1116-13-897   **Hailong Dao** (`hdao@ku.edu`) and **Tony Se*** (`tonyse@ku.edu`). *Finite F-type and F-abundant Modules.*

We introduce and study basic properties of two types of modules over a commutative Noetherian ring R of positive prime characteristic. The first is the category of modules of finite F-type. They include reflexive ideals representing torsion elements in the divisor class group. The second class is what we call F-abundant modules. These include, for example, the ring R itself and the canonical module when R has positive splitting dimension. We are able to prove many facts about these two categories and how they are related, for example that $\text{Hom}_R(M, N)$ is maximal Cohen-Macaulay when M is of finite F-type and N is F-abundant, plus some extra conditions. Our methods allow us to extend previous results by Patakfalvi-Schwede, Yao and Watanabe. They also afford a deeper understanding of these objects, including complete classifications in many cases of interest. (Received September 14, 2015)