Ahmad El-Guindy* (ahmad.el-guindy@qatar.tamu.edu), Texas A&M University at Qatar, Science Program, Doha, Qatar, and Mourad E.H. Ismail, University of Central Florida, Orlando, FL. Unilateral and bilateral identities of Rogers-Ramanujan type.

In this talk, we derive some sum-to-product identities in the theory of q-series. The formulas are related to a generalized version of the q-Airy function which was recently introduced by Ismail and Zhang. Along the way, we obtain some interesting results on the vanishing and non-vanishing of certain finite q-sums when twisted by arbitrary roots of unity with implication to both unilateral and bilateral infinite q-series. (Received September 20, 2016)