Zhenyi Liu* (zhenyi.liu@okstate.edu), 300 S. Roselle Rd. , #207, Schaumburg, IL 60193. Classification of One-sided Incompressible Surfaces in Two Infinite Families of Seifert Fibered Spaces.

In this paper, we identify all one-sided incompressible surfaces, up to isotopy, in the generalized quaternion spaces S^3/Q_{4k} , which are Seifert fibered spaces $M_k = (S^2 : (2,1), (2,1), (k,-k+1)), k \ge 2$. The techniques used can be expanded to give the classification of one-sided incompressible surfaces in the minimal layered chain pair triangulations of Seifert fibered spaces $(S^2 : (2,-1), (r+1,1), (s+1,1)), r, s \ge 1$. (Received September 19, 2010)