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Abel Castorena* (abel@matmor.unam.mx), Instituto de Matematicas, UNAM Campus Morelia, Apdo. Postal 61-3(Xangari), 58089 Morelia, Michoacan, Mexico. *On the slope of relatively minimal fibrations on rational complex surfaces.*

Given a relatively minimal fibration $f : S \rightarrow \mathbb{P}^1$ with general fiber C of genus g , we investigate under what conditions the inequality $6(g - 1) \leq K_f^2$ occurs, where K_f^2 is the canonical relative sheaf of f . We give conditions for having such inequality, depending of the genus and gonality of C and the number of certain exceptional curves on S . We apply our results for constructing examples of fibrations with the desired property. (Received April 06, 2010)