

**ADVANCED REBURNING FOR REDUCTION OF NO_x
EMISSIONS IN COMBUSTION SYSTEMS**

ABSTRACT

Techniques for enhancing the burnout zone chemistry for NO_x reduction are disclosed. The key parameters for the enhancement of burnout zone chemistry are: (a) a reaction temperature in the range from about 1300°F to about 1900°F, and optimally in the range from 1400-1700°F; (b) a carbon monoxide concentration below about 0.5 percent; and (c) the presence of nitrogenous reducing species. By controlling the stoichiometry associated with reburning to produce a slightly fuel-rich region for selective reducing agent injection, reductions can be achieved at relatively low temperatures which approach those obtained by conventional catalytic reduction.

(Figure 1 to accompany the abstract on publication)