Lunar and Mars exploration and research require not only scientific and technological interdisciplinary cooperation, but also the consideration of budding ethical and scientific integrity issues. COSPAR’s planetary protection policy (in coordination with the United Nations Committee on the Peaceful Uses of Outer Space as well as various other bilateral and multilateral organizations) serves as the consensus standard for biological contamination prevention under the 1967 Outer Space Treaty\(^1\). Space agencies Planetary Protection Policies are mostly consistent with the COSPAR policy. Geoethics was formerly promoted in 1991 as a new discipline, involving scientific and societal aspects\(^2\), and its institutionalization was officially established in 2004 with the backing of the Association of Geoscientists for International Development, AGID\(^3\) (IUGS/ICSU). Recently, it has been proposed that the integration of geoethical issues in studies on planetary geology and astrobiology would enrich their methodological and conceptual character\(^4–6\). The incorporation through geoethics of new questions and approaches associated to the “abiotic world” would involve: 1) extrapolating to space the recently defined and approved IUCN/UNESCO guidelines and recommendations on geodiversity\(^7\) as “planetary geodiversity”, and 2) widening the classical concept of Planetary Protection, giving an additional “abiotic” dimension to the exploration and research of the Moon and Mars. Given the geological characteristics and planetary evolution of the Moon and Mars, it is obvious that they require tailored geoethical approaches. Some fundamental aspects include, among others: the interrelation with bioethics and organics vs. inorganic contamination in Planetary Protection, the appropriate regulations of some necessary natural disturbances (e.g. on the Moon) during robotic and manned planetary missions, wilderness/planetary parks\(^8,9\), the correct use of mineralogical and geochemical analytical procedures related to the study of Lunar and Martian meteorites, and also the research, taking into account this new perspective, of the Earth
locations which are called terrestrial analogs.