### Synthesis of Ammonia: a dynamic equilibrium



**N2  +  3 H2  aagl  2 NH3     
  
 Δ*H = -92 kJ/mol***

**Task: Find the appropriate conditions for this reaction and award yourself the Nobel Prize!**

* + - 1. What conditions are there (in general) to influence the position of an equilibrium? Write down keywords only.

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2. How do this conditions have to be chosen so that the equilibrium is shifted in the way to produce the best yield of ammonia?

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* + 1. Unfortunately the catalyst does not work at room temperature but instead needs about 450°C. Therefore we cannot use the temperature to shift the reaction. What does that mean for the other reaction conditions?

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