We claim:

1. A fluid catalytic cracking process comprising reacting a hydrocarbon feedstock under catalytic cracking conditions in the presence of a FCC catalyst and an additive, wherein the additive comprises phosphorus and a ZSM-5 molecular sieve having iron in the framework and the additive has a molar ratio of phosphorus to the combined amount of framework iron and framework aluminum (P:(Fe + Al)) in the range of 1 to 1.3, wherein the process increases production of propylene compared to the same process without using the additive.

2. The fluid catalytic cracking process of claim 1 wherein the hydrocarbon feedstock is reacted at a temperature from 400°C to 700°C.

3. The fluid catalytic cracking process of claim 1 wherein the additive comprises at least four percent by weight phosphorus (as P_2O_5).

4. The fluid catalytic cracking process of claim 1 wherein the additive comprises at least 0.5 weight percent iron, as measured as iron oxide Fe_2O_3, in the molecular sieve framework.

5. The fluid catalytic cracking process of claim 1 wherein the ZSM-5 molecular sieve has a molar ratio of framework iron to framework aluminum within the range of 0.4 to 0.67.

6. The fluid catalytic cracking process of claim 1 wherein the additive further comprises one or more inorganic oxides.

7. The fluid catalytic cracking process of claim 6 wherein the inorganic oxide is selected from the group consisting of silica, alumina, silica-alumina, titanium oxide, zirconium oxide, aluminum phosphate, and combinations thereof.

8. The fluid catalytic cracking process of claim 1 wherein the additive further comprises a clay.

9. The fluid catalytic cracking process of claim 1 wherein the ZSM-5 molecular sieve comprises 25 to 80 weight percent of the additive.

10. The fluid catalytic cracking process of claim 1 wherein the ZSM-5 molecular sieve comprises 40 to 70 weight percent of the additive.