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Sample Analysis at Mars Organic Contaminants Library (SAM-OCL) RAUL GARCIA-SANCHEZ, PRABHAKAR MISRA, Howard University, JOHN CANHAM, ATK Space Systems, Inc., PAUL MAHAFFY, NASA GSFC Planetary Environments Laboratory — The Sample Analysis at Mars Organic Contaminants Library (SAM-OCL) was developed as one of several components for the Mars rover mission's Contamination Control Protocol. The purpose of SAM-OCL is to determine the Gas Chromatography-Mass Spectroscopy (GCMS) signals of different materials composing the Mars Science Laboratory rover. In turn, this allows us to determine which GCMS signals originate from terrestrial contamination or rover material outgassing. The GCMS spectral library has several supplemental components, of which its descriptor spreadsheets are the most important, aimed to make SAM-OCL easily and readily accessible to users in and out of the Mars rover mission. One spreadsheet describes the contaminants that can be found in each file, while the other describes the information regarding each file. The library, along with its supplemental materials, is useful from an organizational and practical sense. Through them we are able to organize large volumes of GCMS data while breaking down the components that each material sample is made off. This allows us easy and fast access to information that will be critical when doing analysis in the data that the SAM instrumentation will obtain.

Prabhakar Misra
Howard University

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