**SOLAR SYSTEM SITES: MARS: MODERN MARS HABITABILITY I**

10:15 a.m. Palo Verde

**Chairs:** Carol Stoker
Alfred McEwen

10:15 a.m. Mischna M. A. *  
**Insolation-Driven Recent Climate Change on Mars** [#3278]
A review of the means by which changes in Mars’ orbital and axial orientation can regulate the presence of liquid water in Mars’ recent past.

10:30 a.m. Dundas C. M. * McEwen A. S. Byrne S.  
**Recent Mars: Wet or Dry or Icy?** [#3305]
Current cratering on Mars reveals widespread ground ice, but active slope processes (gullies and RSL) are consistent with little or no liquid water.

10:45 a.m. Ojha L. * Wray J. McEwen A. Wilhelm M. B.  
**Orbital Observation of Hydrated Oxychlorine Salts on Mars: Implications for Habitability** [#3509]
We describe the remote detections of hydrated oxychlorine salts on the martian surface, and its implications for habitability.

11:00 a.m. McEwen A. S. *  
**Recurring Slope Lineae (RSL) on Mars: Do They Indicate Habitable Environments?** [#3128]
RSL are interpreted as granular flows triggered by some type of water activity, so habitability seems unlikely but cannot be ruled out.

11:15 a.m. Rodriguez-Colon B. J. * Rivera-Valentin E. G.  
**The Subsurface Biological Potential of Gale Crater, Mars Through Deliquescence** [#3080]
We investigate the subsurface biologic potential across MSL’s traverse through deliquescence of calcium perchlorate.

11:30 a.m. Viola D. * McEwen A. S.  
**Distribution of Near-Surface Excess Ice on Mars: Implications for Habitability** [#3094]
Shallow, excess ice is present in the mid-latitudes on Mars. We will discuss the modern distribution of this ice and how it relates to habitability.

11:45 a.m. Mustard J. F. * Tarnas J. D.  
**Hydrogen Production in the Upper 15 km of Martian Crust via Serpentinization: Implications for Ancient and Modern Habitability** [#3426]
Quantification of H₂ produced by hydration reactions on Mars shows this as an abundant energy source for modern or ancient habitable subsurface environments.

12:00 p.m. Stamenković V. * Fischer W. Ward L. Mischna M. Russell M.  
**Generation of Redox Gradients in Modern Mars Environments** [#3582]
We show results on the generation of hydrogen- and oxygen-rich environments on Mars today and in the last 20 Myr.

12:15 p.m. Lunch