1067-AA-2279 Lipika Deka\* (ldeka@csumb.edu), 100 Campus Center, Department of Mathematics and Statistics, Chapman Science Bldg, Seaside, CA 93955. Special Functions in Combinatorics.

Combinatorics and Special Functions were two unrelated subjects for a long time. With the fascinating developments in Combinatorics starting in the early twentieth century, many mathematicians started noticing Special Functions in their solutions to some of the most important combinatorial problems. One relation between these two subjects appeared in Enumerative Combinatorics. Some of the connections are the famous Rogers-Ramanujan identities and other identities for partition of integers. This talk will discuss some of these famous results in Enumerative Combinatorics and show how these are related to some of the Special functions. (Received September 22, 2010)