS1110: The Habitable Planet (**GEOS112:** The Planet Earth). I teach the Biosphere (Module 4). 2007-2020. Convened 2010-2012.

GEOS2042: Life, the Universe and Everything (**GEOS204**). Most lectures and many practicals. 2008 (ELS204)-2020. Convened 2008-2013; 2016-2020.

GEOS2130: Marine Sediments: Records of Past Earth (**GEOS206:** Marine Depositional Environments). Lectures, practicals, and teach on the South Coast of NSW fieldtrip to Kioloa in April. 2008-2021.

ENVS2115: Climate Change, Energy and our Future (**GEOS251:** Geopolitics- The Science of Climate, Energy and our Future; Minerals, Energy and Environment). One module of lectures and tutorials, 2012-2021.

GEOS3130: Earth System History (**GEOS309:** Marine Sediments and Energy Security). Most lectures and practicals. Convened 2011, 2013, 2015-2021.

Other Undergraduate teaching

GEOS1120: Dynamic Earth (**GEOS125:** Earth Dynamics). One workshop, sometimes fieldwork (Hartley). 2008-2020.

GEOS1130: Blue Planet: Oceans, Climate and Life (**GEOS126:** Marine Geoscience). Some lectures, sometimes fieldwork (Port Hacking boat trip). 2007-2021.

GEOS211: Field Geology: Mapping and Palaeoenvironments (**GEOS226:** Introduction to Field Geology) (Keepit fieldtrip). 2008; 2009-2013. Convened 2012-2013.

MAR201: Introduction to Marine Science. 1-2 lectures, 2009-2012.

GEOS397/GEOS394/BIOL382: Applied Palaeontology and Biogenic Sediments, lecture and practical, 2007, 2008, 2010, 2012.

Postgraduate teaching

GEOS7710: Palaeoenvironments and Biogeochemistry (**GEOS710:** Records of palaeoenvironments: life and geochemistry). Convenor and lectures on organic geochemistry for Master Research students, 2016-2020.

GEOS8810: Palaeoenvironments and Biogeochemistry (**GEOS920:** Palaeoenvironments and biogeochemistry). Convenor and lectures on organic geochemistry for master coursework students (Master Geoscience; Master of Science and Innovation). 2016-2020.

GEOS7711: Research Topics in Earth and Environmental Sciences (**GEOS791:** Research Topic in Earth and Planetary Sciences). Research Experience (in organic geochemistry lab), 2016-2020

GEOS710: The Organic Geochemistry of Sedimentary Rocks, Oils and Gases. Lecture and practical organic geochemistry in the research lab for Master Research students. Convenor, 2013-2015.

GEOS920: Petroleum Geochemistry. Lecture and practical organic geochemistry in the research lab for master coursework students (Master Geoscience). Convenor, 2013-2015.

GEOS811: Advanced Field Techniques in Geoscience. Keepit fieldtrip for master coursework students (Master Geoscience). 2008; 2009-2013. Convened 2012-2013.

Genes to Geoscience, Postgraduate modules: Where biology, geology and chemistry meet: Frontiers in Biogeochemistry; What's In Stuff? (with Damian Gore); Geosphere-Biosphere Interactions (With Matthew Kosnik and Craig O'Neill). 2008-2015.

Conferences that I chaired

Australian Organic Geochemistry Conference: Macquarie University, 2-5th December 2012.

Chairman and co-convenor of the joint Australian Organic Geochemistry Conference (AOGC) and International Humic Substances Society (IHSS) Meeting, Leura, NSW, February 2004.

Chairman of the Australian Organic Geochemistry Conference (AOGC), December 2012, at Macquarie University.

Deputy Chairman of the Australian Organic Geochemistry Conference (AOGC), Lindfield, NSW, December 2022.

Employment

Honorary Professor

Professor

School of Natural Sciences

Macquarie University

1 Apr 2022 → present

Macquarie University Marine Research Centre

Macquarie University

1 Jan 2015 → present

MQ Centre for Energy and Environmental Contaminants

Macquarie University

1 Jan 2015 → present

Research outputs

Correlations between microbial taxonomies and wastewater quality parameters in a full-scale petroleum refinery wastewater treatment plant

Wu, F., Zhu, Y., Deng, F., Wen, G., Hose, G. C., Xie, W. & George, S. C., Jan 2024, In: Journal of Water Process Engineering. 57, p. 1-12 12 p., 104684.

Volcanic activity drives lacustrine carbon sequestration after Oceanic Anoxic Event 1a

Li, L., He, W., Liu, Z., Song, Y., Li, Y., Belousova, E., Löhr, S. C. & George, S. C., 1 Jul 2023, In: Palaeogeography, Palaeoclimatology, Palaeoecology. 621, p. 1-12 12 p., 111595.

Anthropogenic petroleum signatures and biodegradation in subantarctic Macquarie Island soils

Houlahan, S. B., Errington, I., Hose, G. C., King, C. K. & George, S. C., Jun 2023, In: Chemosphere. 325, p. 1-12 12 p., 138395.

Global sea level changes or local tectonics? Pliocene, Miocene and Oligocene biomarkers in cored sedimentary rocks from IODP Expedition 317, Canterbury Basin, New Zealand

Aharonovich, S., Lipp, J. S. & George, S. C., Jun 2023, In: Organic Geochemistry. 180, p. 1-25 25 p., 104590.

Millimetre-scale biomarker heterogeneity in lacustrine shale identifies the nature of signal-averaging and demonstrates anaerobic respiration control on organic matter preservation and dolomitization

Xu, H., Hou, D., Löhr, S. C., Liu, Q., Jin, Z., Shi, J., Liang, X., Niu, C. & George, S. C., 1 May 2023, In: Geochimica et Cosmochimica Acta. 348, p. 107-121 15 p.

From the surface ocean to the seafloor: linking modern and paleo-genetics at the Sabrina Coast, East Antarctica (IN2017_V01)

Armbrecht, L., Focardi, A., Lawler, K. A., O'Brien, P., Leventer, A., Noble, T. L., Opdyke, B., Duffy, M., Evangelinos, D., George, S. C., Lieser, J., López-Quiros, A., Post, A., Ostrowski, M., Paulsen, I. & Armand, L., Apr 2023, In: Journal of

geophysical research: Biogeosciences. 128, 4, p. 1-20 20 p., e2022JG007252.

Biogeochemistry of recently fossilized siliceous hot spring sinters from Yellowstone, USA

Teece, B. L., Havig, J. R., George, S. C., Hamilton, T. L., Baumgartner, R. J., Hartz, J. & Van Kranendonk, M. J., 3 Feb 2023, In: Astrobiology. 23, 2, p. 155-171 17 p.

Exceptional molecular preservation in the Late Jurassic Claudia palaeo-geothermal field (Deseado Massif, Patagonia, Argentina)

Teece, B. L., Guido, D. M., Campbell, K. A., Van Kranendonk, M. J., Galar, A. & George, S. C., Nov 2022, In: Organic Geochemistry. 173, p. 1-14 14 p., 104504.

Methanogenic archaea in subsurface coal seams are biogeographically distinct: an analysis of metagenomically-derived *mcrA* sequences

Campbell, B. C., Greenfield, P., Gong, S., Barnhart, E. P., Midgley, D. J., Paulsen, I. T. & George, S. C., Sept 2022, In: Environmental Microbiology. 24, 9, p. 4065-4078 14 p.

Bacteria-plant interactions synergistically enhance biodegradation of diesel fuel hydrocarbons

Eze, M. O., Thiel, V., Hose, G. C., George, S. C. & Daniel, R., 29 Aug 2022, In: Communications Earth and Environment. 3, 1, p. 1-10 10 p., 192.

Aromatic hydrocarbon signatures of the late Miocene-early Pliocene in the Yinggehai Basin, South China Sea: Implications for climate variations

Ding, W., Hou, D., Gan, J., Zhang, Z. & George, S. C., Aug 2022, In: Marine and Petroleum Geology. 142, p. 1-23 23 p., 105733.

Unusual occurrence of alkylphenanthrenes in upper Eocene to Oligocene sediments from the western margin of Tasmania, Australia

Li, Z., Huang, H. & George, S. C., Aug 2022, In: Marine Geology. 450, p. 1-12 12 p., 106859.

Occurrence and origin of perylene in Paleogene sediments from the Tasmanian Gateway, Australia

Li, Z., Huang, H., Yan, G., Xu, Y. & George, S. C., Jun 2022, In: Organic Geochemistry. 168, p. 1-11 11 p., 104406.

Unusual occurrence of alkynaphthalene isomers in upper Eocene to Oligocene sediments from the western margin of Tasmania, Australia

Li, Z., Huang, H. & George, S. C., Jun 2022, In: Organic Geochemistry. 168, p. 1-12 12 p., 104418.

Quantitative framework for astrobiology strategies and *in situ* biogenic assessments

Hartz, J. & George, S. C., 14 Mar 2022, In: Frontiers in Astronomy and Space Sciences. 9, p. 1-8 8 p., 769607.

The potential of oxygenates to increase the risk of exposure to polycyclic aromatic hydrocarbons through groundwater contamination

Eze, M. O. & George, S. C., 1 Mar 2022, In: Water. 14, 5, p. 1-9 9 p., 739.

Sedimentary geochemical records of late Miocene-early Pliocene palaeovegetation and palaeoclimate evolution in the Ying-Qiong Basin, South China Sea

Ding, W., Hou, D., Gan, J., Jiang, L., Zhang, Z. & George, S. C., Mar 2022, In: Marine Geology. 445, p. 1-26 26 p., 106750.

A Comparative study of different quality oil shales developed in the Middle Jurassic Shimengou Formation, Yuqia Area, Northern Qaidam Basin, China

Bai, Y., Liu, Z., George, S. C. & Meng, J., 1 Feb 2022, In: Energies. 15, 3, p. 1-23 23 p., 1231.

Enhancing rhizoremediation of petroleum hydrocarbons through bioaugmentation with a plant growth-promoting bacterial consortium

Eze, M. O., Thiel, V., Hose, G. C., George, S. C. & Daniel, R., Feb 2022, In: Chemosphere. 289, p. 1-8 8 p., 133143.

Using ToF-SIMS analyses for analysing individual oil inclusions of different fluorescence colours in a single quartz crystal from the Barrandian (Czech Republic)

Siljeström, S., Volk, H. & George, S. C., Feb 2022, In: *Organic Geochemistry*. 164, p. 1-9 9 p., 104354.

Biomacromolecules in recent phosphate-shelled brachiopods: identification and characterization of chitin matrix

Agbaje, O. B. A., Brock, G. A., Zhang, Z., Duru, K. C., Liang, Y., George, S. C. & Holmer, L. E., Dec 2021, In: *Journal of Materials Science*. 56, 36, p. 19884-19898 15 p.

Using laser micropyrolysis to assess potential relationships between Cambrian tommotiids and organophosphatic brachiopods

Teece, B. L., Brock, G. A., Paterson, J. R., Skovsted, C. B., Holmer, L. E. & George, S. C., Sept 2021, In: *Journal of Analytical and Applied Pyrolysis*. 158, p. 1-11 11 p., 105277.

Hydrothermal catalytic conversion and metastable equilibrium of organic compounds in the Jinding Zn/Pb ore deposit

Xu, H., Liu, Q., Zhu, D., Meng, Q., Jin, Z., Fu, Q. & George, S. C., 15 Aug 2021, In: *Geochimica et Cosmochimica Acta*. 307, p. 133-150 18 p.

Aromatic compounds in lacustrine sediments from the Lower Cretaceous Jiufotang Formation, Chaoyang Basin (NE China)

Li, L., Jiang, L., George, S. C. & Liu, Z., Jul 2021, In: *Marine and Petroleum Geology*. 129, p. 1-17 17 p., 105111.

柴北缘鱼卡地区中侏罗统石门沟组含煤层段沉积有机相分析

Bai, Y-Y., Lü, Q., Liu, Z., George, S. C., Sun, P., Meng, Q., Xie, W., Song, Q., Wang, J. & Xu, C., Jul 2021, In: *Acta Geoscientica Sinica*. 42, 4, p. 501-513 13 p.

Diversity and metagenome analysis of a hydrocarbon-degrading bacterial consortium from asphalt lakes located in Wietze, Germany

Eze, M. O., Hose, G., George, S. C. & Daniel, R., 14 Jun 2021, In: *AMB Express*. 11, p. 1-12 12 p., 89.

Aromatic compound-degrading taxa in an anoxic coal seam microbiome from the Surat Basin, Australia

Campbell, B. C., Gong, S., Greenfield, P., Midgley, D. J., Paulsen, I. T. & George, S. C., May 2021, In: *FEMS Microbiology Ecology*. 97, 5, p. 1-13 13 p., fiab053.

Oceanic water chemistry evolution and its implications for post-glacial black shale formation: insights from the Cryogenian Datangpo Formation, South China

Ai, J., Zhong, N., Zhang, T., Zhang, Y., Wang, T. & George, S. C., 5 Apr 2021, In: *Chemical Geology*. 566, p. 1-15 15 p., 120083.

Palaeovegetation variation in response to the late Oligocene-early Miocene East Asian summer monsoon in the Ying-Qiong Basin, South China Sea

Ding, W., Hou, D., Gan, J., Wu, P., Zhang, M. & George, S. C., 1 Apr 2021, In: *Palaeogeography, Palaeoclimatology, Palaeoecology*. 567, p. 1-24 24 p., 110205.

Evidence for deeply buried, oil-prone source rocks in the Baiyun depression, Pearl River Mouth Basin, northern South China Sea

Ping, H., Chen, H., Zhai, P., Zhu, J., Xiong, W., Kong, L., Gong, S., Vergara, T. J. & George, S. C., Apr 2021, In: *American Association of Petroleum Geologists Bulletin*. 105, 4, p. 749-783 35 p.

Organic petrology and geochemistry of Lower Cretaceous lacustrine sediments in the Chaoyang Basin (Liaoning Province, northeast China): influence of volcanic ash on algal productivity and oil shale formation

Li, L., Liu, Z., Jiang, L. & George, S. C., 1 Jan 2021, In: *International Journal of Coal Geology*. 233, p. 1-22 22 p., 103653.

Dose-response analysis of diesel fuel phytotoxicity on selected plant species

Eze, M. O., George, S. C. & Hose, G. C., Jan 2021, In: *Chemosphere*. 263, p. 1-8 8 p., 128382.

Advanced oil spill modeling and simulation techniques

Kotzakoulakis, K. & George, S., 2021, *Oil spill occurrence, simulation and behavior*. Riazi, M. R. (ed.). Boca Raton: CRC Press, Taylor & Francis Group, p. 225-264 40 p.

Geochemical comparison of three oil families from the Gippsland Basin, SE Australia

Jiang, L. & George, S. C., Nov 2020, In: *Marine and Petroleum Geology*. 121, p. 1-23 23 p., 104575.

Characterization of organophosphatic brachiopod shells: spectroscopic assessment of collagen matrix and biomineral components

Agbaje, O. B. A., George, S. C., Zhang, Z., Brock, G. A. & Holmer, L. E., 20 Oct 2020, In: *RSC Advances*. 10, 63, p. 38456-38467 12 p.

Late Cretaceous–Paleogene palaeoclimate reconstruction of the Gippsland Basin, SE Australia

Jiang, L., Ding, W. & George, S. C., 15 Oct 2020, In: *Palaeogeography, Palaeoclimatology, Palaeoecology*. 556, p. 1-18 18 p., 109885.

Evolution of paleo-weathering during the late Neoproterozoic in South China: implications for paleoclimatic conditions and organic carbon burial

Ai, J., Zhong, N., George, S. C., Zhang, Y., Yao, L. & Wang, T., 1 Oct 2020, In: *Palaeogeography, Palaeoclimatology, Palaeoecology*. 555, p. 1-15 15 p., 109843.

Geochemical evaluation of aliphatic and aromatic hydrocarbons in Palaeogene source rocks from the Latrobe Group, Gippsland Basin, Australia

Jiang, L. & George, S. C., Oct 2020, In: *Marine and Petroleum Geology*. 120, p. 1-21 21 p., 104516.

Assessing the effect of diesel fuel on the seed viability and germination of medicago sativa using the event-time model

Eze, M. O., Hose, G. C. & George, S. C., Sept 2020, In: *Plants*. 9, 9, p. 1-9 9 p., 1062.

Comparison of differential diagenesis of two oolites on the Lower Triassic platform margin, NE Sichuan Basin: implications for the co-evolution of rock structure and porosity

Li, K., George, S. C., Cai, C., Zhang, X. & Tan, X., Sept 2020, In: *Marine and Petroleum Geology*. 119, p. 1-25 25 p., 104485.

Sedimentary basin evolution, gravity flows, volcanism, and their impacts on the formation of the Lower Cretaceous oil shales in the Chaoyang Basin, northeastern China

Li, L., Liu, Z., Sun, P., Li, Y. & George, S. C., Sept 2020, In: *Marine and Petroleum Geology*. 119, p. 1-21 21 p., 104472.

Quantitatively predicting the thermal maturity of oil trapped in fluid inclusions based on fluorescence and molecular geochemical data of oil inclusions in the Dongying depression, Bohai Bay Basin, China

Ping, H., Chen, H. & George, S. C., 15 Aug 2020, In: *American Association of Petroleum Geologists Bulletin*. 104, 8, p. 1751-1791 41 p.

Overpressure release: fluid inclusion evidence for a new mechanism for the formation of heavy oil

Ping, H., Li, C., Chen, H., George, S. C. & Gong, S., 1 Aug 2020, In: *Geology*. 48, 8, p. 803-807 5 p.

Petroleum sources in the Xihu Depression, East China Sea: evidence from stable carbon isotopic compositions of individual n-alkanes and isoprenoids

Xu, H., George, S. C., Hou, D., Cao, B. & Chen, X., Jul 2020, In: *Journal of Petroleum Science and Engineering*. 190, p. 1-16 16 p., 107073.

Early diagenetic pyrite cementation influences molecular composition of sedimentary organic matter in the Dongying Depression, China

Xu, H., Hou, D., Löhr, S. C., Liu, Q. & George, S. C., Jun 2020, In: *Organic Geochemistry*. 144, p. 1-16 16 p., 104019.

Integrating heavy-mineral, geochemical and biomarker analyses of Plio-Pleistocene sandy and silty turbidites: a novel approach for provenance studies (Indus Fan, IODP Expedition 355)

Andò, S., Aharonovich, S., Hahn, A., George, S. C., Clift, P. D. & Garzanti, E., Jun 2020, In: Geological Magazine. 157, Special Issue 6, p. 929-938 10 p.

Surfactin for enhanced removal of aromatic hydrocarbons during biodegradation of crude oil

Wang, X., Cai, T., Wen, W., Ai, J., Ai, J., Zhang, Z., Zhu, L. & George, S. C., 1 May 2020, In: Fuel. 267, p. 1-16 16 p., 117272.

Mars rover techniques and lower/middle Cambrian microbialites from South Australia: construction, biofacies, and biogeochemistry

Teece, B. L., George, S. C., Agbaje, O. B. A., Jacquet, S. M. & Brock, G. A., May 2020, In: Astrobiology. 20, 5, p. 637-657 21 p.

Biomolecules from fossilized hot spring sinters: implications for the search for life on mars

Teece, B. L., George, S. C., Djokic, T., Campbell, K. A., Ruff, S. W. & Van Kranendonk, M. J., Apr 2020, In: Astrobiology. 20, 4, p. 537-551 15 p.

Ethanol-blended petroleum fuels: implications of co-solvency for phytotechnologies

Eze, M. O. & George, S. C., 11 Feb 2020, In: RSC Advances. 10, 11, p. 6473-6481 9 p.

Organic geochemical characteristics of highly mature Late Neoproterozoic black shales from South China: reappraisal of syngeneity and indigeneity of hydrocarbon biomarkers

Ai, J. Y., George, S. C. & Zhong, N. N., Jan 2020, In: Precambrian Research. 336, p. 1-15 15 p., 105508.

Biomarker signatures of Upper Cretaceous Latrobe Group petroleum source rocks, Gippsland Basin, Australia: distribution and geological significance of aromatic hydrocarbons

Jiang, L. & George, S. C., Dec 2019, In: Organic Geochemistry. 138, p. 1-20 20 p., 103905.

Assessing hydrocarbon biomarkers released from Archean rocks after hydrochloric acid treatment (Bitumen II)

Peters, C. A., Hoshino, Y. & George, S. C., 4 Sept 2019. 2 p.

Geochemical characteristics of coal seam biodegradation

Campbell, B. C., Gong, S., George, S. C., Vergara, T. J., Vick, S. H. W., McLeish, A. G., Tran-Dinh, N. & Midgley, D. J., 4 Sept 2019. 2 p.

Reassessing the syngeneity of biomarkers from South China: Late Neoproterozoic or not?

Ai, J. Y., George, S. C. & Zhong, N. N., 4 Sept 2019. 2 p.

Disequilibrium between relative abundances of diahopanes and diasteranes suggests different formation mechanisms

George, S. C., Baydjanova, S., Jiang, L. & Manda, B. J., 1 Sept 2019. 2 p.

Ancient DNA from marine sediments: precautions and considerations for seafloor coring, sample handling and data generation

Armbrecht, L. H., Coolen, M. J. L., Lejzerowicz, F., George, S. C., Negandhi, K., Suzuki, Y., Young, J., Foster, N. R., Armand, L. K., Cooper, A., Ostrowski, M., Focardi, A., Stat, M., Moreau, J. W. & Weyrich, L. S., Sept 2019, In: Earth-Science Reviews. 196, p. 1-13 13 p., 102887.

Higher-plant evolution during the Cretaceous to Palaeogene in the Gippsland Basin, Australia

Jiang, L. & George, S. C., Sept 2019. 2 p.

Petroleum charge history in the Baiyun depression and Panyu lower uplift in the Pearl River Mouth Basin, northern South China Sea: constraints from integration of organic geochemical and fluid inclusion data

Ping, H., Chen, H., Zhai, P., Zhu, J. & George, S. C., Jun 2019, In: American Association of Petroleum Geologists Bulletin. 103, 6, p. 1401-1442 42 p.

Depositional environment, organic matter sources, and variable 17α (H)-diahopane distribution in Early Permian samples, southern Sydney Basin, Australia

Baydjanova, S. & George, S. C., May 2019, In: Organic Geochemistry. 131, p. 60-75 16 p.

Relationship between the fluorescence colour of oil inclusions and thermal maturity in the Dongying Depression, Bohai Bay Basin, China: part 2. fluorescence evolution of oil in the context of petroleum generation, expulsion and cracking under geological conditions

Ping, H., Chen, H., George, S. C., Li, C. & Hu, S., May 2019, In: Marine and Petroleum Geology. 103, p. 306-319 14 p.

Algal-derived polycyclic aromatic hydrocarbons in Paleogene lacustrine sediments from the Dongying Depression, Bohai Bay Basin, China

Xu, H., George, S. C. & Hou, D., Apr 2019, In: Marine and Petroleum Geology. 102, p. 402-425 24 p.

Lake evolution and its influence on the formation of oil shales in the Middle Jurassic Shimengou Formation in the Tuanyushan area, Qaidam Basin, NW China

Li, L., Liu, Z., George, S. C., Sun, P., Xu, Y., Meng, Q., Wang, K. & Wang, J., Apr 2019, In: Chemie der Erde - Geochemistry. 79, 1, p. 162-177 16 p.

Using petroleum inclusions to trace petroleum systems – a review

Volk, H. & George, S. C., Mar 2019, In: Organic Geochemistry. 129, p. 99-123 25 p.

Fluid inclusion and stable isotopic studies of thermochemical sulfate reduction: Upper permian and lower triassic gasfields, northeast Sichuan Basin, China

Li, K., George, S. C., Cai, C., Gong, S., Sestak, S., Armand, S. & Zhang, X., 1 Feb 2019, In: Geochimica et Cosmochimica Acta. 246, p. 86-108 23 p.

Relationship between the fluorescence color of oil inclusions and thermal maturity in the Dongying Depression, Bohai Bay Basin, China: Part 1. Fluorescence evolution of oil in the context of hydrous pyrolysis experiments with increasing maturity

Ping, H., Chen, H., George, S. C., Li, C. & Hu, S., Feb 2019, In: Marine and Petroleum Geology. 100, p. 1-19 19 p.

The occurrence of isorenieratane and 24-n-propylcholestanes in Paleogene lacustrine source rocks from the Dongying Depression, Bohai Bay Basin: implications for bacterial sulfate reduction, photic zone euxinia and seawater incursions

Xu, H., George, S. C. & Hou, D., Jan 2019, In: Organic Geochemistry. 127, p. 59-80 22 p.

Ethanol-blended fossil fuels: is reduction of atmospheric pollution the only concern?

Eze, M. & George, S., 2019, *SETAC Europe 29th Annual Meeting abstract book*. Society of Environmental Toxicology and Chemistry Europe (SETAC Europe), p. 166 1 p. MO110

The potential of *Medicago sativa* for microbial-enhanced phytoremediation of diesel fuel contaminated sites

Eze, M. O., George, S. C. & Hose, G., 2019.

Sediment microfabric records mass sedimentation of colonial cyanobacteria and extensive syndepositional metazoan reworking in Pliocene sapropels

Löhr, S. C., Kennedy, M. J., George, S. C., Williamson, R. J. & Xu, H., Dec 2018, In: The Depositional Record. 4, 2, p. 293-317 25 p.

Origin, source, mixing, and thermal maturity of natural gases in the Panyu lower uplift and the Baiyun depression, Pearl river Mouth basin, northern South China sea

Ping, H., Chen, H., Zhu, J., George, S. C., Mi, L., Pang, X. & Zhai, P., 1 Nov 2018, In: AAPG Bulletin. 102, 11, p. 2171-2200 30 p.

Hydrocarbon biomarkers preserved in carbonate veins of potentially Paleoproterozoic age, and implications for the early biosphere

Peters, C. A. & George, S. C., Nov 2018, In: *Geobiology*. 16, 6, p. 577-596 20 p.

Biomarker signatures of Upper Cretaceous Latrobe Group hydrocarbon source rocks, Gippsland Basin, Australia: distribution and palaeoenvironment significance of aliphatic hydrocarbons

Jiang, L. & George, S. C., 1 Aug 2018, In: *International Journal of Coal Geology*. 196, p. 29-42 14 p.

Phenolic compounds in oil-bearing fluid inclusions: implications for water-washing and oil migration

Peters, C. A., Hallmann, C. & George, S. C., 1 Apr 2018, In: *Organic Geochemistry*. 118, p. 36-46 11 p.

The influence of vegetation and soil properties on springtail communities in a diesel-contaminated soil

Errington, I., King, C. K., Houlahan, S., George, S. C., Michie, A. & Hose, G. C., 1 Apr 2018, In: *Science of the Total Environment*. 619-620, p. 1098-1104 7 p.

Predicting the weathering of fuel and oil spills: a diffusion-limited evaporation model

Kotzakoulakis, K. & George, S. C., Jan 2018, In: *Chemosphere*. 190, p. 442-453 12 p.

The occurrence and distribution of rearranged hopanes in crude oils from the Lishu Depression, Songliao Basin, China

Jiang, L., George, S. C. & Zhang, M., Jan 2018, In: *Organic Geochemistry*. 115, p. 205-219 15 p.

Biomarker signatures of Upper Cretaceous to Paleogene hydrocarbon source rocks from the Latrobe Group, Gippsland Basin

Jiang, L. & George, S., 2018, In: *ASEG Extended Abstracts*. 2018, 1, p. 1-4 4 p.

Comparison of the geochemistry of Upper Cretaceous and Palaeogene hydrocarbon source rocks from the Latrobe Group, Gippsland Basin

Jiang, L. & George, S. C., 2018, *Organic Geochemistry Conference: origins of oil, old organics and organisms: program and abstracts: 3 – 7 December, 2018*. Edwards, D. S., Grosjean, E., Brocks, J. J. & van Maldegem, L. (eds.). Canberra: Geoscience Australia, p. 105-106 2 p.

Effect of ethanol on the vertical migration of diesel fuel: implications for phytoremediation

Eze, M. O. & George, S. C., 2018, *Organic Geochemistry Conference: origins of oil, old organics and organisms: program and abstracts: 3 – 7 December, 2018*. Edwards, D. S., Grosjean, E., Brocks, J. J. & van Maldegem, L. (eds.). Canberra: Geoscience Australia, p. 55-56 2 p.

Genetic typing of natural gases and condensates in the Songnan-Baodao Sag, Qiongdongnan Basin, South China Sea

Ding, W., Hou, D. & George, S. C., 2018, *Organic Geochemistry Conference: origins of oil, old organics and organisms: program and abstracts: 3 – 7 December, 2018*. Edwards, D. S., Grosjean, E., Brocks, J. J. & van Maldegem, L. (eds.). Canberra: Geoscience Australia, p. 50-52 3 p.

Geochemical characteristics of coal seam biodegradation

Campbell, B. C., Gong, S., George, S. C. & Midgley, D. J., 2018, *Organic Geochemistry Conference: origins of oil, old organics and organisms: program and abstracts: 3 – 7 December, 2018*. Edwards, D. S., Grosjean, E., Brocks, J. J. & van Maldegem, L. (eds.). Canberra: Geoscience Australia, p. 44-45 2 p.

Hydrocarbons and hot springs; looking at analogues in the quest for life on Mars

Teece, B. L., George, S. C., Djokic, T., Campbell, K. A., Ruff, S. W. & van Kranendonk, M. J., 2018, *Organic Geochemistry Conference: origins of oil, old organics and organisms: program and abstracts: 3 – 7 December, 2018*. Edwards, D. S., Grosjean, E., Brocks, J. J. & van Maldegem, L. (eds.). Canberra: Geoscience Australia, p. 87-88 2 p.

Lower-middle Cambrian microbialites from South Australia: architecture, ecology & biogeochemistry

Teece, B., George, S. C. & Brock, G. A., 2018, *International Conference on Ediacaran and Cambrian Sciences: Joint meeting of International Subcommission on Cambrian Stratigraphy (ISCS), International Subcommission on Ediacaran Stratigraphy (ISES), 12th-16th August 2018, Xi'an : programme abstract*. p. 56-57 2 p.

Organic geochemistry and petroleum potential of Permian outcrop and core samples from the southern Sydney Basin
George, S. C., Baydjanova, S., Campbell, B. C. & Manda, B., 2018, In: ASEG Extended Abstracts. 2018, 1, p. 1-5 5 p.

Paleozoic oil-source correlation in the Tarim Basin

Li, Z., George, S. C., Huang, H. & Xu, Z., 2018, *Organic Geochemistry Conference: origins of oil, old organics and organisms: program and abstracts: 3 – 7 December, 2018*. Edwards, D. S., Grosjean, E., Brocks, J. J. & van Maldegem, L. (eds.). Canberra: Geoscience Australia, p. 111-112 2 p.

Stromatolite construction, biofacies and biomarkers in the lower Cambrian Hawker Group, Arrowie Basin, South Australia
Teece, B. L., George, S. C. & Brock, G. A., 2018, In: ASEG Extended Abstracts. 2018, 1, p. 1-6 6 p.

Thermal maturity variations and unusual biomarker distributions in Permian outcrop and core samples from the southern Sydney Basin

George, S. C., Baydjanova, S., Campbell, B. C. & Manda, B., 2018, *Organic Geochemistry Conference: origins of oil, old organics and organisms: program and abstracts: 3 – 7 December, 2018*. Edwards, D. S., Grosjean, E., Brocks, J. J. & van Maldegem, L. (eds.). Canberra: Geoscience Australia, p. 61-63 3 p.

Tracing the redox evolution of the palaeo-ocean through the Late Neoproterozoic in South China: insights from trace elemental proxies

Ai, J., Zhong, N., George, S. C., Wang, T. & Zhang, Y., 2018, *Organic Geochemistry Conference: origins of oil, old organics and organisms: program and abstracts: 3 – 7 December, 2018*. Edwards, D. S., Grosjean, E., Brocks, J. J. & van Maldegem, L. (eds.). Canberra: Geoscience Australia, p. 36-38 3 p.

A simple and flexible correlation for predicting the viscosity of crude oils

Kotzakoulakis, K. & George, S. C., 1 Sept 2017, In: Journal of Petroleum Science and Engineering. 158, p. 416-423 8 p.

Effects of oil cracking on fluorescence color, homogenization temperature and trapping pressure reconstruction of oil inclusions from deeply buried reservoirs in the northern Dongying Depression, Bohai Bay Basin, China

Ping, H., Chen, H., Thiéry, R. & George, S. C., Feb 2017, In: Marine and Petroleum Geology. 80, p. 538-562 25 p.

Biomarker signatures of Upper Cretaceous hydrocarbon source rocks from the Latrobe Group, Gippsland Basin

Jiang, L. & George, S., 2017, In: Geological Society of Australia Abstracts. 125, p. 63 1 p.

Carbon isotopic compositions of n-alkanes and isoprenoids provide evidence of source contributions for Xihu petroleum

Xu, H., George, S. C. & Hou, D., 2017. 2 p.

Investigation of a thermal effect on rearranged hopanes

Jiang, L., Zhang, M., Chen, J. & George, S. C., 2017. 2 p.

Organic geochemistry of Pliocene sapropels from ODP Sites 964 and 967, eastern Mediterranean Basin

George, S. C., Xu, H., Loehr, S. C. & Kennedy, M. J., 2017. 2 p.

Phenolic compounds in oil-bearing fluid inclusions: implications for water-washing and oil migration

Peters, C. A., Hallmann, C. & George, S. C., 2017. 5 p.

The fate and bioavailability of fuel spills in polar marine environments: effect of evaporation and dissolution

Kotzakoulakis, K., Harrison, P. L., King, C. K., Brown, K. & George, S. C., 2017. 2 p.

The transformation of sediment into rock: insights from IODP site U1352, Canterbury Basin, New Zealand

Marsaglia, K. M., Browne, G. H., George, S. C., Kemp, D. B., Jaeger, J. M., Carson, D., Richaud, M. & IODP Expedition 317 Scientific Party, 2017, In: Journal of Sedimentary Research. 87, 3, p. 272-287 16 p.

Distinguishing in situ stromatolite biosignatures from silicification and dolomitisation using short wave, visible-near and thermal infrared spectroscopy: a mars analogue study

Kose, S. H., George, S. C. & Lau, I. C., 1 Nov 2016, In: *Vibrational Spectroscopy*. 87, p. 67-80 14 p.

In search of early life: Carbonate veins in Archean metamorphic rocks as potential hosts of biomarkers

Peters, C. A., Piazolo, S., Webb, G. E., Dutkiewicz, A. & George, S. C., 1 Nov 2016, In: *Earth and Planetary Science Letters*. 453, p. 44-55 12 p.

Assessing fuel spill risks in polar waters: Temporal dynamics and behaviour of hydrocarbons from Antarctic diesel, marine gas oil and residual fuel oil

Brown, K. E., King, C. K., Kotzakoulakis, K., George, S. C. & Harrison, P. L., 15 Sept 2016, In: *Marine Pollution Bulletin*. 110, 1, p. 343-353 11 p.

Organic geochemical characteristics of the Mesoproterozoic Hongshuihuang Formation from northern China: implications for thermal maturity and biological sources

Luo, Q., George, S. C., Xu, Y. & Zhong, N., 1 Sept 2016, In: *Organic Geochemistry*. 99, p. 23-37 15 p.

A possible shale gas prospect? First results of the organic composition and thermal maturity of the Carboniferous Namoi Formation, northern NSW, Australia

Aharonovich, S. & George, S. C., 17 Aug 2016, In: *Australian Journal of Earth Sciences*. 63, 6, p. 771-780 10 p.

Sedimentary organic matter record of Early Cretaceous environmental changes in Western Liaoning Province, NE China

Li, Y., Song, Z., Cao, X. X. & George, S. C., Aug 2016, In: *Organic Geochemistry*. 98, p. 54-65 12 p.

Petroleum potential and kinetic models for hydrocarbon generation from the Upper Cretaceous to Paleogene Latrobe Group coals and shales in the Gippsland Basin, Australia

Abbassi, S., Edwards, D. S., George, S. C., Volk, H., Mahlstedt, N., di Primio, R. & Horsfield, B., Jan 2016, In: *Organic Geochemistry*. 91, p. 54-67 14 p.

Applications of oil-bearing fluid inclusions in petroleum exploration, and advances in the techniques for their analysis

George, S. C., 2016, *Asian Current Research On Fluid Inclusions: abstract volume*. Mumbai: Indian Institute of Technology, p. 10-13 4 p.

Arabian night and sea story: biomarkers from a giant mass transport deposit

Bratenkov, S., Kulhanek, D. K., Clift, P. D. & George, S. C., 2016. 1 p.

Behaviour of hydrocarbons from fuels in polar seawater and effects on the Antarctic amphipod *Paramoera walkeri*

Brown, K. E., King, C., Kotzakoulakis, K., George, S. & Harrison, P., 2016, p. 101-101. 1 p.

Carbon isotope records of thermochemical sulfate reduction corrosion effects on carbonate minerals, Upper Permian and Lower Triassic carbonates, NE Sichuan Basin, China

Li, K., George, S. C. & Chunfang, C., 2016, *19th Australian Organic Geochemistry Conference: Conference handbook and abstracts*. Fremantle, Australia, p. 69-71 3 p.

Combined heavy mineral and biomarker analysis in silt: a novel approach for provenance studies (Indus Fan, IODP Expedition 355)

Andò, S., Bratenkov (Aharonovich), S., Hahn, A., George, S., Clift, P. D., Gazarenti, E. & Expedition 355 Scientific Party, 2016. 1 p.

Constraining the impact of benthic meiofaunal activity on organic carbon burial in ancient oxygen-depleted sedimentary environments

Loehr, S., Kennedy, M. J. & George, S. C., 2016, *19th Australian Organic Geochemistry Conference: Conference handbook and abstracts*. p. 84-85 2 p.

Effects of oil cracking on fluorescence color, homogenization temperature and trapping pressure reconstruction of oil inclusions from deeply buried reservoirs, Northern Donging Depression, China

Ping, H., Chen, H., Thiéry, R. & George, S. C., 2016, p. 50.

Evaluating the performance of field science in an analogue EVA suit: stromatolite identification by geologists and non-geologists

Clarke, J. D. A., Cooper, M., George, S., Hobbs, S., Houlahan, S., Murphy, G. M., Silburn, K., Sprigg, D., Sprigg, M. & Waldie, J., 2016, *Proceedings of the 15th Australian Space Research Conference*. Short, W. & Caprarelli, G. (eds.). Sydney, Australia: National Space Society of Australia, p. 159-172 14 p. (Australian Space Research Conference Series).

Multi-proxy geochemical analyses of Indus Submarine Fan sediments sampled by IODP Expedition 355: implications for sediment provenance and palaeoclimate reconstructions.

Bratenkov (Aharonovich), S., George, S. C., Bendle, J. A. P., Liddy, H. M., Clift, P. D., Pandey, D. K., Kulhanek, D. K., Andò, S., Tiwari, M., Khim, B. K., Griffith, E. M., Steinke, S., Suzuki, K., Lee, J., Newton, K., Tripathi, S. & Expedition 355 Scientific Party, 2016. 1 p.

Multi-proxy geochemical analyses of Indus Submarine Fan sediments sampled by IODP Expedition 355: implications for sediment provenance and palaeoclimate reconstructions

Bratenkov (Aharonovich), S., George, S. C., Bendle, J. A. P., Liddy, H. M., Clift, P. D., Pandey, D. K., Kulhanek, D. K., Andò, S., Tiwari, M., Khim, B. K., Griffith, E. M., Steinke, S., Suzuki, K., Lee, J., Newton, K., Tripathi, S. & Expedition 355 Scientific Party, 2016, *19th Australian Organic Geochemistry Conference: Conference handbook and abstracts*. p. 38-39 2 p.

Oil-bearing fluid inclusions and solid bitumens: biogeochemical repositories of information about the Archean biosphere

George, S. C., Peters, C. A., Piazolo, S., Leefmann, T. & Dutkiewicz, A., 2016, p. 35.

Oil-bearing fluid inclusions and solid bitumens as biogeochemical repositories of information about the Archean biosphere

George, S. C., Peters, C. A., Piazolo, S., Leefmann, T. & Dutkiewicz, A., 2016, p. 2.

Organic contamination of 2.6Ga stromatolitic dolomites leading to false-positive biomarker results

Blake, R. P., Van Kranendonk, M. J., Peters, C. A. & George, S. C., 2016, p. 22.

Organic geochemical characterisation of aliphatic fractions of Pliocene sapropels from ODP Sites 964 and 967, Eastern Mediterranean Basin

George, S. C., Xu, H., Loehr, S. & Kennedy, M. J., 2016, *19th Australian Organic Geochemistry Conference: Conference handbook and abstracts*. p. 60-61 2 p.

Shallow to moderate burial diagenesis and lithification processes in a mixed carbonate/siliciclastic slope succession in the Canterbury Basin, New Zealand

Marsaglia, K. M., Browne, G. H., George, S. C., Kemp, D. B., Jaeger, J., Carson, D., Richaud, M. & IODP Expedition 317 Scientific Party, 2016.

Sub-marine mass slide as a potential biomarker reservoir: preliminary results from IODP Expedition 355, Arabian Sea

Bratenkov (Aharonovich), S., Kulhanek, D. K., Clift, P. D. & George, S. C., 2016, *19th Australian Organic Geochemistry Conference: Conference handbook and abstracts*. Fremantle, Australia, p. 87-88 2 p.

The stable carbon isotopic compositions of individual n-alkanes and isoprenoids provide evidence of source contributions for petroleum generated from the Xihu Depression, East China Sea

Xu, H., George, S. C. & Hou, D., 2016, *19th Australian Organic Geochemistry Conference: Conference handbook and abstracts*. p. 58-59 2 p.

Cyanobacterial Inhabitation on Archean Rock Surfaces in the Pilbara Craton, Western Australia

Hoshino, Y. & George, S. C., 1 Jul 2015, In: *Astrobiology*. 15, 7, p. 559-574 16 p.

Reappraisal of hydrocarbon biomarkers in Archean rocks

French, K. L., Hallmann, C., Hope, J. M., Schoon, P. L., Zumberge, J. A., Hoshino, Y., Peters, C. A., George, S. C., Love, G. D., Brocks, J. J., Buick, R. & Summons, R. E., 12 May 2015, In: *Proceedings of the National Academy of Sciences of the United States of America*. 112, 19, p. 5915-5920 6 p.

Characterisation of organic inclusions in stalagmites using laser-ablation-micropyrolysis gas chromatography-mass spectrometry

Blyth, A. J., Fuentes, D., George, S. C. & Volk, H., 1 May 2015, In: *Journal of Analytical and Applied Pyrolysis*. 113, p. 454-463 10 p., 3449.

Hydrocarbons preserved in a ~2.7 Ga outcrop sample from the Fortescue Group, Pilbara Craton, Western Australia

Hoshino, Y., Flannery, D. T., Walter, M. R. & George, S. C., 1 Mar 2015, In: *Geobiology*. 13, 2, p. 99-111 13 p.

On the filling and leakage of petroleum from traps in the Laminaria High region of the northern Bonaparte Basin, Australia

Abbassi, S., di Primio, R., Horsfield, B., Edwards, D. S., Volk, H., Anka, Z. & George, S. C., Jan 2015, In: *Marine and Petroleum Geology*. 59, p. 91-113 23 p.

Analysis of individual oil-bearing fluid inclusions in single quartz crystals from the Barrandian Basin (Lower Palaeozoic, Czech Republic) using ToF-SIMS

Leefmann, T., Siljeström, S., Volk, H., Dutkiewicz, A. & George, S. C., 2015, *Book of abstracts: 27th International Meeting on Organic Geochemistry*. Francu, J., Schwark, L., Ocásková, D., Čáslavský, J. & Brejchová, V. (eds.). p. 122-123 2 p.

A petrological investigation to find potential biomarker sites in Precambrian rocks

Peters, C. A., George, S. C., Piazolo, S., Webb, G. E. & Dutkiewicz, A., 2015, *Book of abstracts: 27th International Meeting on Organic Geochemistry*. Francu, J., Schwark, L., Ocásková, D., Čáslavský, J. & Brejchová, V. (eds.). p. 583-584 2 p.

Compound specific carbon isotope analysis of palaeo gases trapped in fluid inclusions: implications for the source of gas in the Browse Basin, Australia

Gong, S., Sestak, S., Armand, S., van Holst, J., Bourdet, J., Volk, H., Kempton, R. F., George, S., Grosjean, E. & Edwards, D. S., 2015.

Global sea level changes or local tectonics? First Miocene biomarkers in cored sedimentary rocks from IODP Expedition 317, Canterbury Basin, New Zealand

Bratenkov (Aharonovich), S. & George, S. C., 2015, *Book of abstracts: 27th International Meeting on Organic Geochemistry*. Francu, J., Schwark, L., Ocásková, D., Čáslavský, J. & Brejchová, V. (eds.). p. 748-749 2 p.

New insights on potential sources of hydrocarbons in the Gippsland Basin

Abbassi, S., Edwards, D. S., George, S. C., Volk, H., di Primio, R. & Horsfield, B., 2015. 1 p.

Organic geochemistry of non-marine Permian-Triassic mass extinction (PTME) sections in the Sydney Basin, Australia

George, S. C., Williams, M. L., Wheeler, J., Baydjanova, S., Camilleri, N., Hanssen, B., Maher, R., Meek, U., Nelson, A., O'Connor, C., Porter, W. & Jones, B. G., 2015, *Book of abstracts: 27th International Meeting on Organic Geochemistry*. Francu, J., Schwark, L., Ocásková, D., Čáslavský, J. & Brejchová, V. (eds.). Prague, Czech Republic, p. 613-614 2 p.

Predicting the weathering and bioavailability of fuel spills in cold marine environments

Kotzakoulakis, K., George, S. C. & Smith, P., 2015.

Predicting the weathering and bioavailability of fuel spills in polar marine environments

Kotzakoulakis, K., George, S. C. & Smith, P., 2015.

Reappraisal of hydrocarbon biomarkers in Archean rocks

French, K. L., Hallmann, C., Schoon, P. L., Zumberge, J. E., Hoshino, Y., Peters, C. A., George, S. C., Love, G. D., Brocks, J. J., Buick, R. & Summons, R. E., 2015. 1 p.

The organic geochemistry of Permian shales from southern New South Wales, Australia

Baydjanova, S. & George, S. C., 2015, *Book of abstracts: 27th International Meeting on Organic Geochemistry*. Francu, J., Schwark, L., Ocásková, D., Čáslavský, J. & Brejchová, V. (eds.). p. 784-785 2 p.

The spatial distribution of hydrocarbon biomarkers in an Archean stromatolite outcrop in the Fortescue Group, Pilbara region, Western Australia

Hoshino, Y., Flannery, D. T., Walter, M. R. & George, S. C., 2015, *Book of abstracts: 27th International Meeting on Organic Geochemistry*. Francu, J., Schwark, L., Ocásková, D., Čáslavský, J. & Brejchová, V. (eds.). p. 611-612 2 p.

Assessing the syngeneity and indigeneity of hydrocarbons in the ~1.4 Ga Velkerri Formation, McArthur Basin, using slice experiments

Flannery, E. N. & George, S. C., Dec 2014, In: *Organic Geochemistry*. 77, p. 115-125 11 p.

¹⁴C analysis of aliphatic hydrocarbon fractions from the hypersaline Lake Tyrrell, southeast Australia

Bray, P. S., Brocks, J. J. & George, S. C., Aug 2014, In: *Organic Geochemistry*. 73, p. 29-34 6 p.

Innovative fluorescence spectroscopic techniques for rapidly characterising oil inclusions

Liu, K., George, S. C., Lu, X., Gong, S., Tian, H. & Gui, L., Jul 2014, In: *Organic Geochemistry*. 72, p. 34-45 12 p.

Generation characteristics of Mesozoic syn- and post-rift source rocks, Bonaparte Basin, Australia: new insights from compositional kinetic modelling

Abbassi, S., George, S. C., Edwards, D. S., di Primio, R., Horsfield, B. & Volk, H., Feb 2014, In: *Marine and Petroleum Geology*. 50, p. 148-165 18 p.

Marine influence helps preserve the oil potential of coaly source rocks: Eocene Mangahewa Formation, Taranaki Basin, New Zealand

Sykes, R., Volk, H., George, S. C., Ahmed, M., Higgs, K. E., Johansen, P. E. & Snowdon, L. R., Jan 2014, In: *Organic Geochemistry*. 66, p. 140-163 24 p.

The performance of field scientists undertaking observations of early life fossils while in simulated space suit

Willson, D., Rask, J. C., George, S. C., De Leon, P., Bonaccorsi, R., Blank, J., Slocombe, J., Silburn, K., Steele, H., Gargano, M. & McKay, C. P., Jan 2014, In: *Acta Astronautica*. 93, p. 193-206 14 p.

A comparative multiproxy approach to address paleo-redox change at the Paleocene-Eocene boundary, New Jersey continental margin

Chen, A., Burton, E., George, S. C., Hesse, P., Kraal, P., Potter, D., Sepúlveda, J., Trimby, P. & Vella, N., 2014.

Assessing the syngeneity and indigeneity of hydrocarbons in the ~1.4 Ga Velkerri Formation, McArthur Basin, using slice experiments

Flannery, E. N. & George, S. C., 2014.

Beginnings

King, S., Donovan, S., George, S. C., Jaeglé, L., Pyle, D., van Gasselt, S. & Ersek, V., 2014, In: *GeoResJ*. 1-2, p. ii 1 p.

Bioavailability and fate of toxic aromatic hydrocarbons in fuel spills in the Antarctic marine environment

Kotzakoulakis, K., George, S. C., Harrison, P. L., Alexander, F. & King, C. K., 2014, p. 229.

Biomarkers or not? A petrologic assessment of Archean rocks and their oil inclusions

Peters, C. A., Dutkiewicz, A., Piazolo, S., Webb, G. E. & George, S. C., 2014, p. 64-65. 2 p.

Coal contribution to oil and gas accumulations in the Bonaparte and Gippsland basins: new insights from molecular and bulk kinetic data

Abbassi, S., Horsfield, B., di Primio, R., Edwards, D. S., Volk, H. & George, S., 2014.

Crude oil in Archean carbonates

Peters, C. A., Dutkiewicz, A., Piazolo, S. & George, S. C., 2014.

Exploration of Miocene biomarkers in cored sedimentary rocks from IODP Expedition 317, Canterbury Basin, New Zealand

Bratenkov (Aharonovich), S. & George, S., 2014.

Geochemical characterisation and predicted bulk chemical properties of petroleum generated from Jurassic and Cretaceous source rocks in the Vulcan Sub-basin, Bonaparte Basin, North West Shelf of Australia

Abbassi, S., Horsfield, B., George, S. C., Edwards, D. S., Volk, H. & di Primio, R., 2014, In: *Organic Geochemistry*. 76, p. 82-103 22 p.

Global sea level changes or local tectonics? First Miocene biomarkers in cored sedimentary rocks from IODP Expedition 317, Canterbury Basin, New Zealand

Bratenkov (Aharonovich), S. & George, S. C., 2014, *Life, environments and resources: AOGC2014: the 18th Australian Organic Geochemistry Conference: program and abstracts*. McKirdy, D. & Lohr, S. (eds.). Adelaide: The University of Adelaide, p. 73-74 2 p.

In memoriam: John W. Smith (1925-2014)

George, S. C., 2014, *Life, environments and resources: AOGC2014: the 18th Australian Organic Geochemistry Conference*. Adelaide: The University of Adelaide, p. 23-26 4 p.

Investigating the syngeneity and the paleobiology of hydrocarbon biomarkers in the Fortescue Group at 2.7-2.8 Ga

Hoshino, Y., Flannery, D. T., Walter, M. R. & George, S. C., 2014.

Origin and evolution of biomarkers in cored Miocene sedimentary rocks from IODP Expedition 317, Canterbury Basin, New Zealand

Bratenkov (Aharonovich), S. & George, S. C., 2014.

Petroleum biodegradation in subantarctic Macquarie Island soils

Houlahan, S. B., Hose, G., Errington, I., King, C. K. & George, S. C., 2014, *Life, environments and resources: AOGC2014: 18th Australian Organic Geochemistry Conference*. Adelaide: The University of Adelaide, p. 81-82 2 p.

Potential sources of petroleum accumulations in the Gippsland Basin: insights from pyrolysis and bulk chemical data

Abbassi, S., George, S. C., Edwards, D. S., Volk, H., di Primio, R. & Horsfield, B., 2014, p. 101-102. 2 p.

Predicting the weathering and bioavailability of fuel spills in cold marine environments

Kotzakoulakis, K., George, S. C. & Smith, P., 2014, *Life, environments and resources: AOGC2014: the 18th Australian Organic Geochemistry Conference*. McKirdy, D. & Lohr, S. (eds.). Adelaide: The University of Adelaide, p. 83-84 2 p.

Preliminary results on the organic composition and thermal maturity of the Carboniferous Namoi Formation, northern NSW, Australia: a possible shale gas prospect?

Bratenkov (Aharonovich), S. & George, S., 2014.

The effects of aged diesel fuel on subantarctic invertebrate and microbial communities

Errington, I., King, C. K., George, S. C., Houlahan, S. & Hose, G., 2014.

The organic geochemistry of Permian shales from the south coast of NSW

Baydjanova, S., Wheeler, J., Thomas, B. & George, S. C., 2014, p. 105-106. 2 p.

The preservation potential of hydrocarbon biomarkers in an Archean stromatolite outcrop in the Fortescue Group, Pilbara region, Western Australia

Hoshino, Y., Flannery, D., Walter, M. R. & George, S. C., 2014, p. 62-63. 2 p.

ToF-SIMS dual beam depth profiling of individual oil-bearing fluid inclusions

Leefmann, T., Denman, J. A., Dutkiewicz, A., Siljeström, S., Volk, H. & George, S. C., 2014, p. 122-123. 2 p.

Understanding the biodegradation of petroleum hydrocarbons in the Gippsland Basin, offshore Australia, using quantitative two-dimensional gas chromatography time-of-flight mass spectrometry

George, S. C., Holterhof, J. & Volk, H., 2014, p. 46-47. 2 p.

Analysis of single oil-bearing fluid inclusions in mid-Proterozoic sandstones (Roper Group, Australia)

Siljeström, S., Volk, H., George, S. C., Lausmaa, J., Sjövall, P., Dutkiewicz, A. & Hode, T., 1 Dec 2013, In: *Geochimica et Cosmochimica Acta*. 122, p. 448-463 16 p.

Sedimentology, stratigraphy and geochemistry of a stromatolite biofacies in the 2.72 Ga Tumbiana Formation, Fortescue Group, Western Australia

Coffey, J. M., Flannery, D. T., Walter, M. R. & George, S. C., Oct 2013, In: *Precambrian Research*. 236, p. 282-296 15 p.

A biomarker study of depositional paleoenvironments and source inputs for the massive formation of Upper Cretaceous lacustrine source rocks in the Songliao Basin, China

Song, Z., Qin, Y., George, S. C., Wang, L., Guo, J. & Feng, Z., 1 Sept 2013, In: *Palaeogeography, Palaeoclimatology, Palaeoecology*. 385, p. 137-151 15 p.

Biomarker geochemistry of very old rocks: single oil inclusion analysis by TOF-SIMS

George, S. C., Siljeström, S., Volk, H., Dutkiewicz, A., Lausmaa, J., Sjövall, P. & Hode, T., Sept 2013, p. 45-46. 2 p.

Geochemical characteristics of the Mesoproterozoic Hongshuihuang Formation, northern part of North China

Luo, Q., George, S. C. & Zhong, N., Sept 2013, p. 454-455. 2 p.

Investigations into syngenicity and indigeneity of hydrocarbons of the Mesoproterozoic Velkerri Formation using slice experiments

Flannery, E. N. & George, S. C., Sept 2013, p. 207-208. 2 p.

On the filling and leakage of petroleum from traps in the northern Bonaparte Basin, Australia

Abbassi, S., di Primio, R., Horsfield, B., Anka, Z., Volk, H., George, S. C. & Edwards, D. S., Sept 2013, p. 121-122. 2 p.

Investigating the syngenicity and the palaeobiology of hydrocarbon biomarkers in the Fortescue Group at 2.7-2.8 Ga

Hoshino, Y., Flannery, D., Walter, M. & George, S. C., 2013, *Organic Geochemistry: trends for the 21st Century: Book of Abstracts of the Communications presented to the 26th International Meeting on Organic Geochemistry*. Canary Islands: CSIC Consejo Superior de Investigaciones Científicas, Vol. 2. p. 261-262 2 p.

Sensitivity of the Antarctic amphipod *Paramoera walkeri* to diesel and fuel oil: lethal and behavioural impacts

Brown, K. E., King, C. K., Lane, A., Kotzakoulakis, K., George, S. C. & Harrison, P. L., 2013.

An exciting future for biomarker geochemistry in very old rocks: single oil inclusion analysis by TOF-SIMS

George, S. C., Siljeström, S., Volk, H., Dutkiewicz, A., Lausmaa, J., Sjövall, P. & Hode, T., Dec 2012, p. 68-69.

Application of a linear transfer model for the estimation of the hydrocarbon concentration in the seawater of Antarctica following a fuel spill

Kotzakoulakis, K. & George, S. C., Dec 2012, p. 57. 1 p.

Flash pyrolysis GCMS analysis of fluid inclusions

Greenwood, P. F., Zhirong, Z., Liu, K., Grice, K., George, S. C., Fisher, L. & Hough, R., Dec 2012, p. 62-63. 2 p.

Geochemistry of Mesoproterozoic Hongshuihuang Formation shales in northern part of North China: implications for provenance, source weathering and paleoclimate

Luo, Q., George, S. C. & Zhong, N., Dec 2012, p. 90-91. 2 p.

Investigating the syngeneity and the palaeobiology of hydrocarbon biomarkers in the Fortescue group at 2.7-2.8 Ga

Hoshino, Y., Flannery, D., Walter, M. R. & George, S. C., Dec 2012, *Biogeochemistry from Deep Time through Petroleum Resources to Modern Environments: 17th Australian Organic Geochemistry Conference, Program and Abstracts. 2nd - 5th December 2012, Macquarie University, Sydney*. Ahmed, M., Gong, S., Kotzakoulakis, K. & George, S. C. (eds.). Vol. CSIRO Report Number: EP129608. p. 43-44 2 p.

The Organic geochemistry of the Mesoproterozoic Vekkeri Formation and investigations into syngenicity and indigeneity of hydrocarbons using slice experiments

Flannery, E. N. & George, S. C., Dec 2012, p. 45-46. 2 p.

Chemical changes of fluid inclusion oil trapped during the evolution of an oil reservoir: Jabiru-1A case study (Timor Sea, Australia)

Bourdet, J., Eadington, P., Volk, H., George, S. C., Pironon, J. & Kempton, R., Sept 2012, In: *Marine and Petroleum Geology*. 36, 1, p. 118-139 22 p.

Mass Spectrometry Techniques for Analysis of Oil and Gas Trapped in Fluid Inclusions

George, S. C., Volk, H. & Dutkiewicz, A., 21 May 2012, *Mass Spectrometry Handbook*. Lee, M. S. (ed.). 1st ed. Hoboken, NJ: John Wiley & Sons, p. 645-673 29 p. (Wiley Series on Pharmaceutical Sciences and Biotechnology: Practices, Applications and Methods).

Radiocarbon analysis of halophilic microbial lipids from an Australian salt lake

Bray, P. S., Jones, C. M., Fallon, S. J., Brocks, J. J. & George, S. C., Jan 2012, In: *Quaternary Research*. 77, 1, p. 104-109 6 p.

A Record of life in changing Neoarchean environments of the Fortescue Group, Pilbara region, Western Australia

Flannery, D., Hoshino, Y., Walter, M., Van Kranendonk, M. & George, S., 2012, p. 1655. 1 p.

Assessing toxicity of diesel and fuel oil on early life stages of Antarctic marine invertebrates

Brown, K. E., King, C. K., George, S. C., Lane, A. & Harrison, P. L., 2012.

Biomarkers in offshore Canterbury Basin sediments, New Zealand: Organic matter input and thermal maturity

George, S. C., Teague, E., Lipp, J. S., Yoshimura, T. & Claypool, G. E., 2012, p. 298. 1 p.

Chemical fossils: marking the origins of life

George, S. C. & Dutkiewicz, A., 2012, In: *Chemistry in Australia*. 79, 4, p. 16-19 4 p.

Coal degradation in anaerobic sediments associated with acid mine drainage

Van Holst, J., Midgley, D. J., Stalker, L., Gillings, M. & George, S. C., 2012, p. 2765. 1 p.

Field observations relating to the c. 2740 Ma Mopoke Member, Kylena Formation, Fortescue Group, Pilbara region, Western Australia

Flannery, D. T., Hoshino, Y., George, S. C. & Walter, M. R., 2012, Perth: Geological Survey of Western Australia. 12 p. (Record - Geological Survey of Western Australia; vol. 2012/8)

Investigating the syngeneity and paleobiology of hydrocarbon biomarkers in the Fortescue Group at 2.7-2.8 Ga

Hoshino, Y., Flannery, D., Walter, M. & George, S. C., 2012, p. 1656. 1 p.

Source rock mapping using fluid inclusion geochemistry in the offshore Perth Basin

Volk, H., Kempton, R., Gong, S., Ahmed, M., George, S. C., Boreham, C. & Grosjean, E., 2012.

Sr isotopic composition of pore water of shelf cores from IODP Expedition 317: Canterbury Basin, New Zealand
Yoshimura, T., Kawahata, H., Tanimizu, M., George, S. C., Lipp, J. S. & Claypool, G. E., 2012, p. 2577-2577. 1 p.

The rate of removal and the compositional changes of diesel in Antarctic marine sediment
Woolfenden, E. N. M., Hince, G., Powell, S. M., Stark, S. C., Snape, I., Stark, J. S. & George, S. C., 1 Dec 2011, In: *Science of the Total Environment*. 410-411, p. 205-216 12 p.

Paleosalinity significance of occurrence and distribution of methyltrimethyltridecyl chromans in the Upper Cretaceous Nenjiang Formation, Songliao Basin, China
Wang, L., Song, Z., Yin, Q. & George, S. C., Dec 2011, In: *Organic Geochemistry*. 42, 11, p. 1411-1419 9 p.

Biogeochemistry of sediments at ultra-deep burial depth recovered during IODP Expedition 317, Canterbury Basin, New Zealand
Lipp, J. S., George, S. C., Claypool, G. E., Yoshimura, T., Hinrichs, K. U. & Expedition 317 Shipboard Scientists, Sept 2011, *25th International Meeting on Organic Geochemistry, Abstract Book*. Interlaken, p. 325 Poster-185

Organic carbon content and character of Holocene–Eocene sediments recovered during IODP Expedition 317, Canterbury Basin, New Zealand
George, S. C., Lipp, J. S., Claypool, G. E., Yoshimura, T. & Expedition 317 Shipboard Scientists, Sept 2011, *25th International Meeting on Organic Geochemistry, Abstract Book*. Interlaken, p. 186 Poster-186

Analysis of organic biomarkers in single Precambrian oil-bearing fluid inclusions using ToF-SIMS
Siljeström, S., Lausmaa, J., Volk, H., George, S., Sjövall, P., Dutkiewicz, A. & Hode, T., 2011, In: *Mineralogical Magazine*. 75, 3, p. 1874 1 p.

Analysis of single Precambrian oil-bearing fluid inclusions as a way of constraining evolution of eukaryotes
Siljeström, S., Lausmaa, J., Volk, H., George, S. C., Sjövall, P., Dutkiewicz, A. & Hode, T., 2011, p. EGU2011-12852.

Biogeochemical processes in Holocene-Pleistocene sediments at <100 m depth recovered during IODP Expedition 317, Canterbury Basin, New Zealand
George, S. C., Lipp, J. S., Claypool, G. E., Yoshimura, T. & Expedition 317 Shipboard Scientists, 2011, *25th International Meeting on Organic Geochemistry, Abstract Book*. Interlaken, p. 342 Poster-203

Expedition 317 summary

Fulthorpe, C. S., Hoyanagi, K., Crundwell, M. P., Dinarès-Turell, J., Ding, X., George, S. C., Hepp, D. A., Jaeger, J., Kawagata, S., Kemp, D. B., Kim, Y-G., Kominz, M. A., Blum, P., Lever, H., Lipp, J., Marsaglia, K. M., McHugh, C. M., Murakoshi, N., Ohi, T., Pea, L., & 13 othersRichaud, M., Suto, I., Tanabe, S., Guérin, G., Tinto, K. J., Uramoto, G., Yoshimura, T., Slagle, A. L., Blair, S. A., Browne, G. H., Carter, R. M., Ciobanu, M-C. & Claypool, G. E., 2011, In: *Proceedings of the Integrated Ocean Drilling Program*. 317, p. 1-86 86 p.

IODP Expedition 317: exploring the record of sea-level change off New Zealand
Fulthorpe, C. S., Hoyanagi, K., Blum, P. & IODP Expedition 317 Scientists, 2011, In: *Scientific Drilling*. 12, p. 4-14 11 p.

Methods

Fulthorpe, C. S., Hoyanagi, K., Crundwell, M. P., Dinarès-Turell, J., Ding, X., George, S. C., Hepp, D. A., Jaeger, J., Kawagata, S., Kemp, D. B., Kim, Y-G., Kominz, M. A., Blum, P., Lever, H., Lipp, J., Marsaglia, K. M., McHugh, C. M., Murakoshi, N., Ohi, T., Pea, L., & 13 othersRichaud, M., Suto, I., Tanabe, S., Guérin, G., Tinto, K. J., Uramoto, G., Yoshimura, T., Slagle, A. L., Blair, S. A., Browne, G. H., Carter, R. M., Ciobanu, M-C. & Claypool, G. E., 2011, In: *Proceedings of the Integrated Ocean Drilling Program*. 317, p. 1-68 68 p.

New biomarker results from the 2.7 Ga Tumbiana Formation, Pilbara region
George, S. C., Coffey, J. M. & Walter, M., 2011.

New biomarker results from the 2.7 Ga Tumbiana Formation, Pilbara region
George, S. C., Coffey, J. M. & Walter, M., 2011.

Paleontology and field observations of the approximately 2720 Ma Tumbiana Formation in the northwest Pilbara, Western Australia

Coffey, J. M., Walter, M. R., George, S. C. & Hill, A. C., 2011, Perth: Geological Survey of Western Australia. (Geological Survey of Western Australia : Record; vol. 2011/8)

Site U1351

Fulthorpe, C. S., Hoyanagi, K., Crundwell, M. P., Dinarès-Turell, J., Ding, X., George, S. C., Hepp, D. A., Jaeger, J., Kawagata, S., Kemp, D. B., Kim, Y-G., Kominz, M. A., Blum, P., Lever, H., Lipp, J., Marsaglia, K. M., McHugh, C. M., Murakoshi, N., Ohi, T., Pea, L., & 13 othersRichaud, M., Suto, I., Tanabe, S., Guèrin, G., Tinto, K. J., Uramoto, G., Yoshimura, T., Slagle, A. L., Blair, S. A., Browne, G. H., Carter, R. M., Ciobanu, M-C. & Claypool, G. E., 2011, In: Proceedings of the Integrated Ocean Drilling Program. 317, p. 1-128 128 p.

Site U1352

Fulthorpe, C. S., Hoyanagi, K., Crundwell, M. P., Dinarès-Turell, J., Ding, X., George, S. C., Hepp, D. A., Jaeger, J., Kawagata, S., Kemp, D. B., Kim, Y-G., Kominz, M. A., Blum, P., Lever, H., Lipp, J., Marsaglia, K. M., McHugh, C. M., Murakoshi, N., Ohi, T., Pea, L., & 13 othersRichaud, M., Suto, I., Tanabe, S., Guèrin, G., Tinto, K. J., Uramoto, G., Yoshimura, T., Slagle, A. L., Blair, S. A., Browne, G. H., Carter, R. M., Ciobanu, M-C. & Claypool, G. E., 2011, In: Proceedings of the Integrated Ocean Drilling Program. 317, p. 1-171 171 p.

Site U1353

Fulthorpe, C. S., Hoyanagi, K., Crundwell, M. P., Dinarès-Turell, J., Ding, X., George, S. C., Hepp, D. A., Jaeger, J., Kawagata, S., Kemp, D. B., Kim, Y-G., Kominz, M. A., Blum, P., Lever, H., Lipp, J., Marsaglia, K. M., McHugh, C. M., Murakoshi, N., Ohi, T., Pea, L., & 13 othersRichaud, M., Suto, I., Tanabe, S., Guèrin, G., Tinto, K. J., Uramoto, G., Yoshimura, T., Slagle, A. L., Blair, S. A., Browne, G. H., Carter, R. M., Ciobanu, M-C. & Claypool, G. E., 2011, In: Proceedings of the Integrated Ocean Drilling Program. 317, p. 1-103 103 p.

Site U1354

Fulthorpe, C. S., Hoyanagi, K., Crundwell, M. P., Dinarès-Turell, J., Ding, X., George, S. C., Hepp, D. A., Jaeger, J., Kawagata, S., Kemp, D. B., Kim, Y-G., Kominz, M. A., Blum, P., Lever, H., Lipp, J., Marsaglia, K. M., McHugh, C. M., Murakoshi, N., Ohi, T., Pea, L., & 13 othersRichaud, M., Suto, I., Tanabe, I., Guèrin, G., Tinto, K. J., Uramoto, G., Yoshimura, T., Slagle, A. L., Blair, S. A., Browne, G. H., Carter, R. M., Ciobanu, M-C. & Claypool, G. E., 2011, In: Proceedings of the Integrated Ocean Drilling Program. 317, p. 1-84 84 p.

Diisopropyl naphthalenes: Environmental contaminants of increasing importance for organic geochemical studies
George, S. C., Volk, H., Romero-Sarmiento, M. F., Dutkiewicz, A. & Mossman, D. J., Sept 2010, In: *Organic Geochemistry*. 41, 9, p. 901-904 4 p.

Canterbury Basin sea level: global and local controls on continental margin stratigraphy

Fulthorpe, C. S., Hoyanagi, K., Crundwell, M. P., Dinarès-Turell, J., Ding, X., George, S. C., Hepp, D. A., Jaeger, J., Kawagata, S., Kemp, D. B., Kim, Y-G., Kominz, M. A., Blum, P., Lever, H., Lipp, J. S., Marsaglia, K. M., McHugh, C. M., Murakoshi, N., Takeshi, O., Pea, L., & 13 othersRichaud, M., Itsuki, S., Tanabe, S., Guèrin, G., Tinto, K. J., Uramoto, G., Yoshimura, T., Slagle, A. L., Blair, S. A., Browne, G. H., Carter, R. M., Ciobanu, M-C. & Claypool, G. E., 2010, Integrated Ocean Drilling Program Management International. 133 p.

Compound specific radiocarbon analysis of hypersaline microbial biomarkers

Bray, P. S., Jones, C., Fallon, S. J., Brocks, J. J. & George, S. C., 2010, *16th Australian Organic Geochemistry Conference: program and abstracts*. Chen, J. H., Hope, J. M., Grosjean, E., Boreham, C. J. & Brocks, J. J. (eds.). Canberra: Geoscience Australia, p. 64-65

Does the Neoarchaeon Fortescue group record the earliest evidence for oxygenic photosynthesis?

Flannery, D. T., Coffey, J., George, S. C. & Walter, M. R., 2010, *Fifth International Archean Symposium Abstracts*. Tyler, I. M. & Knox-Robinson, C. M. (eds.). East Perth, WA: Geological Survey of Western Australia, p. 358-359

Genesis and biogeochemical evolution of hydrocarbons in the Neo-Mesoproterozoic sediments of the Yanshan Basin, North China

Mu, G., George, S. C., Zhong, N. & Gong, S., 2010, *16th Australian Organic Geochemistry Conference: program and abstracts*. Chen, J. H., Hope, J. M., Grosjean, E., Boreham, C. J. & Brocks, J. J. (eds.). Canberra, p. 112-113

How does depth affect the preferential degradation process in Antarctic marine sediments polluted by diesel?

Woolfenden, E., Snape, I. & George, S. C., 2010, *16th Australian Organic Geochemistry Conference: program and abstracts*. Chen, J. H., Hope, J. M., Grosjean, E., Boreham, C. J. & Brocks, J. J. (eds.). Canberra: Geoscience Australia, p. 52-53

Integrated ocean drilling program expedition 317 preliminary report canterbury basin sea level global and local controls on continental margin stratigraphy

Fulthorpe, C. S., Hoyanagi, K., Blum, P., Guérin, G., Slagle, A. L., Blair, S. A., Browne, G. H., Carter, R. M., Ciobanu, M. C., Claypool, G. E., Crundwell, M. P., Dinarès-Turell, J., Ding, X., George, S. C., Hepp, D. A., Jaeger, J., Kawagata, S., Kemp, D. B., Kim, Y. G., Kominz, M. A., & 13 othersLever, H., Lipp, J. S., Marsaglia, K. M., McHugh, C. M., Murakoshi, N., Ohi, T., Pea, L., Richaud, M., Suto, I., Tanabe, S., Tinto, K. J., Uramoto, G. & Yoshimura, T., 2010, In: Integrated Ocean Drilling Program: Preliminary Reports. 317, p. 1-133 133 p.

IODP Expedition 317, Canterbury Basin, offshore NZ: on-board geochemistry results

George, S. C., Lipp, J. S., Yoshimura, T., Claypool, G. E. & Expedition 317 Shipboard Scientists, 2010, *16th Australian Organic Geochemistry Conference: program and abstracts*. Canberra, Australia: Geoscience Australia, p. 44-45

Long-term degradation of lubricant oil in Antarctic sediments

Easton, M., Woolfenden, E. N. M., Snape, I. & George, S. C., 2010, *16th Australian Organic Geochemistry Conference: Program and Abstracts*. Chen, J. H., Hope, J. M., Grosjean, E., Boreham, C. J. & Brocks, J. J. (eds.). Canberra: Geoscience Australia, p. 98

Organic geochemical evidence of a microbial ecology in the 2.7 Ga Tumbiana Formation from stromatolitic outcrop samples, Fortescue Basin, Western Australia

Coffey, J. M., Walter, M. & George, S. C., 2010, p. 91.

Preliminary results on Canterbury Basin Sea-Level transect, New Zealand, IODP Exp. 317

Fulthorpe, C. S., Hoyanagi, K., Blum, P., George, S. & Expedition 317 Shipboard Scientists, 2010.

Preserved biomarkers in ephemeral saline lake sediments as constraints on inland regional evaporative regimes

Jones, C., Volkman, J. K., Magee, J. W., Luly, J., Bray, P. S., George, S. C., Banfield, J. F. & Brocks, J. J., 2010, p. 265-266.

Radiocarbon dating of archaeal lipids in microbial mats from an Australian salt lake

Bray, P. S., Jones, C. M., Brocks, J. J. & George, S. C., 2010, p. 266. 1 p.

Generation and expulsion of oils from Permian coals of the Sydney Basin, Australia

Ahmed, M., Volk, H., George, S. C., Faiz, M. & Stalker, L., Jul 2009, In: *Organic Geochemistry*. 40, 7, p. 810-831 22 p.

Stability of complex hydrocarbons within fluid inclusions in rocks exposed to high temperatures

George, S. C., Dutkiewicz, A., Volk, H., Ridley, J. & Buick, R., Jun 2009, In: *Geochimica et Cosmochimica Acta*. 73, 13, p. A427-A427 1 p.

Assessment of regional oil charge patterns using oil inclusion geochemistry in the Vulcan Sub-basin, NW Australia

George, S. C., Lisk, M., Ahmed, M., Volk, H. & Edwards, D., 2009, p. Poster 161. 1 p.

Cautions in the interpretation of petroleum fluid inclusion data in petroleum system analysis: insight from spectroscopic analyses of natural and synthetic inclusions

Liu, K., Xiao, X., Mills, D., George, S. C., Volk, H. & Gong, S., 2009, p. 62-62. 1 p.

Di-iso-propynaphthalenes: environmental contaminants of increasing importance for organic geochemists
George, S. C., Volk, H. & Dutkiewicz, A., 2009, p. Poster 99. 1 p.

Geochronology based on radiocarbon dating of archaeal biomarkers, Lake Tyrrell, Northern Victoria, Australia
Bray, P. S., Jones, C., Brocks, J. & George, S. C., 2009, p. Poster 211. 1 p.

Hydrocarbons in Antarctic marine sediment: expect the unexpected
Woolfenden, E., George, S. C. & Snape, I., 2009, p. Oral 9. 1 p.

Influence of depositional environment and early diagenesis on molecular maturity parameters of coals and related oils an example from the Taranaki Basin
Volk, H., Sykes, R., Zink, K. & George, S. C., 2009, p. Poster 164. 1 p.

Oil-bearing fluid inclusions from the Palaeoproterozoic: A review of biogeochemical results from time-capsules >2.0 Ga old
George, S. C., Dutkiewicz, A., Volk, H., Ridley, J., Mossman, D. J. & Buick, R., 2009, In: Science in China, Series D: Earth Sciences. 52, 1, p. 1-11 11 p.

Pyrolysis of Jamison Sandstone solid bitumen from the Mesoproterozoic Roper Superbasin
Sestak, S., Singh, V., Volk, H., George, S. C. & Dutkiewicz, A., 2009, p. 94. 1 p.

Source rock and fluid inclusion study of Neoproterozoic-Mesoproterozoic sediments in the Yanshan Basin, North China
Mu, G., George, S. C., Ningning, Z., Song, T., Zhao, B. & Zhang, Y., 2009, p. Poster 80. 1 p.

Tracking petroleum systems in the Perth Basin by integrating microscopic, molecular and isotopic information on petroleum fluid inclusions
Volk, H., Kempton, R. H., Ahmed, M., Gong, S., George, S. C. & Boreham, C. J., 2009, p. 109-109. 1 p.

The indigenous origin of Witwatersrand "carbon"
Mossman, D. J., Minter, W. E. L., Dutkiewicz, A., Hallbauer, D. K., George, S. C., Hennigh, Q., Reimer, T. O. & Horscroft, F. D., 30 Jul 2008, In: Precambrian Research. 164, 3-4, p. 173-186 14 p.

Changes to oil fluorescence by the invasion of gas or water
Eadington, P. J., Kempton, R., George, S., Volk, H., Bourdet, J. & Coehlo, C. E. S., Jul 2008, In: Geochimica et Cosmochimica Acta. 72, 12, p. A236-A236 1 p.

Fluid inclusions provide evidence for early oil composition prior to gas condensate migration into reservoirs
George, S. C., Volk, H., Lisk, M., Brincat, M. P. & Eadington, P. J., Jul 2008, In: Geochimica et Cosmochimica Acta. 72, 12, p. A303-A303 1 p.

The suitability of the fuel used for motor-sledging on Scott's last expedition, 1910-1913
McIntyre, C. P., Volk, H., Batts, B. D. & George, S. C., Jul 2008, In: Polar Record. 44, 3, p. 276-277 2 p.

Preservation of hydrocarbons and biomarkers in oil trapped inside fluid inclusions for >2 billion years
George, S. C., Volk, H., Dutkiewicz, A., Ridley, J. & Buick, R., 1 Feb 2008, In: Geochimica et Cosmochimica Acta. 72, 3, p. 844-870 27 p.

Distribution and geochemical composition of oil-bearing fluid inclusions compared to crude oil, oil shows and rock extracts in a Campos Basin well, offshore Brazil
Coelho, C. E. S., George, S. C., Volk, H., Eadington, P. & Ross, A. S., 2008, In: Revista brasileira de geociências : órgão da Sociedade Brasileira de Geologia. 38, Suppl. 1, p. 19-38 20 p.

Hydrocarbons in Antarctic marine sediments: degradation and ecological effects over five years

Woolfenden, E. NM., Powell, S., Stark, S. C., Stark, J., Thompson, B. AW., Harvey, P., Snape, I., Riddle, M. & George, S. C., 2008, p. 77-78. 2 p.

Hydrocarbons in Antarctic marine sediments: degradation and ecological effects over 5 years (SRE4)

Woolfenden, E. N. M., Stark, J., Thompson, B. A. W., Powell, S., Stark, S. C., Harvey, P., Snape, I., Riddle, M. & George, S. C., 2008. 1 p.

Hydrocarbons in solid bitumens and fluid inclusions from the Palaeoproterozoic Oklo natural fission reactors, Gabon

George, S. C., Volk, H., Dutkiewicz, A., Ridley, J. & Mossman, D. J., 2008, p. 51-52. 2 p.

Influence of depositional environment and early diagenesis on molecular maturity parameters of coals an example from the Taranaki Basin

Volk, H., George, S. & Sykes, R., 2008, *Eastern Australasian Basins Symposium III*. Blevin, J. E. & Uruski, C. (eds.). Sydney: Petroleum Exploration Society of Australia, p. 215-217 3 p.

Palaeoproterozoic hydrocarbons associated with uranium and gold deposits

Dutkiewicz, A., George, S. C., Mossman, D., Volk, H., Ridley, J. & Buick, R., 2008. 1 p.

The palaeoenvironment and palaeoecology of the 2.7Ga Tumbiana Formation, Pilbara Craton, Western Australia

Coffey, J., Walter, M. R., George, S. C. & Hill, A., 2008.

The Paleontology and Stratigraphy of the 2.7Ga Tumbiana Formation, Pilbara Craton, Western Australia

Coffey, J., George, S. C., Walter, M. R. & Hill, A., 2008, p. 116-117. 2 p.

Determining the extent of weathering of spilled fuel in contaminated soil using the diastereomers of pristane and phytane

McIntyre, C. P., Harvey, P. M. A., Ferguson, S., Wressnig, A. M., Snape, I. & George, S. C., Dec 2007, In: *Organic Geochemistry*. 38, 12, p. 2131-2134 4 p.

New insights into the chemical composition of chitinozoans

Jacob, J., Paris, F., Monod, O., Miller, M. A., Tang, P., George, S. C. & Bény, J. M., Oct 2007, In: *Organic Geochemistry*. 38, 10, p. 1782-1788 7 p.

Oil and its biomarkers associated with the Palaeoproterozoic Oklo natural fission reactors, Gabon

Dutkiewicz, A., George, S. C., Mossman, D. J., Ridley, J. & Volk, H., 30 Sept 2007, In: *Chemical Geology*. 244, 1-2, p. 130-154 25 p.

Petroleum charge history in the Lunnan Low Uplift, Tarim Basin, China - Evidence from oil-bearing fluid inclusions

Gong, S., George, S. C., Volk, H., Liu, K. & Peng, P., Aug 2007, In: *Organic Geochemistry*. 38, 8, p. 1341-1355 15 p.

Proterozoic oils in the roper superbasin, Northern Australia

Dutkiewicz, A., Volk, H., Ridley, J. & George, S. C., Jul 2007, p. 39. 1 p.

The 2006 AOGC Medal

Batts, B. & George, S. C., Jul 2007, In: *Organic Geochemistry*. 38, 7, p. 1013-1014 2 p.

Geochemical analysis techniques and geological applications of oil-bearing fluid inclusions, with some Australian case studies

George, S. C., Volk, H. & Ahmed, M., May 2007, In: *Journal of Petroleum Science and Engineering*. 57, 1-2, p. 119-138 20 p.

Determining the extent of biodegradation of fuels using the diastereomers of acyclic isoprenoids

McIntyre, C. P., Harvey, P. M. A., Ferguson, S., Wressnig, A. M., Volk, H., George, S. C. & Snape, I., 1 Apr 2007, In: *Environmental Science and Technology*. 41, 7, p. 2452-2458 7 p.

Biomarker evidence for two sources for solid bitumens in the Subu wells: Implications for the petroleum prospectivity of the East Papuan Basin

George, S. C., Volk, H., Ahmed, M., Pickel, W. & Allan, T., Apr 2007, In: *Organic Geochemistry*. 38, 4, p. 609-642 34 p.

Cambrian petroleum systems and oil migration in the Georgina Basin, Australia

Boreham, C. J., Volk, H., Sherwood, N. & George, S., 2007, *Abstract Book 23rd International Meeting on Organic Geochemistry*. Farrimond, P. (ed.). Torquay: EAOG, p. 638-639 2 p.

Eukaryote-derived steranes in Precambrian oils and rocks: fact or fiction?

George, S., Dutkiewicz, A., Volk, H., Ridley, J., Mossman, D. & Buick, R., 2007, *Abstract Book 23rd International Meeting on Organic Geochemistry*. Farrimond, P. (ed.). Torquay: EAOG, p. 9-10 2 p.

Hydrocarbon-aqueous mixtures in syndiagenetic fluid inclusions

Ridley, J., Dutkiewicz, A., George, S. C. & Volk, H., 2007.

Monitoring biodegradation, weathering and bioremediation in cold climates

McIntyre, C., George, S. C., Harvey, P., Ferguson, S. H., Snape, I., Wressnig, A. M. & Volk, H., 2007.

Oil-bearing fluid inclusions from the Palaeoproterozoic: biogeochemical time-capsules for >2.0 billion years

George, S. C., Dutkiewicz, A., Volk, H., Ridley, J., Mossman, D. J. & Buick, R., 2007.

Oils sourced from Permian coals - geochemical evidence from Sydney Basin oil seeps and shows

Ahmed, M., Volk, H., George, S., Faiz, M. & Stalker, L. C., 2007, *Abstract Book 23rd International Meeting on Organic Geochemistry*. Farrimond, P. (ed.). Torquay: EAOG, p. 815-816 2 p.

Petroleum migration in the Georgina Basin: evidence from the geochemistry of oil inclusions and bitumens

Volk, H., George, S. C., Kempton, R. H., Liu, K., Ahmed, M. & Ambrose, G. J., 2007, *Proceedings: Central Australian basins symposium*. Munson, T. J. & Ambrose, G. J. (eds.). Darwin: Northern Territory Geological Survey, p. 282-303 22 p.

Precambrian inclusion oils in the Roper Group: a review

Dutkiewicz, A., Volk, H., Ridley, J. & George, S. C., 2007, *Proceedings: Central Australian basins symposium*. Munson, T. J. & Ambrose, G. J. (eds.). Darwin: Northern Territory Geological Survey, p. 326-348 23 p.

Unravelling the oily past of giant gas fields using oil-bearing fluid inclusions.

Volk, H., George, S., Brincat, M. P., Kennard, J. M., Edwards, D., Boreham, C. J., Ahmed, M. & Lisk, M., 2007, *Abstract Book 23rd International Meeting on Organic Geochemistry*. Farrimond, P. (ed.). Torquay: EAOG, p. 109-110 2 p.

Using laser micropyrolysis to decipher the chemical record of metazoans during the "Cambrian Explosion"

George, S., Brock, G., Paterson, J., Skovsted, C., Fuentes, D., Volk, H. & Walter, M., 2007, *Abstract Book 23rd International Meeting on Organic Geochemistry*. Farrimond, P. (ed.). Torquay: EAOG, p. 688-689 2 p.

Quantitative whole oil gas chromatography as a tool for understanding biodegradation processes in oil reservoirs

George, S. C., Nov 2006, In: *American Association of Petroleum Geologists Bulletin*.

Biomarkers from Huronian oil-bearing fluid inclusions: An uncontaminated record of life before the Great Oxidation Event

Dutkiewicz, A., Volk, H., George, S. C., Ridley, J. & Buick, R., Jun 2006, In: *Geology*. 34, 6, p. 437-440 4 p.

Applying innovative fluorescence spectroscopy techniques to study petroleum inclusions

Liu, K., George, S., Eadington, P. J., Fenton, S., Volk, H. & Ahmed, M., Feb 2006, *AOGC-NOM Conference Program and Abstracts*. Perth: Curtin University of Technology

Biomarkers trapped in 2.45 Ga oil inclusions from Canada
George, S. C., Dutkiewicz, A., Volk, H., Ridley, J. & Buick, R., Feb 2006, *AOGC-NOM Conference Program and Abstracts*. Perth: Curtin University of Technology, p. 93-94

Geochemical characteristics of fluid inclusion oils from the Lunnan Low Uplift (Tarim Basin, China)
Gong, S., Volk, H., George, S., Liu, K. & Peng, P., Feb 2006, *AOGC-NOM Conference Program and Abstracts*. Perth: Curtin University of Technology, p. 87-88

Recent developments and applications of the laser micropyrolysis GC-MS technique
Fuentes, D., George, S. C., Barcikowski, S., McIntyre, C., Sattari, R. & Sestak, S., Feb 2006, *AOGC-NOM Conference Program and Abstracts*. Perth: Curtin University of Technology, p. 77-78

Solid bitumen and oil-bearing fluid inclusions associated with Proterozoic natural fission reactors at Oklo (Gabon, Africa)
Volk, H., Dutkiewicz, A., George, S., Mossman, D. J. & Ridley, J., Feb 2006, *AOGC-NOM Conference Program and Abstracts*. Perth: Curtin University of Technology, p. 103-104

Using oil inclusions for reconstruction fluid evolutions: an example from the Gidgealpa oilfield (Cooper-Eromanga basins, Central Australia)
Bruensing, J., Volk, H., George, S. C. & Liu, K., Feb 2006, *AOGC-NOM Conference Program and Abstracts*. Perth: Curtin University of Technology, p. 117-118

Biomarkers sealed in Huronian oil-bearing fluid inclusions from the Matinenda Formation, Canada
Dutkiewicz, A., Volk, H., George, S. C., Ridley, J. & Buick, R., 2006, *Australian Earth Sciences Convention 2006: conference abstracts*. Australian Society of Exploration Geophysicists

Early diagenesis of organic matter in isorank coal seams of the Mangahewa Formation, Taranaki Basin, New Zealand
Volk, H., George, S. C., Ahmed, M. & Sykes, R., 2006.

Evaluating the extent of biodegradation of fuel spills using the stereochemical isomers of acyclic isoprenoids
McIntyre, C., Harvey, P. M. A., George, S. C. & Snape, I., 2006.

It's Life but not as we know it
Volk, H., George, S. C., Dutkiewicz, A. & Ridley, J., 2006, *Australasian Science*, 27, 2, p. 14-16 3 p.

Oil and its biomarkers trapped inside fluid inclusions ca. 2.45-2.0 Ga
Dutkiewicz, A., Volk, H., George, S. C., Ridley, J., Mossman, D. & Buick, R., 2006, In: *Geochimica et Cosmochimica Acta*. 70, 18, p. A153-A153 1 p.

Oil-bearing fluid inclusions: biogeochemical time-capsules for > 2.0 billion years
George, S. C., Volk, H., Dutkiewicz, A., Ridley, J. & Mossman, D., 2006, In: *Geochimica et Cosmochimica Acta*. 70, 18, p. A198-A198 1 p.

Oil from Late Permian coals in the Sydney Basin, Australia: a geochemical study
Ahmed, M., Volk, H., George, S. C., Faiz, M. & Stalker, L., 2006.

Organic geochemical characteristics of Late Permian coals from the southern Sydney Basin, Australia
George, S., Ahmed, M., Volk, H. & Faiz, M., 2006, In: *Proceedings of the 36th Sydney Basin Symposium on "Advances in the Study of the Sydney Basin"*. 8 p.

Petroleum charge history in the Lunnan Low Uplift, Tarim Basin, China: revealed from fluid inclusion investigation
Gong, S., Volk, H., George, S. C., Liu, K. & Peng, P., 2006.

Petroleum charge history of a stacked reservoir offshore Brazil as inferred from the distribution and geochemistry of petroleum inclusions

Volk, H., Coelh, C. E. S., George, S. C., Eadington, P. J. & Ross, A. S., 2006.

Quantitative whole oil gas chromatography as a tool for understanding biodegradation processes in oil reservoirs
George, S. C. & Volk, H., 2006.

Use of the distribution and geochemistry of oil-bearing fluid inclusions to unravel petroleum charge histories: an example from offshore Brazil

Coelho, C. E. S., Volk, H., George, S. C., Eadington, P. J. & Ross, A. S., 2006, p. 183-185. 3 p.

Characterisation of fluid inclusion oil in a Mid-Proterozoic sandstone and dolerite (Roper Superbasin, Australia)
Volk, H., George, S. C., Dutkiewicz, A. & Ridley, J., 22 Nov 2005, In: *Chemical Geology*. 223, 1-3, p. 109-135 27 p.

Composition and origin of fuel from the hut of explorer Robert Falcon Scott, Cape Evans, Antarctica

Volk, H., McIntyre, C., Batts, B. D. & George, S. C., Apr 2005, In: *Organic Geochemistry*. 36, 4, p. 655-661 7 p.

Geochemical comparison of fluid inclusion and present-day oil accumulations in the Papuan Foreland - Evidence for previously unrecognised petroleum source rocks

Volk, H., George, S. C., Middleton, H. & Schofield, S., Jan 2005, In: *Organic Geochemistry*. 36, 1, p. 29-51 23 p.

Australian contributions to the field of organic geochemistry

Summons, R. E., George, S. C. & Grice, K., 2005.

Charge history of the Gidgealpa oilfield, Cooper Eromanga basins: evidence from fluid inclusion oil analysis
Brunsing, J., Volk, H. & George, S. C., 2005, p. 54-54. 1 p.

Clues to fill histories of gas fields in the Caswell Sub-basin- evidence from the distribution and geochemistry of palaeo-oils

Volk, H., Brincat, M. P., George, S. C., Kennard, J. M., Edwards, D. S., Boreham, C. J., Ahmed, M. & Lisk, M., 2005, p. 679. 1 p.

Composition and origin of fuel from Scotts expedition to Antarctica

Volk, H., McIntyre, C., Batts, B. D. & George, S. C., 2005, *Abstract Book 22nd International Meeting on Organic Geochemistry*. Gonzalez-Vila, F. J. & Almendros, G. (eds.). Seville, Spain: European Association of Organic Geochemists , p. 258-259 1 p.

Diamondoids as bioremediation indicators for diesel spills

McIntyre, C., Harvey, P. M. A., Snape, I. & George, S. C., 2005, *Abstract Book 22nd International Meeting on Organic Geochemistry*. González-Vila, F. J., González-Pérez, F. A. & Almendros, G. (eds.). Seville: EAOG, Vol. 1. p. 196-197

Enhancement of the capability of the laser micropyrolysis GC-MS technique

George, S. C., Barcikowski, S., McIntyre, C., Fuentes, D., Sattari, R. & Sestak, S., 2005, *Abstract Book 22nd International Meeting on Organic Geochemistry*. González-Vila, F. J., González-Pérez, J. A. & Almendros, G. (eds.). Seville, Spain: European Association of Organic Geochemists, p. 1115-1116 2 p.

Molecular and isotopic characteristics of shallow surface sediments from petroleum seep areas, offshore North West Australia

Volk, H., Logan, G., George, S. C., Fuentes, D., Jones, A. & Rollet, N., 2005, p. 390-390. 1 p.

Petroleum migration in the Georgina Basin: Evidence from petrography and diagenesis of carbonate reservoirs, and from the molecular composition of oil inclusions and bitumens encountered in the Elkedra and Ross wells

Volk, H., George, S. C., Kempton, R. H., Liu, K., Ahmed, M. & Ambrose, G., 2005, p. 12-13. 1 p.

Precambrian oil in the Roper Superbasin: A Fluid Inclusion Perspective

Dutkiewicz, A., Volk, H., Ridley, J. & George, S. C., 2005, p. 38-39. 1 p.

Recognising oil mixing using maturity parameters from different molecular weight fractions of oils

George, S. C., Volk, H. & Ahmed, M., 2005, *Abstract Book 22nd International Meeting on Organic Geochemistry*. Gonzalez-Vila, F. J., Gonzalez-Perez, J. A. & Almendros, G. (eds.). Seville, Spain: European Association of Organic Geochemists, p. 62-63 1 p.

The use of biomarkers from oil inclusions to constrain Paleoproterozoic ecosystems and environments

George, S. C., Dutkiewicz, A., Volk, H., Ridley, J. & Buick, R., 2005, p. 40-40. 1 p.

Total Scanning Fluorescence (TSF) as an effective screening tool for delineating oil families

Liu, K., George, S. C., Li, S., Pang, X., Fenton, S., Volk, H. & Ahmed, M., 2005, *Abstract Book 22nd International Meeting on Organic Geochemistry*. Gonzalez-Vila, F. J., Gonzalez-Perez, J. A. & Almendros, G. (eds.). Seville, Spain: European Association of Organic Geochemists, p. 1128-1129 2 p.

Unravel the origin and processes of heavy oil genesis using integrated fluid inclusion analysis

Liu, K., Pang, X., Li, S., George, S. C., Eadington, P., Fenton, S., Li, P. & Zhang, S., 2005.

Variability of molecular maturity parameters in isothermal source rocks - Implications for assessing the thermal maturity of oils

Volk, H., George, S. C., Ahmed, M. & Sykes, R., 2005, *Abstract Book 22nd International Meeting on Organic Geochemistry*. Gonzalez-Vila, F. J. & Almendros, G. (eds.). Seville, Spain: European Association of Organic Geochemists , p. 420-421 1 p.

Fluid inclusion evidence for an early, marine-sourced oil charge prior to gas-condensate migration, Bayu-1, Timor Sea, Australia

George, S. C., Lisk, M. & Eadington, P. J., Nov 2004, In: *Marine and Petroleum Geology*. 21, 9, p. 1107-1128 22 p.

The analysis of oil trapped during secondary migration

George, S. C., Ahmed, M., Liu, K. & Volk, H., Nov 2004, In: *Organic Geochemistry*. 35, 11-12 SPEC. ISS., p. 1489-1511 23 p.

Geochemistry of oil in fluid inclusions in a middle Proterozoic igneous intrusion: implications for the source of hydrocarbons in crystalline rocks

Dutkiewicz, A., Volk, H., Ridley, J. & George, S. C., Aug 2004, In: *Organic Geochemistry*. 35, 8, p. 937-957 21 p.

Changes in the molecular composition of crude oils during their preparation for GC and GC-MS analyses

Ahmed, M. & George, S. C., Feb 2004, In: *Organic Geochemistry*. 35, 2, p. 137-155 19 p.

Australian Petroleum CRC Project 5.1A: Inter-laboratory comparison of molecular and stable isotopic data commonly used in petroleum exploration studies

Greenwood, P. F., Boreham, C. J., Stalker, L., Van Aarsen, B., Hope, J. M., Sandison, C., Logan, G. A., Davenport, R., George, S. C., Ahmed, M., Volk, H., Quezada, R. A., Sestak, S., Grice, K., Bastow, T., Wang, S. & Chidlow, G., 2004, *Organic matter: interfaces and interactions*. McIntyre, C. (ed.). Sydney: CSIRO, p. 60-61

Biomarker evidence for two sources of solid bitumens in the Subu wells, east Papuan Basin

George, S. C., Volk, H., Ahmed, M., Quezada, R. A., Allan, T., Pickel, W. & Holland, D., 2004, *Organic matter: interfaces and interactions*. McIntyre, C. (ed.). Sydney, NSW: CSIRO Petroleum, p. 58-59 1 p.

Chemical composition of fuel from the hut of explorer Robert Falcon Scott, Cape Evans, Antarctica

Volk, H., McIntyre, C., Batts, B. D. & George, S. C., 2004, *Organic matter: interfaces and interactions*. McIntyre, C. (ed.). Sydney, NSW: CSIRO Petroleum, p. 110-111 1 p.

Comparing the geochemical composition of fluid inclusion and crude oils from wells on the Laminaria High, Timor Sea

George, S. C., Ruble, T. E., Volk, H., Lisk, M., Brincat, M. P., Dutkiewicz, A. & Ahmed, M., 2004, *Timor Sea Petroleum Geoscience, Proceedings Of The Timor Sea Symposium*. Ellis, G. K., Baillie, P. W. & Munson, T. J. (eds.). Darwin: Northern Territory Geological Survey, p. 203-230 28 p.

Feasibility of combining molecular with isotopic characterisation of fluid inclusion oils - a case history from the Perth Basin
Volk, H., George, S., Boreham, C. J. & Hope, J., 2004, *Organic matter: interfaces and interactions: AOGC-IHSS Conference Program and Abstracts*. Leura, p. 108-109

Feasibility of combining molecular with isotopic characterisation of fluid inclusion oils - a case history from the Perth Basin
Volk, H., George, S. C., Boreham, C. J. & Hope, J., 2004, *Organic matter: interfaces and interactions*. McIntyre, C. (ed.). Sydney, NSW: CSIRO Petroleum, p. 108-109 1 p.

Geochemical and compound specific carbon isotopic characterisation of fluid inclusion oils from the offshore Perth Basin (Western Australia): implications for recognising effective oil source rocks
Volk, H., George, S. C., Boreham, C. J. & Kempton, R. H., 2004, In: *The APPEA Journal*. 44, 1, p. 223-239 17 p.

Geochemical characterisation of Proterozoic oil trapped in fluid inclusions in sedimentary and igneous rocks in the Roper Superbasin, Australia
Volk, H., George, S. C., Dutkiewicz, A. & Ridley, J., 2004.

Novel petroleum systems in Papua New Guinea indicated by terpane and methylhopane distributions
George, S. C., Volk, H., Ahmed, M., Middleton, H., Allan, T. & Holland, D., 2004, *Eastern Australasian Basins Symposium II*. Boult, P. J., Johns, D. R. & Lang, S. C. (eds.). Perth: Petroleum Exploration Society of Australia, p. 575-588 14 p.

Oil-bearing fluid inclusions: Geochemical analysis and geological applications
George, S. C., Volk, H. & Ahmed, M., 2004, In: *Acta Petrologica Sinica*. 20, 6, p. 1319-1332 14 p.

Oil migration in the Vulcan Sub-basin, Timor Sea, investigated using GOI and FIS Data
Liu, K., Eadington, P. J., Kennard, J. M., Middleton, H., George, S. C., Ahmed, M. & Cope, P., 2004, *Timor Sea Petroleum Geoscience, Proceedings Of The Timor Sea Symposium*. Ellis, G. K., Baillie, P. W. & Munson, T. J. (eds.). Darwin: Northern Territory Geological Survey, p. 333-351 19 p.

Oil source rocks in the Papuan Foreland as inferred by the geochemistry of crude and fluid inclusion oils
Volk, H., George, S. C., Middleton, H. & Schofield, S., 2004.

Organic petrology and geochemistry of solid bitumens in the Eastern Papuan Basin
Pickel, W., George, S. C., Volk, H. & Ahmed, M., 2004, p. 147-149. 2 p.

Precambrian petroleum: new insights from oil-bearing fluid inclusions
Dutkiewicz, A., Ridley, J., Volk, H., George, S. C. & Buick, R., 2004, p. 71-71. 1 p.

The distribution and composition of sulphur isotopes and flash pyrolysis products of solid bitumens from Papua New Guinea

Ahmed, M., Barclay, S. A., George, S. C., McDonald, B., Volk, H. & Smith, J. W., 2004, *Organic matter: interfaces and interactions*. McIntyre, C. (ed.). Sydney, NSW: CSIRO Petroleum, p. 24-25 1 p.

The distribution and isotopic composition of sulfur in solid bitumens from Papua New Guinea
Ahmed, M., Barclay, S. A., George, S. C., McDonald, B. & Smith, J. W., 2004, In: *Geochemical Society Special Publications*. 9, C, p. 51-58 8 p.

Two sources of solid bitumens shown by biomarker evidence in the Subu wells, east Papuan Basin
George, S. C., Volk, H., Ahmed, M., Allan, T., Pickel, W. & Holland, D., 2004.

Variability of molecular source and thermal maturity indicators in a marine-influenced coal seam: the Greta Seam, Sydney Basin
George, S. C. & Smith, J. W., 2004, p. 77-78. 1 p.

Variation of molecular maturity parameters in iso-rank, marine-influenced coals: A systematic study on extracts of Eocene Taranaki coals
Volk, H., George, S. C., Ahmed, M. & Sykes, R., 2004, p. 191-193. 2 p.

Biomarkers, brines, and oil in the Mesoproterozoic, Roper Superbasin, Australia
Dutkiewicz, A., Volk, H., Ridley, J. & George, S., Nov 2003, In: Geology. 31, 11, p. 981-984 4 p.

Oil migration in the Middle Proterozoic Roper Superbasin, Australia: evidence from oil inclusions and their geochemistries
Volk, H., Dutkiewicz, A., George, S. & Ridley, J., May 2003, In: Journal of Geochemical Exploration. 78-79, p. 437-441 5 p.

Compound specific carbon isotopic characterisation of fluid inclusion oils
Volk, H., Boreham, C., Hope, J., Kempton, R. & George, S. C., 2003, *21st International Meeting on Organic Geochemistry, Book of Abstracts Part II*. Krakow, Poland: European Association of Organic Geochemists, p. 45-46 1 p.

Geochemical comparison of fluid inclusion and reservoired oils in the Papuan Foreland Basins - Evidence for unrecognised petroleum source rocks
Volk, H., George, S. C. & Middleton, H., 2003, *21st International Meeting on Organic Geochemistry, Book of Abstracts Part II*. Krakow, Poland: European Association of Organic Geochemists, p. 90-91 1 p.

Geochemistry and microthermometry of ~ 1400 Million year-old oil in fluid inclusions in sedimentary and igneous rocks in the Roper Superbasin, Australia
Dutkiewicz, A., George, S. C., Volk, H. & Ridley, J., 2003, p. 61-62. 1 p.

Predicting abundances and n-alkane profiles of oil inclusions from bulk fluorescence spectrophotometry
Liu, K., George, S. C. & Eadington, P. J., 2003, *21st International Meeting on Organic Geochemistry, Book of Abstracts Part II*. Krakow, Poland: European Association of Organic Geochemists, p. 177-178 1 p.

Selected papers from the Chinese 2001 Symposium on Research and Technological Advances of Reservoir Geochemistry
George, S. C., Li, M., Larter, S. R. & Zhang, S., 2003, In: Organic Geochemistry. 34, 7, p. 871-872 2 p.

The analysis of oil trapped in the process of secondary migration
George, S. C., Ahmed, M., Liu, K. & Volk, H., 2003, *21st International Meeting on Organic Geochemistry, Book of Abstracts Part I*. Krakow, Poland: European Association of Organic Geochemists, p. 162-163 1 p.

Variabilities in response of aromatic thermal maturity markers in the Proterozoic Middle Velkerri Formation, McArthur Basin, Australia
George, S. C. & Ahmed, M., 2003, *21st International Meeting on Organic Geochemistry, Book of Abstracts Part II*. Krakow, Poland: European Association of Organic Geochemists, p. 66-67 1 p.

Coal as a source rock for oil: A review
Wilkins, R. W. T. & George, S. C., May 2002, In: International Journal of Coal Geology. 50, 1-4, p. 317-361 45 p.

A review of the evidence for expulsion of commercial quantities of oil from humic coal
George, S. C., Wilkins, R. W. T. & Boreham, C. J., 2002, p. A2.2.3. 1 p.

Biodegradation of low molecular weight hydrocarbons in Barrow Island crude oils
George, S. C., Minifie, S. & Teerman, S., 2002, p. 35-36. 1 p.

Changes in the molecular composition of crude oils during their preparation for GC and GC-MS analyses
Ahmed, M. & George, S. C., 2002, p. 41-42. 2 p.

Evidence for an early, marine-sourced oil charge prior to gas-condensate migration, Bayu-1, Timor Sea

George, S. C., Lisk, M., Eadington, P. J. & Quezada, R. A., 2002, *Proceedings of the Petroleum Exploration Society of Australia Symposium, The Sedimentary Basins of Western Australia 3*. Keep, M. & Moss, S. J. (eds.). Perth: Petroleum Exploration Society of Australia, p. 465-474 10 p.

Evidence for a new oil family in the Nancar Trough area, Timor Sea

George, S. C., Volk, H., Ruble, T. E. & Brincat, M. P., 2002, In: The APPEA Journal. 42, 1, p. 387-404 18 p.

My life before I was compressed: fluid flow histories on the northern Australian convergent margin
Lisk, M., Krieger, F., Gartrell, A. & George, S., 2002. 3 p.

Organic geochemical characterisation of bitumens in the Campanian Pale Sandstone, Papua New Guinea
Barclay, S. A., George, S. C., Ahmed, M. & Holland, D., 2002, p. 37-38. 1 p.

Reply to comment by Oxtoby on "Assessing the maturity of oil trapped in fluid inclusions using molecular geochemistry data and visually-determined fluorescence colours"

George, S. C., Ruble, T. E., Dutkiewicz, A. & Eadington, P. J., 2002, In: Applied Geochemistry. 17, 10, p. 1375-1378 4 p.

The effect of minor to moderate biodegradation on C₅ to C₉ hydrocarbons in crude oils

George, S. C., Boreham, C. J., Minifie, S. A. & Teerman, S. C., 2002, In: *Organic Geochemistry*. 33, 12, p. 1293-1317 25 p.

The use of fluid inclusion oils to reconstruct the charge history of petroleum reservoirs an example from the Taranaki Basin

Volk, H., George, S. C., Killops, S. D., Lisk, M., Ahmed, M. & Quezada, R. A., 2002, *New Zealand Petroleum Conference Proceedings*. Auckland, New Zealand: New Zealand Petroleum Conference Proceedings, p. 221-233 13 p.

Use of aromatic compound distributions to evaluate organic maturity of the Proterozoic middle Velkerri Formation, McArthur Basin, Australia

George, S. C. & Ahmed, M., 2002, *Proceedings of the Petroleum Exploration Society of Australia Symposium, The Sedimentary Basins of Western Australia 3*. Keep, M. & Moss, S. J. (eds.). Perth: Petroleum Exploration Society of Australia, p. 253-270 18 p.

In situ analytical pyrolysis of coal macerals and solid bitumens by laser micropyrolysis GC - MS

Greenwood, P. F., George, S. C., Pickel, W., Zhu, Y. & Zhong, N., 1 Apr 2001, In: *Journal of Analytical and Applied Pyrolysis*. 58-59, p. 237-253 17 p.

Assessing the maturity of oil trapped in fluid inclusions using molecular geochemistry data and visually-determined fluorescence colours

George, S. C., Ruble, T. E., Dutkiewicz, A. & Eadington, P. J., 2001, In: Applied Geochemistry. 16, 4, p. 451-473 23 p.

Charge histories of petroleum reservoirs in the Gippsland and Taranaki Basins Evidence from the analysis of oil inclusions and crude oils

Volk, H., George, S. C., Lisk, M., Killops, S. D., Ahmed, M. & Quezada, R. A., 2001, *Eastern Australasian Basins Symposium*. Hill, K. C. & Bernecker, T. (eds.). Perth: Petroleum Exploration Society of Australia, p. 413-422 10 p.

Enhanced petroleum systems analysis in frontier basins: integrating geochemistry with geoscience

Lisk, M., Ruble, T. E., Ostby, J., O'Brien, G. W., Brincat, M. P., Russell, N. J. & George, S. C., 2001. 1 p.

Extracting oil from fluid inclusions for geochemical analyses: size matters!

George, S. C., Volk, H., Ruble, T., Lisk, M., Ahmed, M., Liu, K., Quezada, R. & Dutkiewicz, A., 2001, p. 467-468. 1 p.

Hydrocarbon charge history of the northern Londonderry High: implications for trap integrity and future prospectivity
Brincat, M. P., O'Brien, G. W., Lisk, M., Deruig, M. & George, S. C., 2001, In: The APPEA Journal. 41, 1, p. 483-496 14 p.

The effect of minor to moderate biodegradation on C5 to C9 hydrocarbons in crude oils
George, S. C., Minifie, S. & Teerman, S., 2001, p. 224-225. 1 p.

The Use and abuse of fluorescence colours as maturity indicators of oil in inclusions from Australasian petroleum systems
George, S. C., Ruble, T. E. & Dutkiewicz, A., 2001, In: The APPEA Journal. 41, 1, p. 505-522 18 p.

Validation of source kitchens and petroleum charge history in complicated basin using fluid inclusion: an example from Tazhong 4 oilfield in central uplift, Tarim Basin
Feiyu, W., George, S. C., Ahmed, M., Quezada, R. A., Keyu, L., Shuichang, Z. & Digang, L., 2001.

Validation of source kitchens and petroleum charge history of the Tazhong 4 oilfield (central uplift of Tarim Basin) using fluid inclusion data
Feiyu, W., George, S. C., Ahmed, M., Quezada, R. A., Keyu, L., Shuichang, Z. & Digang, L., 2001, p. 423-424. 1 p.

Geochemical appraisal of palaeo-oil columns: implications for petroleum systems analysis in the Bonaparte Basin
Ruble, T. E., Edwards, D. S., Lisk, M., Ahmed, M., Quezada, R. A., George, S. C. & Summons, R. E., Dec 2000.

Tricyclic terpenoid composition of Tasmanites kerogen as determined by pyrolysis GC-MS

Greenwood, P. F., Arouri, K. R. & George, S. C., Apr 2000, In: Geochimica et Cosmochimica Acta. 64, 7, p. 1249-1263 15 p.

Adopting a unified approach to examine petroleum generation kinetics
Ruble, T. E., Boreham, C. J., Lewan, M. D., Greenwood, P. F., Faiz, M., Sherwood, N. R., George, S. C., Atkinson, I. & Adamson, K. J., 2000.

Geochemical correlation of gas emissions in the Cataract River gorge, Australia
George, S. C., Pallasser, R., Quezada, R. A., Wold, M. B., Williams, D. & Wood, J., 2000, In: American Association of Petroleum Geologists Bulletin. 84, 7 p., 90913.

Oil-bearing fluid inclusions: geochemical analysis techniques and geological applications
George, S. C., Ruble, T. E., Quezada, R. A., Ahmed, M. & Greenwood, P. F., 2000, p. 171. 1 p.

Organic geochemistry of gas emissions in the Cataract River gorge
George, S. C., Pallasser, R. J., Quezada, R. A., Wold, M. B., Williams, D. J. & Wood, J., 2000. 1 p.

Organic maturity evaluation of the Proterozoic middle Velkerri Formation, Northern Territory, Australia: use of aromatic hydrocarbon distributions
George, S. & Ahmed, M., 2000, In: American Association of Petroleum Geologists Bulletin. 84, September, p. 1429 1 p.

Use of fluid inclusions to locate palaeo-oil water contacts and application to investigation of petroleum systems
Eadington, P. J., Lisk, M., Krieger, F. W., Brincat, M. P. & George, S. C., 2000.

Effects of biodegradation on Australian Permian coals
Ahmed, M., Smith, J. W. & George, S. C., Oct 1999, In: Organic Geochemistry. 30, 10, p. 1311-1322 12 p.

Coal mining beneath a gorge; induced fracturing and the release of the reservoir gases
Wold, M. B., Choi, S. K., George, S. C., Wood, J. H. & Williams, D. J., 1999, *20th Century Lessons, 21st Century Challenges..* Vouille, G. & Berest, P. (eds.). Portugal: International Society for Rock Mechanics, p. 339-342 4 p.

Influence of the aromatic fraction on fluorescence colour of natural oil inclusions from oil fields in Australia and Papua New Guinea
Eadington, P. J., Palmer, N. & George, S. C., 1999.

Introduction to the Special Issue: Proceedings of the 1998 Australian Organic Geochemistry Conference
George, S. C., 1999, In: *Organic Geochemistry*. 30, 10, p. 1211 1 p.

Mass spectral characteristics of C₁₉ and C₂₀ tricyclic terpanes detected in Latrobe Tasmanite oil shale
Greenwood, P. F. & George, S. C., 1999, In: *European Journal of Mass Spectrometry*. 5, 3, p. 221-230 10 p.

Organic compounds trapped in aqueous fluid inclusions: a constraint on the interpretation of low molecular weight hydrocarbons in oil inclusions
George, S. C., Lisk, M., Ruble, T. E. & Quezada, R. A., 1999.

Tasmanite oil shale, Tasmanites and novel tricyclic terpenoids

Greenwood, P. F., George, S. C., Arouri, K. & Summons, R. E., 1999, *Abstracts of the 19th International Meeting on Organic Geochemistry*. Istanbul, Turkey, p. 665-666

The use of oil-inclusion fluorescence colours as maturity indicators: a cautionary note from molecular geochemistry data
George, S. C., Ruble, T. E. & Dutkiewicz, A., 1999.

The use of oil inclusion geochemistry and basin modelling for assessing oil charge history: Blackback oilfield, Gippsland Basin, Australia
George, S. C., Russell, N. J., Ruble, T. E., Lisk, M. & Eadington, P. J., 1999, p. 111-112. 2 p.

Use of fluid inclusions to locate palaeo-oil water contacts and application to investigation of petroleum systems
Eadington, P. J., Lisk, M., Krieger, F. W., Brincat, M. P. & George, S. C., 1999.

Applications of laser micropyrolysis-gas chromatography-mass spectrometry
Greenwood, P. F., George, S. C. & Hall, K., Nov 1998, In: *Organic Geochemistry*. 29, 5-7 -7 pt 2, p. 1075-1089 15 p.

A study of the gross compositions of oil-bearing fluid inclusions using high performance liquid chromatography
Pang, L. S. K., George, S. C. & Quezada, R. A., Nov 1998, In: *Organic Geochemistry*. 29, 5-7 -7 pt 2, p. 1149-1161 13 p.

Constraining the oil charge history of the South Pepper oilfield from the analysis of oil-bearing fluid inclusions
George, S. C., Lisk, M., Summons, R. E. & Quezada, R. A., Oct 1998, In: *Organic Geochemistry*. 29, 1-3 -3 pt 1, p. 631-648 18 p.

Organic compounds trapped in aqueous fluid inclusions
Ruble, T. E., George, S. C., Lisk, M. & Quezada, R. A., Oct 1998, In: *Organic Geochemistry*. 29, 1-3, p. 195-205 11 p.

Proterozoic source rocks: sedimentology and organic characteristics of the Velkerri Formation, Northern Territory, Australia
Warren, J. K., George, S. C., Hamilton, P. J. & Tingate, P., Mar 1998, In: *AAPG Bulletin*. 82, 3, p. 442-463 22 p.

Correlation of oils trapped in fluid inclusions from the Cooper/Eromanga Basin System, Australia
Ruble, T. E., Quezada, R. A., George, S. C. & Eadington, P. J., 1998, *Abstracts of the 18th International Meeting on Organic Geochemistry*. Maastricht, The Netherlands, p. 595-596

Effects of biodegradation on the molecular composition of Australian Permian coal
Ahmed, M., Smith, J. W. & George, S. C., 1998, *Proceedings of the 1998 Australian Organic Geochemistry Conference: 28-30th September 1998*. Canberra, p. 14-15

Evaluating factors which control the fluorescence colour of oil-bearing fluid inclusions
George, S. C., Ruble, T. E. & Dutkiewicz, A., 1998, *Proceedings of the 1998 Australian Organic Geochemistry Conference: Canberra, 28-30th September 1998*. p. 43-45 3 p.

Geochemical comparison of oil trapped in fluid inclusions and reservoir oil in Blackback oilfield, Gippsland Basin, Australia
George, S. C., Eadington, P. J., Lisk, M. & Quezada, R. A., 1998, In: Petroleum Exploration Society of Australia Journal. 26, p. 64-81 18 p.

Geochemistry of a palaeo-oil column, Octavius 2, vulcan sub-basin
George, S. C., Lisk, M., Eadington, P. J. & Quezada, R. A., 1998, *The Sedimentary Basins of Western Australia 2: Proceedings of the Petroleum Exploration Society of Australia Symposium*. Purcell, P. G. & Purcell, R. R. (eds.). Perth, WA.: Petroleum Exploration Society of Australia, Vol. 2. p. 195-210 16 p.

Novel tricyclic terpenoids from Tasmanite facies

Greenwood, P. F., George, S. C. & Al-Arouri, K., 1998, *Proceedings of the 1998 Australian Organic Geochemistry Conference: Canberra, 28-30th September 1998*. p. 23-25 3 p.

Vagrant oils: geochemical signposts to unrecognised petroleum systems
George, S. C., Summons, R. E., Bradshaw, M., Crowley, J., Edwards, D. S. & Zumberge, J. E., 1998, *The Sedimentary Basins of Western Australia Part 2: Proceedings of the Petroleum Exploration Society of Australia Symposium*. Perth, WA: Petroleum Exploration Society of Australia, Vol. 2. p. 169-184

Geochemical comparison of oil-bearing fluid inclusions and produced oil from the Toro sandstone, Papua New Guinea
George, S. C., Krieger, F. W., Eadington, P. J., Quezada, R. A., Greenwood, P. F., Eisenberg, L. I., Hamilton, P. J. & Wilson, M. A., Feb 1997, In: *Organic Geochemistry*. 26, 3-4, p. 155-173 19 p.

Comparison of palaeo oil charges with currently reservoir hydrocarbons using molecular and isotopic analyses of oil-bearing fluid inclusions: Jabiru oil field, Timor Sea
George, S. C., Greenwood, P. F., Logan, G. A., Quezada, R. A., Pang, L. S. K., Lisk, M., Krieger, F. W. & Eadington, P. J., 1997, In: *The APPEA Journal*. 37, 1, p. 490-504 15 p.

Describing the oil charge history of the South Pepper oilfield from the analysis of oil-bearing fluid inclusions
George, S. C., Lisk, M. & Summons, R. E., 1997, p. 21-22. 2 p.

Determining the gross composition of oil-bearing fluid inclusions using HPLC
Pang, L. S. K., George, S. C. & Quezada, R. A., 1997, p. 515-516. 2 p.

Fluid inclusion record of early oil preserved at jabiru field, vulcan sub-basin
George, S. C., Lisk, M., Eadington, P. J., Krieger, F. W., Quezada, R. A., Greenwood, P. F. & Wilson, M. A., 1997, In: *Exploration Geophysics*. 28, 2, p. 66-71 6 p.

Laser micropyrolysis GC-MS: A micro-selective analytical method
Greenwood, P. F., George, S. C. & Hall, K., 1997, *Abstracts of the 18th International Meeting on Organic Geochemistry*. Maastricht, The Netherlands, p. 513-514

Organic compounds trapped in aqueous fluid inclusions
George, S. C., Lisk, M., Ruble, T. E. & Quezada, R. A., 1997, p. 373-374. 2 p.

A new apparatus for laser micropyrolysis-gas chromatography/mass spectrometry
Greenwood, P. F., George, S. C., Wilson, M. A. & Hall, K. J., Dec 1996, In: *Journal of Analytical and Applied Pyrolysis*. 38, 1-2, p. 101-118 18 p.

Laser micropyrolysis gas chromatography mass spectrometry
Hall, K., Greenwood, P. F., George, S. C. & Wilson, M. A., Sept 1996.

The effects of varying tissue preservation on the aliphatic hydrocarbons within a high-volatile bituminous coal
Casareo, F. E., George, S. C., Batts, B. D. & Conaghan, P. J., Aug 1996, In: *Organic Geochemistry*. 24, 8-9, p. 785-800
16 p.

An HPLC method for analysis of oil in fluid inclusions in geochemical systems
Smeulders, D., Wilson, M. A., George, S. C. & Quezada, R. A., 1996.

Comparison of palaeo oil charges with currently reservoir hydrocarbons using the geochemistry of oil-bearing fluid inclusions
George, S. C., Lisk, M., Eadington, P. J., Quezada, R. A., Krieger, F. W., Greenwood, P. F. & Wilson, M. A., 1996, *SPE - Asia Pacific Oil & Gas Conference*. Texas, US: Society of Petroleum Engineers, p. 159-171 13 p.

Geochemical comparison of early oil preserved in fluid inclusions with current oil charge, Jabiru Field, Vulcan Sub-basin
George, S. C., Quezada, R. A., Lisk, M., Greenwood, P. F., Logan, G. A., Eadington, P. J., Krieger, F. W. & Wilson, M. A., 1996.

Interfacing a laser microprobe to a GC-MS
Greenwood, P. F., George, S. C., Wilson, M. A. & Hall, K., 1996.

Laser micropyrolysis gas chromatography mass spectroscopy (a new tool!) for petrographical chemistry (a new discipline!)
Greenwood, P. F., George, S. C., Wilson, M. A. & Hall, K., 1996.

Low molecular weight compounds trapped in fluid inclusions: analysis by on-line crushing in Quantum MSSV
George, S. C., Lisk, M. & Quezada, R. A., 1996.

Mapping hydrocarbon charge histories: detailed characterisation of the South Pepper oil field, Carnarvon Basin
Lisk, M., George, S. C., Summons, R. E., Quezada, R. A. & O'Brien, G. W., 1996, In: *The APPEA Journal*. 36, 1, p. 445-464 20 p.

Petrography and aliphatic hydrocarbon composition of the Barrett Coal Member, Upper Permian, northern Sydney basin, NSW

Casareo, F., Batts, B. D., George, S. C., Conaghan, P. J. & Jardine, D. R., 6 Apr 1995, *Proceedings of the 29th Newcastle Symposium: Advances in the Study of the Sydney Basin*. Newcastle, NSW: University of Newcastle

A study of sulphur and nitrogen in two high sulphur coals

Zhu, Z., Gu, Y., George, S. C., Wilson, M. A., Huggins, F. E. & Huffman, G. P., 1 Jan 1995, In: *Coal Science and Technology*. 24, C, p. 1681-1684 4 p.

Implications of variations in petrography on the aliphatic hydrocarbon composition within the Barrett coal member, upper Permian Wittingham coal measures, Northern Sydney basin, New South Wales (NSW), Australia

Casareo, F. E., Batts, B. D., Conaghan, P. J., George, S. C. & Jardine, D. R., 1995, *Coal Science, Vols I and II*. Pajares, JA. & Tascon, JMD. (eds.). Amsterdam, Netherlands: Elsevier, p. 279-282 4 p. (COAL SCIENCE AND TECHNOLOGY; vol. 24).

Molecular geochemistry of oil-generating coals from Turpan Basin, China

George, S. C., Sherwood, N., Gu, Y., Greenwood, P. F., Cheng, K. & Zhao, C., 1995, *Organic Geochemistry: Developments and Applications to Energy, Climate, Environment and Human History: Selected papers from the 17th International meeting on Organic Geochemistry*. Grimalt, J. O. & Dorronsoro, C. (eds.). Donostia-San Sebastian: A.I.G.O.A.

Molecular geochemistry of oil-generating coals from Turpan Basin, China
George, S. C., Sherwood, N., Gu, Y., Greenwood, P. F., Cheng, K. & Zhao, C., 1995, p. 40. 1 p.

Organic geochemistry of petroleum-bearing fluid inclusions in quartz grains from a Cretaceous sandstone
George, S. C., Eadington, P. J. & Hamilton, P. J., 1995, *Organic Geochemistry: Developments and Applications to Energy, Climate, Environment and Human History: Selected papers from the 17th International meeting on Organic Geochemistry*. Grimalt, J. O. & Dorronsoro, C. (eds.). Donostia-San Sebastian, Spain: A.I.G.O.A., p. 282-283 2 p.

The analysis of oil trapped in fluid inclusions in quartz grains
George, S. C., Eadington, P. J., Quezada, R. A. & Hamilton, P. J., 1995, *Proceedings of the 1995 Australian Organic Geochemistry Conference: Department of Geology and Geophysics, The University of Adelaide*. McKirdy, D. M. & Michaelsen, B. H. (eds.). p. 29

The geosynthesis of alkylaromatics

Smith, J. W., George, S. C. & Batts, B. D., 1995, In: *Organic Geochemistry*. 23, 1, p. 71-80 10 p.

The influence of depositional environment on the methylphenanthrene index
George, S. C. & Smith, J. W., 1995, *Coal Science and Technology: Proceedings of the Eight International Conference on Coal Science*. Pajares, J. A. & Tascon, J. M. D. (eds.). Elsevier, Amsterdam, Vol. 24. p. 287-290 4 p.

An integrated analytical approach for determining the origin of solid bitumens in the McArthur Basin, northern Australia
George, S. C., Llorca, S. M. & Hamilton, P. J., 1994, In: *Organic Geochemistry*. 21, 3-4, p. 235-248 14 p.

Aromatic hydrocarbon distributions in the Greta seam, Sydney Basin
George, S. C., 1994.

Ketones in a Proterozoic dolerite sill

George, S. C. & Jardine, D. R., 1994, In: *Organic Geochemistry*. 21, 8-9, p. 829-839 11 p.

Pyrolysis of aromatic compounds as a guide to synthetic reactions in sediments

Smith, J. W., George, S. C. & Batts, B. D., 1994, In: *Australian Petroleum Exploration Association Journal*. 34, 1, p. 231-240 10 p.

Vitrinite reflectance suppression in coal due to a marine transgression: case study of the organic geochemistry of the Greta Seam, Sydney Basin

George, S. C., Smith, J. W. & Jardine, D. R., 1994, In: *The APPEA Journal*. 34, 1, p. 241-255 14 p.

Black sandstones in the Midland Valley of Scotland: Thermally metamorphosed hydrocarbon reservoirs?
George, S. C., 1993, In: *Transactions of the Royal Society of Edinburgh: Earth Sciences*. 84, 1, p. 61-72 12 p.

The organic and isotope geochemistry of the Permian Greta coal, Australia

George, S. C., Smith, J. W., Jardine, D. & Hamilton, P. J., 1993, In: *American Association of Petroleum Geologists Bulletin*. 77

CSIRO Australia: research and development for the exploration industry
Hamilton, P. J., Eadington, P. J., George, S. C., Rigby, D., Smyth, M., Whitford, D. J., Wilkins, R. W. T. & Wilmhurst, J. R., Dec 1992, *Offshore South East Asia 9th Conference and Exhibition*. Singapore, Vol. OSEA 92203. p. 699-706 7 p.

Analytical approaches for determining the origin of solid bitumens: an integrated review
George, S. C., Llorca, S. M. & Hamilton, P. J., 1992.

An integrated analytical approach for determining the origin of solid bitumens
George, S. C., Llorca, S. M. & Hamilton, P. J., 1992, In: American Association of Petroleum Geologists Bulletin. 76, p. 1102 1 p., 91015.

Effect of igneous intrusion on the organic geochemistry of a siltstone and an oil shale horizon in the Midland Valley of Scotland
George, S. C., 1992, In: Organic Geochemistry. 18, 5, p. 705-723 19 p.

The influence of igneous activity on the generation and accumulation of petroleum in the central area of the Midland Valley of Scotland
George, S. C., 1990, (Unpublished) 393 p.

The organic geochemistry of some heat-affected samples from the Midland Valley of Scotland
George, S. C., 1989.

Diagenesis of a Carboniferous sandstone from the Midland Valley of Scotland
George, S. C., 1988.

Activities

Australian National University
Simon George (Visiting researcher)
14 Oct 2018 → 14 Dec 2018

Deputy Head of Department, EPS
Simon George (Participant)
Mar 2018 → ...

Reviewer of grant submitted to Petroleum Research Fund
Simon George (Participant)
Mar 2018

China University of Petroleum - Beijing
Simon George (Visiting researcher)
Nov 2017

Jilin University
Simon George (Visiting researcher)
Nov 2017

Australian Geoscience Council Convention 2018
Simon George (Participant)
Aug 2017 → Oct 2018

Invited keynote plenary speaker for the Asian Current Research On Fluid Inclusions (ACROFI-VI), Indian Institute of Technology Bombay, 25th to 27th November, 2016.
Simon George (Speaker)
Nov 2016

Zhaojun Liu
Simon George (Host)
Nov 2016

China University of Geoscience Beijing
Simon George (Visiting researcher)
Jun 2016

Invited keynote speaker for the Geofluids conference, Wuhan, China, June 2016.
Simon George (Speaker)
Jun 2016

Jilin University
Simon George (Visiting researcher)
Jun 2016

Jilin University
Simon George (Visiting researcher)
2016 → 2021

Oral presentation at the Big History Anthropocene Conference, Macquarie University, December 2015. "Geology of the Anthropocene"
Simon George (Speaker)
Dec 2015

CAS - Guangzhou Institute of Geochemistry
Simon George (Visiting researcher)
Jul 2015

Yangtze University
Simon George (Visiting researcher)
Jul 2015

Member of the EPS Learning and Teaching committee
Simon George (Participant)
2015 → ...

Macquarie University Marine Research Centre (Organisational unit)
Simon George (Chair)
2014 → 2018

Projects

AR app for physical campus exploration of evolution / biology / Big History, while walking down Wally's Walk
Gillings, M., Christian, D., George, S., Steel, M., Downey, G., O'Neill, C. J., Brock, G., Staas, L., Rampe, M. & Ens, E.
11/09/17 → 31/12/17

A reality check for learning approaches; a bank of mobile Virtual Reality (VR) stations for campus wide applications
Westaway, K., Ralph, T., Hesse, P., George, S., Bulbert, M., Allen, D., Power, R. & Rampe, M.
1/04/18 → 31/12/18

Australian Drilling Program: Biomarkers, Oxygen and Geobiology
George, S.
7/09/11 → 31/12/16

Australian Membership of the International Ocean Discovery Program
George, S., Arculus, R., Cohen, D., Gallagher, S., Vasconcelos, P., Elders, C., Foden, J., Coffin, M., Nebel, O., McGregor, H., Sloss, C., Webster, J. & Kemp, A.
29/06/16 → ...

Australian Membership of the International Ocean Discovery Program (2014-2015)

George, S., Arculus, R., Rohling, E., Roberts, A., Exon, N., O'Reilly, S., Aitchison, J. C., Webster, J. C. U., Coffin, M., Vasconcelos, P., Welsh, K., McCuaig, T., George, A., Skilbeck, C., Baxter, A., Hergt, J., Gallagher, S., Fergusson, C., Sloss, C., Heap, A., Schellart, W., Stilwell, J., Foden, J., Kershaw, A., Clennell, M. & Müller, D.

9/07/14 → 31/12/15

Biodegradation and ecotoxicology of spilled fuel oils in polar soils

George, S.

5/03/07 → 4/03/08

CL Monochromator for Scanning Electron Microscopy

Zakoshanski, I., O'Reilly, S., Griffin, B., Pearson, N., Belousova, E., Jacob, D., Piazolo, S., Clark, S., Daczko, N., Foley, S., George, S., Rushmer, T., Turner, S., Dadd, K., Schaefer, B., Handley, H., Downes, J., Lang, C. & Brock, G.

1/01/15 → 31/12/15

Constraining the impact of benthic meiofaunal activity on organic carbon burial in ancient oxygen-depleted sedimentary environments

Loehr, S., Kennedy, M., George, S. & Schaefer, B.

1/01/16 → ...

Deciphering the organic geochemical record of metazoans during the 'Cambrian Explosion' bioevent

George, S.

1/07/07 → 30/06/09

Diatom lipids: the key to past sea-ice history in remote Antarctic regions

Armand, L., George, S., Belt, S., Heraud, P., Bowler, C., Beardall, J. & MQRES, M.

28/02/17 → 23/08/17

Ecological Risks from Oil Products used in Antarctica: Characterising hydrocarbon behaviour and assessing toxicity on sensitive early life stages of Antarctic marine invertebrates

George, S.

5/12/11 → 30/06/12

Facility for large lipid analysis of geological and environmental samples, including new ability to derive important palaeothermometers

George, S., Goodwin, I., Lolas, A., Jacob, D., Westaway, K. & Leefmann, T.

1/01/14 → 31/12/14

Facility for long term preservation and storage of biological, chemical, environmental and geological samples

Nevalainen, H., Packer, N., Karuso, P., Jamie, J., Molloy, M., Brown, L., Liu, F., Herbert, B., George, S. & Vemulpad, S.

1/01/11 → 31/12/11

Femtosecond laser micropyrolysis gas chromatograph-mass spectrometer

George, S., Paterson, J., Van Kranendonk, M., Brocks, J., Sherwood, N., Jacob, D., Fuerbach, A., Brock, G., Loehr, S. & Sestak, S.

1/01/18 → 31/12/18

Fossils, fuels and ancient molecules: a multidisciplinary study investigating early animal and hydrocarbon evolution in the Cambrian of central Australia

Brock, G. & George, S.

1/01/10 → 31/12/10

Funds to aid with start-up if Produced Water Research Centre, Faculty of Science

George, S.

22/05/12 → 31/12/12

Geochemical changes during coal biodegradation to methane

George, S., Campbell, B. & Loehr, S.

5/03/18 → 5/03/21

Geochemistry Lab - ASE 300 Accelerated Solvent Extractor

George, S., Walter, M., Brock, G., Jamie, J., Gore, D. & McRae, C.

1/01/07 → 31/12/07

Hybrid fourier transform dispersive raman micro-spectrometer

George, S., Kannangara, G., Kennedy, E., McNevin, D., Chen, Y. & Wilson, M.

1/01/09 → 31/12/09

LECO comprehensive two-dimensional gas chromatography (GCxGC) with flame ionization detection system

George, S., Nelson, P., Brock, G. & Jamie, J.

1/01/08 → 31/12/08

Luminescence dating facility - dosimetry and detection

Westaway, K., Goodwin, I., Fryirs, K., Hesse, P., George, S., Choat, M., Fanning, P. & Cohen, T.

1/01/10 → 31/12/10

Macquarie University Energy and Environmental Contaminants Research Centre

Taylor, M., Gore, D., Strezov, V., Nelson, P., Edwards, G., Davies, P., Kennedy, M., Loehr, S., Handley, H., George, S., Jiang, Y. & Hose, G.

1/01/16 → ...

Macquarie University Planetary Research Centre

O'Neill, C. J., Schaefer, B., Rushmer, T., Foley, S., Turner, S., Clark, S., George, S., Kennedy, M., Piazolo, S., Afonso, J. C., De Marco, O., Wardle, M., Schwab, C., Heimlich, M., Inglis, D. & Chang, M.

1/07/15 → ...

Mass balancing of generation and escape of methane on the North West Shelf of Australia in the Cenozoic

George, S. & Abbassi, S.

21/09/11 → 26/09/12

Models of local and global climate changes through organic inputs and biomarker geochemistry in deep water core sediments in the Indus fan, Arabian Sea

George, S. & Aharonovich, S.

1/01/16 → ...

Molecular fossils, environmental genomics & the natural history of an Australian salt lake

George, S. & Brocks, J.

1/01/07 → 31/12/09

MQ Marine Research Centre

George, S., Armand, L., Armbrecht, L., Bishop, M., Brock, G., Daczko, N., Dadd, K., Goodwin, I., Grech, A., Hesse, P., Irvine, A., Jacob, D., Kennedy, M., Kosnik, M., Loehr, S., Madin, E., Madin, J., Ostrowski, M., Paulsen, I., Saintilan, N., Tetu, S., Williamson, J., Wood, L. & O'Brien, P.

1/07/15 → ...

MQ SAFETY NET Biogeochemical evolution of animal exoskeletons throughout the Phanerozoic

George, S.

1/01/19 → 31/12/19

Organic geochemistry of Eocene to Oligocene sediments in the Tasmania Gateway – a detailed analysis of depositional environment, organic matter inputs, and palaeo sea surface temperature, ODP Leg 189
Harper, C. & George, S.
22/10/18 → 22/10/20

Organic matter inputs, depositional environment, and thermal maturity of Paleogene sedimentary rocks in the deep-water South China Sea
George, S. & Zhong, S.
19/09/23 → 1/12/24

Oxygenation of Earth: the timing of the origin of cyanobacteria
George, S. & Walter, M.
1/01/10 → 31/12/15

Palaeoenvironments and thermal maturity of the Permian southern Sydney Basin, from drillcore DM Callala DDH1
George, S. & Campbell, B.
1/08/17 → ...

Patterns of global climate changes during the Miocene Epoch based on evaluation of the biomarkers from IODP expeditions 313 and 317
George, S. & Aharonovich, S.
27/08/14 → 27/08/16

Precision saw for finely cutting and slicing geological samples
George, S., Turner, S., Rushmer, T., Schaefer, B., Brock, G., Hoshino, Y., Abbassi, S., van Holst, J., Pankhurst, M., Foley, F. & Brens, R.
1/01/12 → 31/12/12

Purge and trap concentrator with autosampler for analysis of volatile organic compounds in water and soil samples
George, S., Brock, G., Jamie, I., Nelson, P., Hose, G., Bishop, M., Schaefer, B., Goodwin, I., Armand, L. & Williamson, J.
1/01/10 → 31/12/10

Pyrolysis equipment for chemical analysis of large organic molecules
George, S., Loehr, S., Jacob, D., Brock, G., Armand, L., Strezov, V., Handley, H. & Abbott, A.
1/01/17 → ...

Rates of depletion of lubricant and fuel contaminants during natural attenuation from Antarctic marine environments, and ecosystem response to exposure to complex mixtures
George, S., Snape, I., McRae, C., Stark, J., King, C. & McIntyre, C.
31/10/07 → 30/06/12

Reassessing the rise and phylogeny of Cambrian organophosphatic shelly lophotrochozoans using molecular fossils
Holmer, L., George, S., Brock, G., Zhang, Z. & Agbaje, O.
6/05/20 → 31/12/22

Residual toxicity and risk assessment of petroleum hydrocarbons in Antarctic and sub-Antarctic soils
Hose, G., George, S., Ferrari, B., King, C. & Snape, I.
18/03/13 → 30/06/17

Sediment Hydrocarbon Pyrolysis Analyzer
Zakoshanski, I., Kennedy, M., George, S., Strezov, V., Gore, D. & Jacob, D.
1/01/15 → 31/12/15

Start-up grant for Simon George
George, S.
1/01/07 → 31/12/07

Stromatolite Construction, Biofacies and Biomarkers in Lower Cambrian Carbonates of the Hawker Group, Arrowie Basin, South Australia
George, S. & Teece, B.
1/05/17 → ...

Thermal Desorption Capability for Molecular Analysis
George, S., Prentice, C., Taylor, P., Jamie, J., Atwell, B. & Jamie, I.
1/01/13 → 31/12/13

Time-of-flight mass spectrometer for analysis of complex mixtures in oils, ancient rocks, recent sediments, natural products and atmospheric aerosols
George, S., Nelson, P., Gore, D., Jamie, J., Brocks, J., Neilan, B., Kannangara, G., Snape, I., Volk, H. & Wilson, M.
1/01/10 → 31/12/10

Toxicity of chemically and physically dispersed fuels on Antarctic marine biota - applicability of dispersant use for fuel spill response planning
George, S., Harrison, P. & Lane, A.
1/07/13 → 30/06/16

Tracing life's beginnings: molecular fossils from single oil inclusions
George, S., Dutkiewicz, A. & MQRES 3 (International), M. 3.
6/02/13 → 5/02/16

Using ancient phytoplankton communities and genes to illuminate future ocean responses
George, S., Ostrowski, M., Armand, L. & Armbrecht, L.
1/10/16 → ...