1030-13-268William Heinzer and Irena Swanson* (iswanson@reed.edu), 3203 SE Woodstock Blvd,
Portland, OR 97202. The Goto numbers of parameter ideals.

Let Q be a parameter ideal of a Noetherian local ring (R, m). The Goto number g(Q) of Q is the largest integer g such that $Q: m^g$ is integral over Q. We examine the values of g(Q) as Q varies over the parameter ideals of R. We concentrate mainly on the case where the dimension of R is 1, and many of our results concern parameter ideals of a numerical semigroup ring. The motivation was the work of Corso, Huneke, Vasconcelos, Polini, and Goto, on Cohen-Macaulay criteria for Rees algebras and fiber rings. (Received August 05, 2007)