

## Publications 2014, IGCP587 – a selection

3 December 2014

### Book

Vickers-Rich, P., 2013/2014. *The Flight: Boris S. Sokolov. Natural History and Paleontology in the Changing Landscape of 20<sup>th</sup> and 21<sup>st</sup> Century Russia. The Palaeontological Society of India, Lucknow: 262 pp. (2<sup>nd</sup> printing in 2014) – on line:*

([http://www.bsip.res.in/pdf/VickersRich\\_The%20Flight%20071212\[1\].pdf](http://www.bsip.res.in/pdf/VickersRich_The%20Flight%20071212[1].pdf))

### Research Papers

Bowers, A., 2014. Further Precambrian (Ediacaran) fossil discoveries in Charnwood Forest, Leicestershire. *Mercian Geologist*, 18 (3): 175-179.

Buatois, L.A., Narbonne, G.M., Mángano, M.G., Carmona, N.B., and Myrow, P., Ediacaran matground ecology persisted into the earliest Cambrian, *Nature Communications* 5, Article number: 3544, doi:10.1038/ncomms4544, p. 1-5.

Carbone, C., and Narbonne, G.M., 2014, When life got smart: the evolution of behavioral complexity through the Ediacaran and early Cambrian of NW Canada. *Journal of Paleontology*, vol. 86: 309-330.

Droser, M.L., Gehling, J.J., Dzaugis, M.E., Kennedy, M.J., Rice, D., Allen, M.F., 2014, A New Ediacaran fossil with a novel sediment displacive life habit. *Journal of Paleontology*. 88, 145-151.

García-Bellido, D. C., Lee, M. S., Jago, J. B., Gehling, J. G. And Peterson, J. R., 2014. A new vetulicolian from Australia and its bearing on the chordate affinities of an enigmatic Cambrian group. *BMC Evolutionary Biology*, 14:214 doi:10.1186/s12862-014-0214-z.

Gaschnig, R., Rudnick, R., McDonough, W.F., Kaufman, A.J., Hu, Z., and Gao, S. (2014) Onset of oxidative continental weathering recorded in the geochemistry of ancient glacial diamictites. *Earth and Planetary Science Letters* 408: 87-99.

Gehling, J.G. and Droser, M.L., 2014. How well do fossil assemblages of the Ediacara Biota time? *Forum Reply. Geology*, 42. Doi:10.1130/G35403Y.1

Gehling, J.G., Runnegar, B.N. and Droser, M.L., 2014. Scratch traces of large Ediacaran bilaterian animals. *Journal of Paleontology* 88, 284-298.

Ghisalberti, M., Gold, D.A., Laflamme, M., Clapham, M.E., Narbonne, G.M., Summons, R.E., Johnston, D.T., and Jacobs, D.K., 2014, Canopy flow models identify the advantage of size in the oldest communities of multicellular eukaryotes, *Current Biology* 25: 305-309.

Joel, L., Droser, M.L., and Gehling, J. G., 2014, A new enigmatic, tubular organism from the Ediacara Member, Rawnsley Quartzite, South Australia, *Journal of Paleontology*, 88: 253-262.

Gómez-Peral, L., Kaufman, A.J., and Poiré, D. (2014) Paleoenvironmental implications of two phosphogenic events in Neoproterozoic sedimentary successions of the Tandilla System, Argentina. *Precambrian Research* 252: 88-106.

Grazhdankin, D., 2014. Patterns of evolution of the Ediacaran soft-bodied biota: *Journal of Paleontology*, 88: 269-283.

Hofmann, M., Linnemann, U., Hoffmann, K-H, Germs, G., Gerdes, A., Marko, L., Eckelmann, K., Gartner, A. & Krause, 2014. The four Neoproterozoic glaciations of southern Namibia and their detrital zircon record: The fingerprints of four crustal growth events during two supercontinent cycles. *Precambrian Research*, 2014: 1-14. [Http://dx.doi.org/10.1016/j.precamres.2014.07.021](http://dx.doi.org/10.1016/j.precamres.2014.07.021)

Ivantsov A. Yu., Gritsenko V. P., Konstantynenko, L. I., Zakrevskaya M.A., 2014. Revision of the problematic Vendian macrofossils *Beltanelliformis* (= *Beltanelloides*, *Nemiana*). *Paleontological Journal*, 2014, 48 (13): 1-26.

Ivantsov A. Yu., Vickers-Rich, P., Kattan, F., Trusler P. Macrofossils of Late Precambrian of Saudi Arabia // Paleostrat-2014: Annual Assembly, Paleontological Section of the Moscow Society of Nature Explorers: Program and Theses Reports. Moscow. 2014. P. 31-32. [in Russian].

Ivantsov A. Yu., Zakrevskaya M.A. *Vendia sokolovi* and golden age of Proarticulata on microbial fields of Late Precambrian // Diversification and staging of evolution of organic world in light of paleontological record. Proceedings of the LX session of the Paleontological Society, dedicated to 100th anniversary of academician B.S. Sokolov. St. Petersburg. 2014. P. 66-68. [in Russian].

Joel, L., Droser, M. L. and Gehling, J. G., 2014. A new enigmatic, tubular organism from the Ediacara Member, Rawnsley Quartzite, South Australia. *Journal of Paleontology*, 88: 253-262.

Linnemann, U., Gerdes, A., Hofmann, M. and Marko, L., 2014. The Cadonian Orogen: Neoproterozoic to Early Cambrian crustal growth and orogenic zoning along the periphery of the West African Craton-Constraints from U-Pb zircon ages and Hf isotopes (Schwarzburg Antiform, Germany). *Precambrian Research*, 244 (2014): 236-278.

Liu, P., Xiao, S., Yin, C., Chen, S., Zhou, C. and Li, M., 2014. Ediacaran acanthomorphic acritarchs and other microfossils from chert nodules of the upper Doushantuo Formation in the Yangtze Gorges area, South China. *Journal of Paleontology*, 72 (supplement to No. 1): 1-139.

Meyer, M., Elliott, D., Wood, A. D., Polys, N. F., Colbert, M., Maisno, J. A., Vickers-Rich, P., Hall, M. Hoffman, K. H., Schneider, G. and Xiao, S., 2014. Three-dimensional microCT analysis of the Ediacara fossil *Pteridium* simplex sheds new light on its ecology and phylogenetic affinity. *Precambrian Research*, 249 (2014): 79-87.

Meyer, M., Xiao, S., Gill, B. C., Schiffbauer, J. D., Chen, Z., Zhou, C. and Yuan, X., 2014. Interactions between Ediacaran animals and microbial mats: insights from *Lamonte trevallas*, a new trace fossil from the Dengying Formation of South China. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 396: 62-74.

Misi, A., Azmy, K., Kaufman, A.J., de Oliveira, T.F., Sanches, A.L. and de Oliveira, G.D. (2014) Review of the geological and geochronological framework of the Vazante sequence, Minas Gerais, Brazil: Implications to metallogenic and phosphogenic models. *Ore Geology Reviews* **63**: 76-90.

Narbonne, G.M., Laflamme, M., Trusler, P.W., Dalrymple, R.W. and Greentree, C. 2014, Deep-water Ediacaran fossils from northwestern Canada: taphonomy, ecology, and evolution. *Journal of Paleontology*, vol. 86: 207-223. [Cover illustration]

Moczydlowska, M., Westall, F. and Foucher, F., 2014. Microstructure and biogeochemistry of the organically preserved Ediacaran metazoan *Sabellidites*. *Journal of Paleontology*, 88 (2): 224-239.

Nettle, D., Halverson, G.P., Cox, G.M., Collins, A.S., Schmitz, M., Gehling, J.G., Johnson, P.R. and Kadi, K. 2014. A middle-late Ediacaran volcano-sedimentary record from the eastern Arabian-Nubian shield. *Terra Nova*. 26, 120-129. DOI: 10.1111/ter.12077.

Peng, Y., Bao, H., Pratt, L.M., Kaufman, A.J., Jiang, G., Boyd, D., Wang, Q., Zhou, C., Yuan, X., Xiao, S., and Loyd, S. (2014) Contamination of ancient carbonate-associated sulfate by Modern atmospheric sulfate: evidence from triple oxygen isotopes. *Geology* **42**: 815-818.

Schiffbauer, J.D., Xiao, S. Cai, Y., Wallace, A.F., Hua, H., Hunter, J., Xu, H., Peng, Y., and Kaufman, A.J. (2014) A unifying model for Neoproterozoic-Paleozoic exceptional fossil preservation through

pyritization and carbonaceous compression. *Nature Communications*.

Serezhnikova, E.A., Ragozina, A.L., Dorjnamjaa, D. and Zaitseva, L.V. Fossil microbial communities in Neoproterozoic interglacial rocks of Western Mongolia., 2014. *Precambrian Research*, 245: 66–79.

Serezhnikova, E.A., 2014. Skeletogenesis in problematic Late Proterozoic Lower Metazoa . *Paleontological Journal*, 48, 14.

Spangenberg, J.E., Bagnoud-Velásquez, M., Boggiani, P.C., Gaucher, C., 2014. Redox variations and bioproductivity in the Ediacaran: Evidence from inorganic and organic geochemistry of the Corumbá Group, Brazil. *Gondwana Research*, 26: 1186-1207.

Xiao, S., Droser, M.L., Gehling, J.G., Hughes, I.V, Wan, B., Chen, Z. and Yuan, X. 2013. Affirming life aquatic for the Ediacara biota in China and Australia. *Geology* 41, 1095-1098, doi:10.1130/G34691.1.

Xiao, S., Shen, B., Tang, Q., Kaufman, A.J., Yuan, X., Li, J., and Qian, M. (2014) Biostratigraphic and chemostratigraphic constraints on the age of early Neoproterozoic carbonate successions in North China. *Precambrian Research* 246: 208-225.

Xiao, S., Zhou, Z., Liu, P., Wang, D. and Yuan, X., 2014. Phosphatized acanthomorphic acritarchs and related microfossils from the Ediacaran Doushantuo Formation at Wengán (South China) and their implications for biostratigraphic correlation. *Journal of Paleontology*, 88: 1-67.

Zhelezinskaia, I.\*, Kaufman, A.J., Farquhar, J., and Cliff, J. (2014) Large sulfur isotope fractionation associated with Neoproterozoic microbial sulfate reduction. *Science* 346: 742-744.

### **Conference Papers/Reports**

Gehling, J.G. 2014. Australian Criteria for Subdivision of the Ediacaran. International Commission on Stratigraphy Subcommission on Ediacaran Stratigraphy; Subcommission on Cryogenian Stratigraphy. Third International Congress of Geobiology, June 16-18, Wuhan, China.

Gehling, J.G. 2014. Evidence of Ediacaran motility and the origins of bilaterian animals Address to Royal Society of South Australia. April 10. Flinders University, South Australia.

Kaufman, A. J. and Cui, H., 2014. A new chemostratigraphic synthesis of the Ediacaran Period. Geological Society of Namibia Symposium, Geological Survey of Namibia, 20 May 2014, Windhoek. (Abstract volume pg. 2)

Kaufman, A. J., Vickers-Rich, P., Walde, D., Gaucher, C. and Boggiani, P., 2014 (March). Corumba Meeting 2013 (4-9 August): The Neoproterozoic Paraguay Fold Belt (Brazil): Glaciation, iron-manganese formation and biota, an IGCP Workshop and Field Excursion on the Ediacaran system. *Episodes*, 37 (1): 1-3.

Narbonne, G. M. And James, N. P., 2014. Precambrian microbial reefs: Template for the Phanerozoic reef ecosystem. Geological Society of Namibia Symposium, Geological Survey of Namibia, 20 May 2014, Windhoek. (Abstract volume pg. 3)

Sharp, A. C., Vickers-Rich, P., Trusler, P. and Rich, T. H., 2014. Reconstructing *Rangaea*: New Technology and palaeobiological interpretations. Geological Society of Namibia Symposium, Geological Survey of Namibia, 20 June 2014, Windhoek. (Abstract volume, pg. 5)

Trusler, P., 2014. Reconstructing an Ediacaran Icon. Geological Society of Namibia Symposium, Geological Survey of Namibia, 20 May 2014, Windhoek. (Abstract volume pg. 4)

Vickers-Rich, P., 2014. Keynote Address. The Importance of Early Childhood Education in the Earth Sciences. 7<sup>th</sup> Conference of the African Association of Women in Geosciences, Geological Survey of Namibia, Windhoek (<http://www.mme.gov.na/gsn/CAAWG7>) 3-9 November 2014. (Abstract volume pg. 6)

Vickers-Rich, P., Ivantsov, A., Trusler, P., Hall, M., Narbonne, G., Leonov, M., Serezhnikova, E., Fedonkin, M., Kattan, F., Kubisani, A., Yazidi, A., Khasgari, W., Acenolaza, G., Acenolaza, F., Sharma, M., Mathur, S. C., Linnemann, U., Hofmann, M., Hoffmann, K. H., Li, C-W, Rich, T. H., Smith, J. and Rich, B., 2014. New discoveries of Ediacarans/Vendians in Namibia, Saudi Arabia, India and Argentina. Geological Society of Namibia Symposium, Geological Survey of Namibia, 20 June 2014, Windhoek. (Abstract volume page7).