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**Use and abuse of diffusion**

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Diffusion in a bounded region (or diffusive mass transport) can be seen from at least three platforms:

- chemistry of the Fick's equation
- chemical engineering.

To pose a particular problem we have to provide some additional conditions (initial conditions, boundary conditions and further). As we understood it in all cases diffusion is considered in an open region (in other words in one phase). Chemical engineering however brings an idea of "diffusion" between phases. We claim that there isn't diffusion between phases. One can only consider mass transport between phases. Mass transport (or transfer in chemical engineering jargon) from one phase to another composes of: diffusion in first phase partition at an interface diffusion in second phase.