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### Response to Letter to the Editor

We of course agree that, far from equilibrium, the most active catalyst will not necessarily be the same for both the forward and the reverse reactions. It is equally true that at equilibrium the optimal catalyst must be the same for the two opposite reactions. Such general statements are therefore of limited usefulness in making predictions about the optimal catalyst. In a series of papers we have developed the theoretical framework to make quantitative predictions [1] and find (surprisingly?) that even for a reaction like ammonia synthesis and decomposition running quite close to equilibrium the optimal catalyst for the two reactions is not the same [2].

### References

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