



Vladimir I. Vernadsky: a Retrospective (Vladimir Ivanovich Vernadsky Medal Lecture)

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Vladimir Vernadsky (1863-1945) was a Russian mineralogist and geochemist, a keen observer of nature and arguably, the father of geobiology. His contributions to geobiology are summarized in the treatise "The Biosphere", published originally in Russian in 1926, and translated into English in 1986. In "The Biosphere" Vernadsky unites Hutton's concepts of geological cycling with Winogradsky's (and others) insights into the tenacity of life to recycle energy and matter, to promote the idea of life as a geologic force. Vernadsky appreciated the exceedingly long history of life on Earth and recognized its influence on geologic materials dating back into the Archean. In this contribution, I will review Vernadsky's ideas and place them into the context of the evolution of geological and biological sciences during his time. I will also place his insights into the context of modern thinking on the relationship between life and the cycling of matter on the modern Earth and through geologic time.