

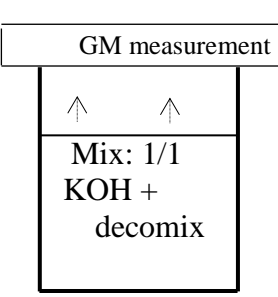
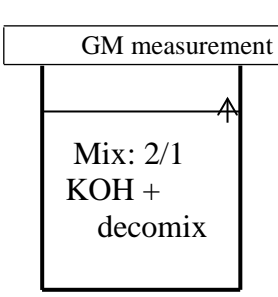
1.3 billion years are off

The half-life of the *Potassium-40* (*Kalium-40*) isotope was reduced by the effect of a certain mix of especially selected elementary processes from 1.3 billion years to a couple of minutes!

KOH was used for the experiment, as this is the only free for purchase chemical product. There were 2 variants for studying the effect:

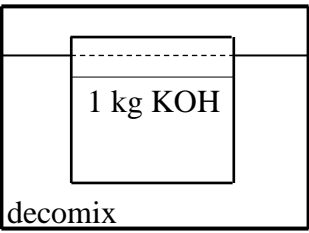
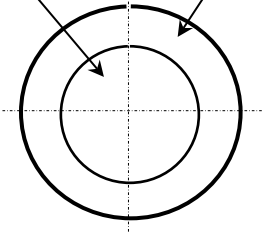
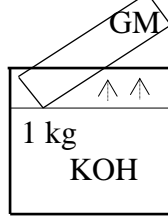
Experiment 1

KOH in crystal format and the *decomix* in powder format are well mixed in glass pots. The activity of the mix is measured from above through the open cover of the glass pot:

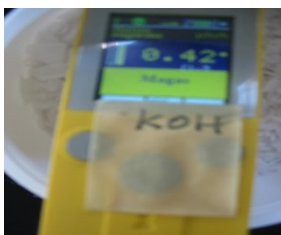
<p>1/1</p> 	<p>After the mixing of the components <i>intensive heat generation</i> was detected in both cases. Heat generation is more intensive in case A/1. Activity remains reduced. GM = Geiger-Muller device</p>	<p>1/2</p> 
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Experiment 2:

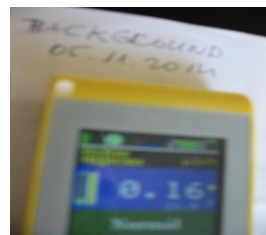
The plastic pot containing 1kg *KOH* crystals is placed into a larger vessel with *decomix*

<p>Keeping separated</p> 	<p><i>KOH</i> <i>decomix</i></p> 	<p>measurement</p> 	<p>Measurements in 10-14 days give decreasing tendency of <i>KOH</i>.</p>
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Large number (80-130) of measurements have been taken for a single radiation data in both cases as the activity level is extremely low.



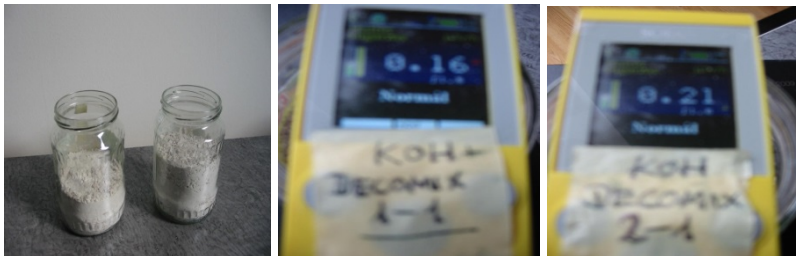
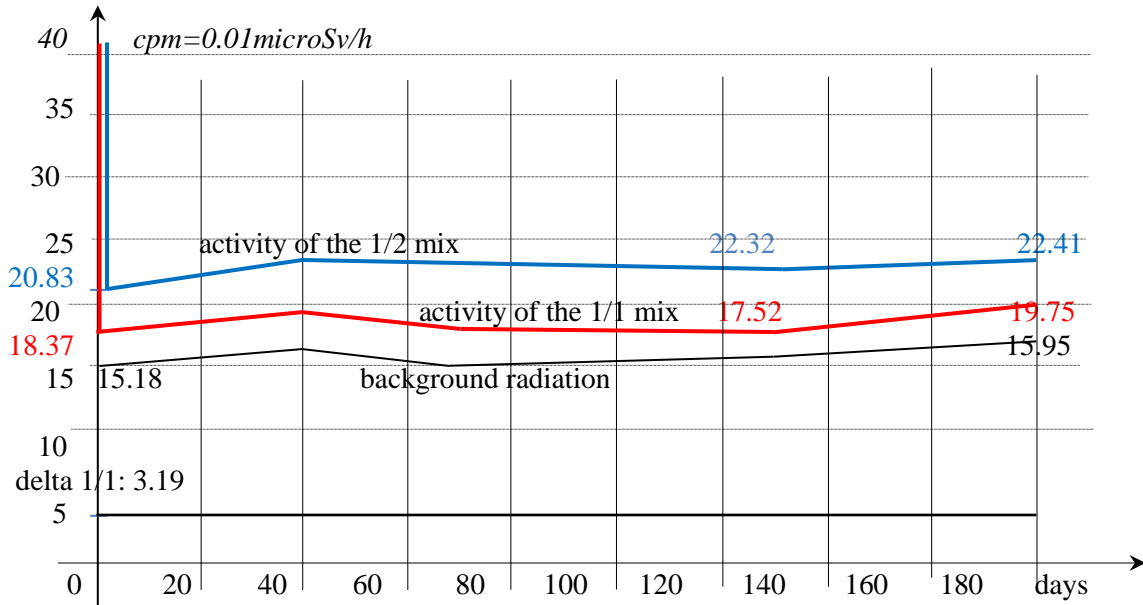
Activity of the *KOH*



Background radiation

Rehabilitation of KOH in the mix with the *decontamination mix*

Date of the measurement	activities						original KOH at the starting back-ground ρ_{KOH} cpm	days
	Back-ground ρ_{bg} cpm	Portions: KOH- 1 Dmix- 1 ρ_{mix} cpm absolute values	Portions: KOH- 1 Dmix- 1 delta $\Delta\rho_{mix} = \rho_{mix} - \rho_{bg}$ Δ cpm	Portions: KOH- 2 Dmix- 1 ρ_{mix} cpm absolute values	Portions: KOH- 2 Dmix- 1 delta $\Delta\rho_{mix} = \rho_{mix} - \rho_{bg}$ Δ cpm	original KOH at the starting back-ground ρ_{KOH} cpm		
22.10.2014 the date of mixing	15.18	18.37	immediate reduction to 3.19	20.83	immediate reduction to 5.66	40.21	0	
05.11.2014	15.30	16.60	1.30	21.74	5.69		13	
28.11.2014	15.97	18.47	2.50	22.94	6.96		37	
05.01.2015	15.80	17.98	2.18	22.41	6.61		75	
02.03.2015	16.03	17.52	1.49	22.32	6.29		132	
21.04.2015	15.95	19.75	3.80	22.41	6.46		182	



The *first* picture well illustrates the “home” conditions of the experiment.
 The *second* and the *third* are especially selected from the huge number of data for the 1/1 and the 2/1 KOH/Dmix relations of the mix.

Rehabilitation of KOH in decontamination bath

Date	activities						days
	Back-ground ρ_{bg} cpm	KOH in Dmix bath ρ_{KOH} cpm absolute values	KOH in Dmix bath delta $\Delta\rho_{KOH} = \rho_{KOH} - \rho_{bg}$ Δcpm	KOH taken out of the bath ρ_{KOH} cpm absolute values	KOH taken out of the bath delta $\Delta\rho_{KOH} = \rho_{KOH} - \rho_{bg}$ Δcpm	clean KOH ρ_{KOH} cpm absolute value	
04.09.2014	16.60	42.00				42.00	0
10.09.2014	16.60	37.56	20.96	40.40	23.80		6
06.10.2014	16.60	34.55	17.95	35.28	18.68		32
06.11.2014	15.30	34.64	19.34	32.55	17.35		63
05.01.2015	15.80			32.52	16.72		123
02.03.2015	16.03			31.50	15.47		180
21.04.2015	15.95			32.64	16.69		230

