

Chemical Reaction Engineering I

Quiz 3

By
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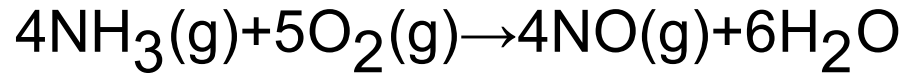
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QUESTION

In a process that utilizes ammonia for nitric oxide production, a gas phase elementary reaction involve is as follows;



The inlet feed consists of 17 mol% of ammonia in air at 7.2 atm and 250 °C.

- Calculate the overall inlet concentration, C_T in mol.L^{-1} unit.
- Set up a stoichiometric table using ammonia as your reference substance. Express the partial pressure P_i and concentration C_i for all species as functions of conversion for a flow reactor.



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