## Homework problem due to 06.12. 2013

Solution of this problem can be handed in during the wrap up session on 06.12. 2013 or it can be sent by e-mail to: <a href="mailto:pavel.frajtag@epfl.ch">pavel.frajtag@epfl.ch</a>

## **Problem 36:**

Assume that a tea sample (mass 1g) containing the tolerance value for methyl bromide of 50mg/kg is irradiated with a neutron flux density of  $3.6 \cdot 10^{10}$ /cm<sup>2</sup>/s.

- Which (maximum) activity would the bromine in the sample reach after an infinite irradiation time?
- Which activity has the bromine in the sample after an irradiation time of 30 minutes?

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