

results filter 1

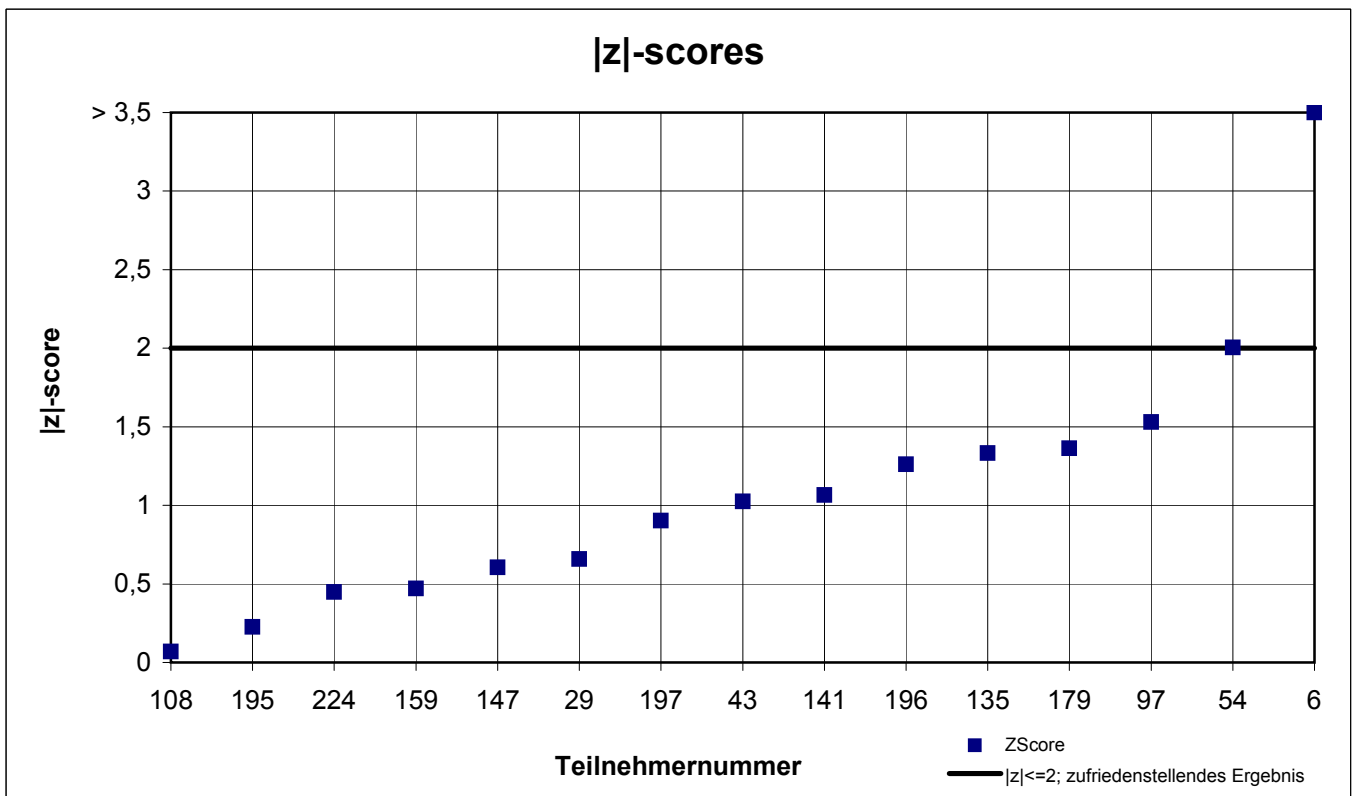
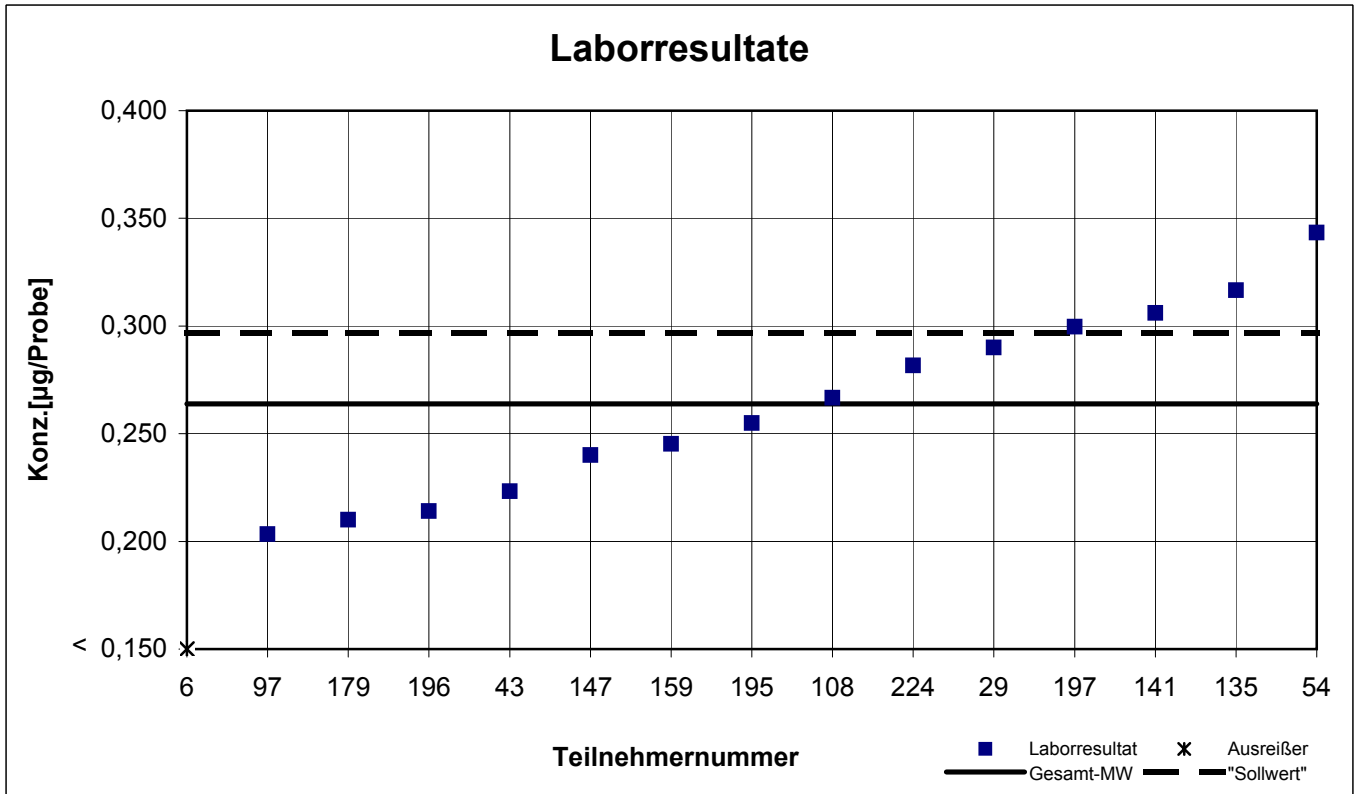
participant number	benzo[a]pyrene		benzo[e]pyrene		benzo[ghi]perylene		benzo[k]fluoranthene		indeno[1,2,3-cd]pyrene	
	result [µg/sample]	z - score	result [µg/sample]	z - score	result [µg/sample]	z - score	result [µg/sample]	z - score	result [µg/sample]	z - score
6	0,092	4,4	0,124	4,5	0,124	4,1	0,088	4,6	0,098	4,2
29	0,290	0,7	0,410	0,5	0,360	0,7	0,330	1,1	0,350	2,0
43	0,223	1,0	0,350	0,6	0,310	0,3	0,270	0,3	0,240	0,7
54	0,343	2,0	0,440	1,0	0,417	1,8	0,317	0,8	0,313	1,1
97	0,203	1,5	0,320	1,1	0,213	2,3	0,193	2,1	0,183	2,1
108	0,267	0,1	0,377	0,1	0,330	0,1	0,300	0,4	0,237	0,8
135	0,317	1,3	0,920	9,3	0,380	1,1	0,870	13,7	0,330	1,6
141	0,306	1,1	0,363	0,4	0,442	2,4	0,353	1,6	0,328	1,5
147	0,240	0,6	0,395	0,2	0,326	0,0	0,294	0,2	0,293	0,6
159	0,245	0,5	0,389	0,1	0,320	0,1	0,291	0,2	0,283	0,4
179	0,210	1,4	k.A.	k.A.	0,260	1,4	0,250	0,8	0,177	2,3
195	0,255	0,2	0,119	4,6	0,375	1,0	0,305	0,5	0,277	0,2
196	0,214	1,3	0,264	2,1	0,230	2,0	0,240	1,0	0,209	1,5
197	0,300	0,9	0,034	6,1	0,288	0,8	0,268	0,4	0,278	0,3
224	0,282	0,4	0,529	2,5	0,319	0,1	0,288	0,1	0,251	0,4

marked fields are outliers

	benzo[a]-pyrene	benzo[e]-pyrene	benzo[ghi]-perylene	benzo[k]-fluoranthene	indeno[1,2,3-cd]pyrene
mean value c_k [µg / sample]	0,264	0,384	0,326	0,284	0,268
standard deviation S_k [µg / sample]	0,0437	0,0708	0,0658	0,0413	0,0542
relative standard deviation [%]	16,57	18,46	20,16	14,52	20,26
"true result" [µg / sample]	0,297	0,393	0,355	0,334	0,326

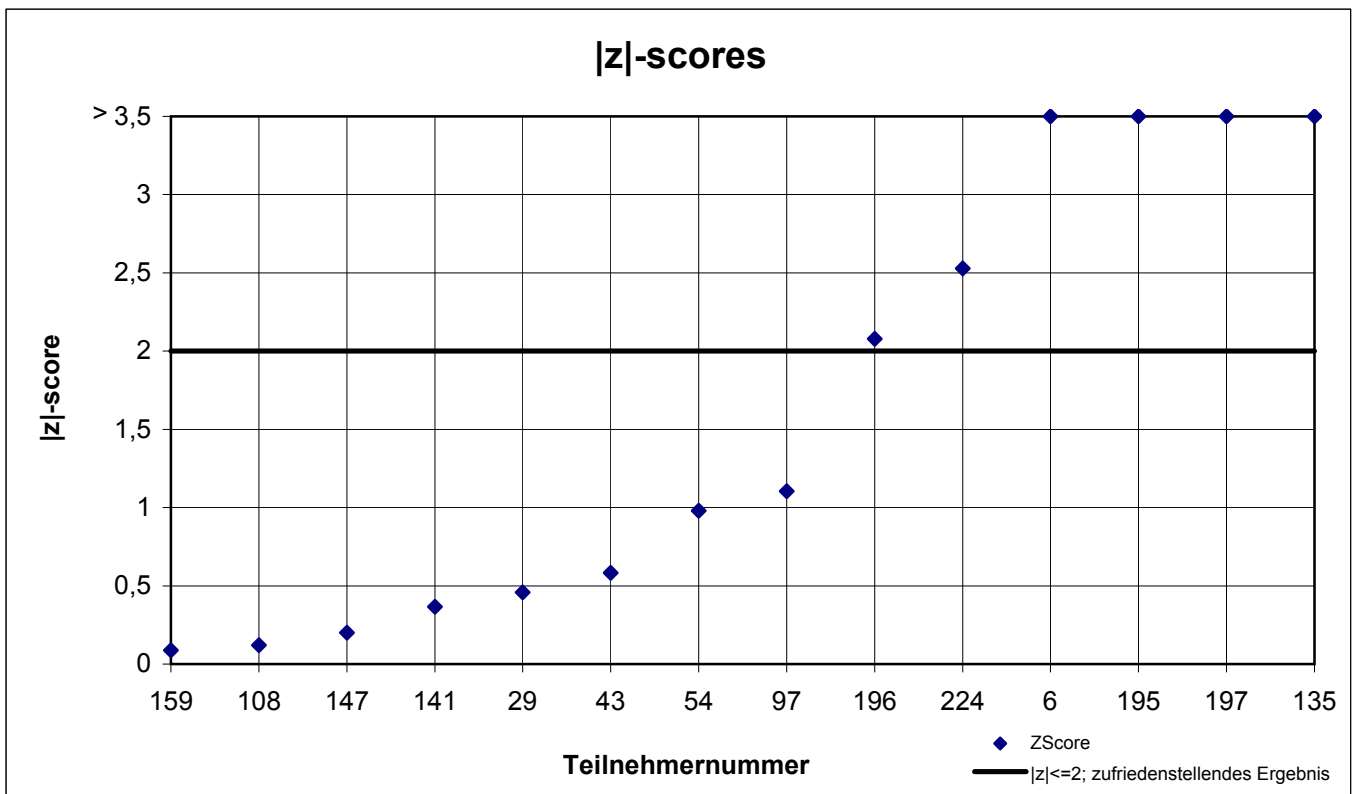
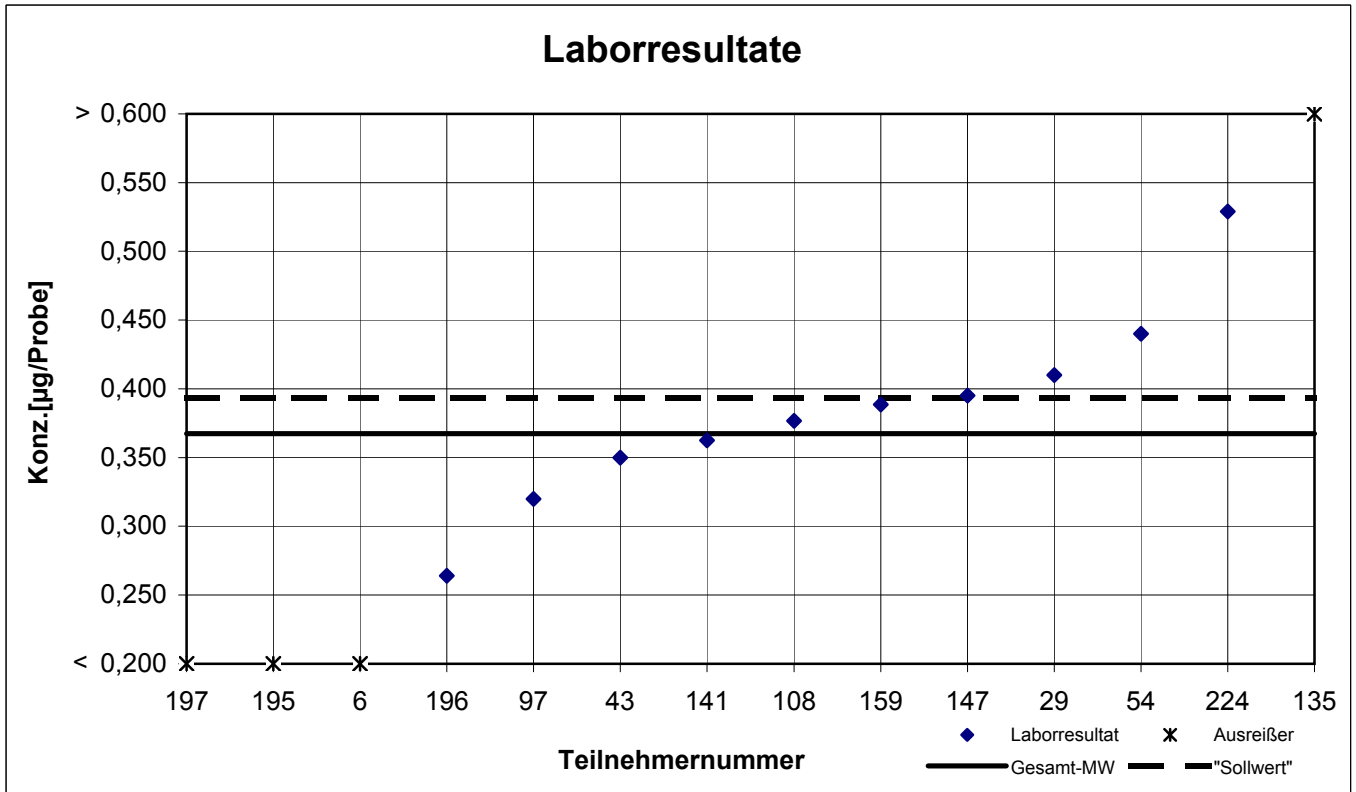
Filter 1

Benzo[a]pyren



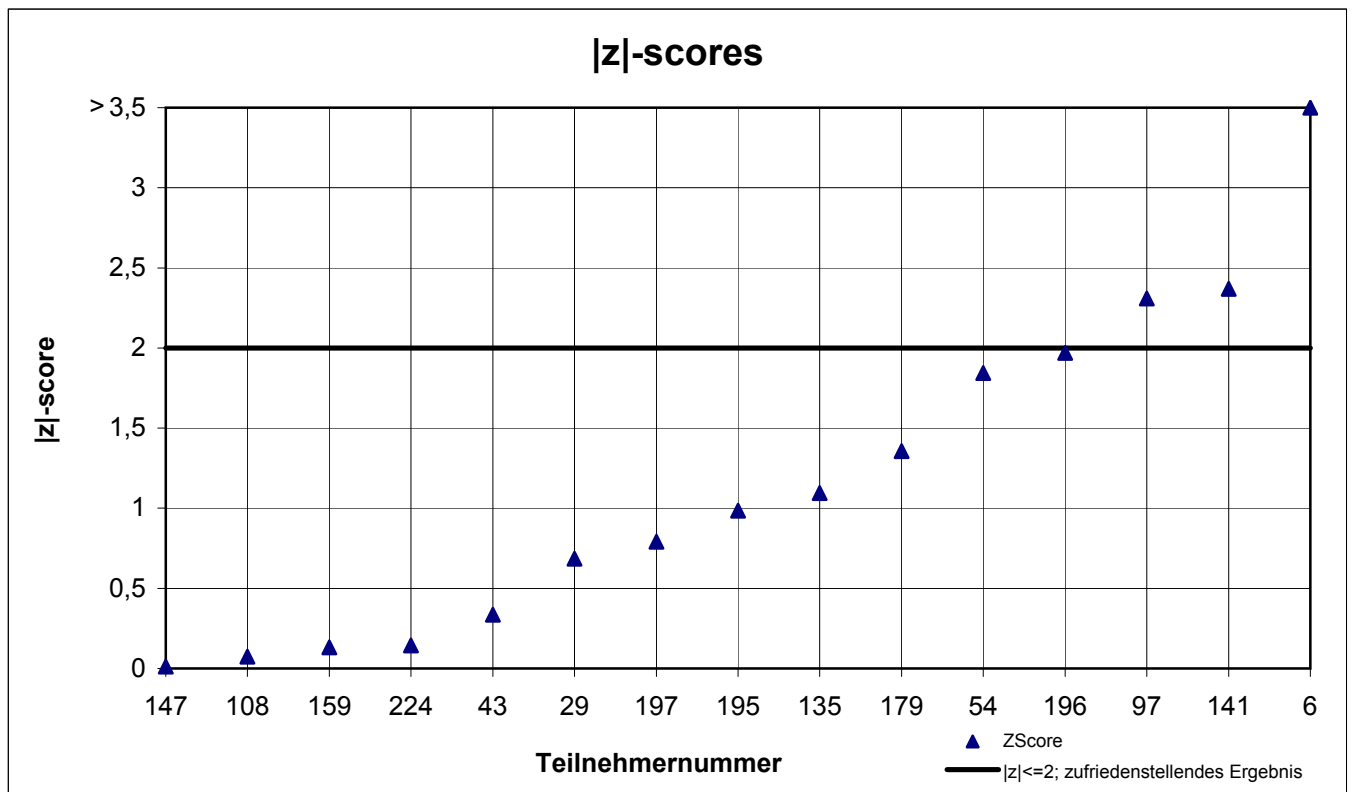
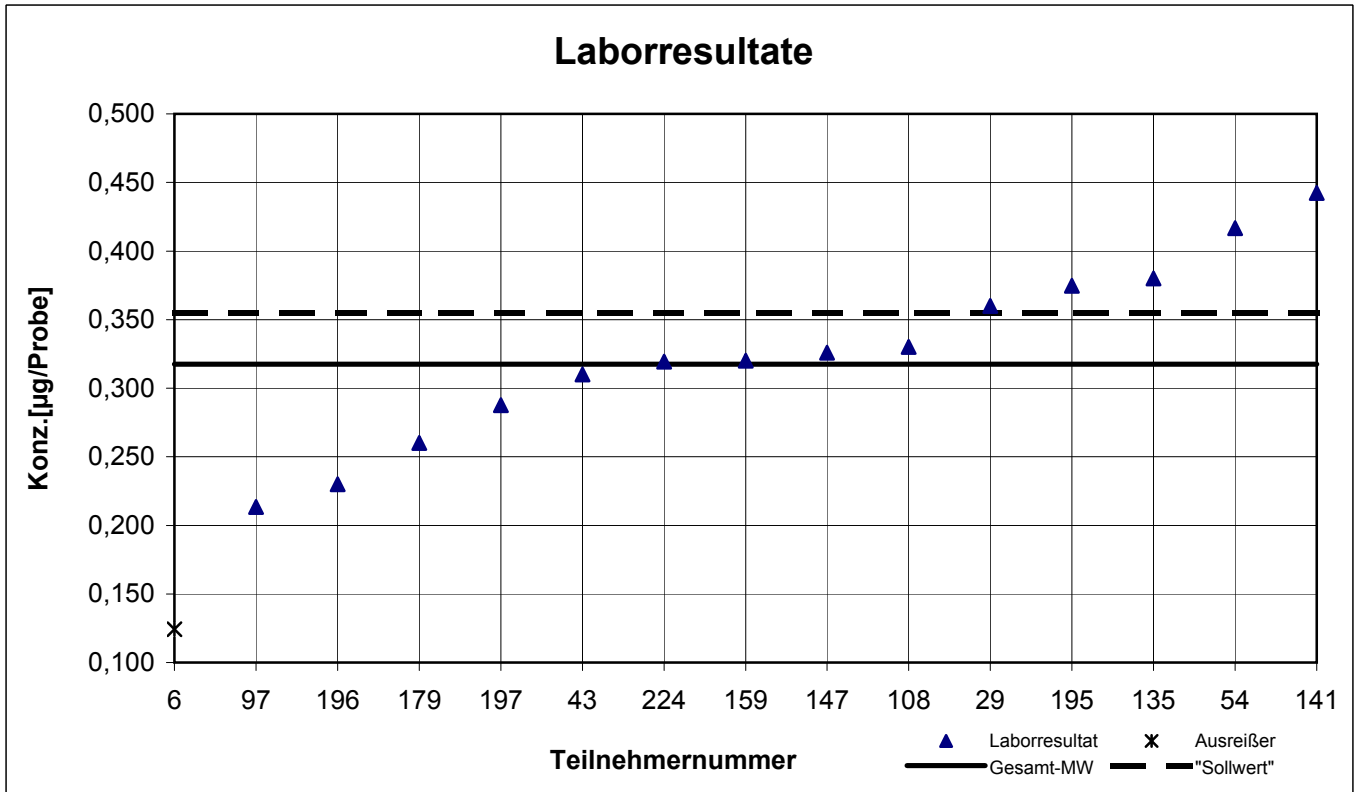
Filter 1

Benzo[e]pyren



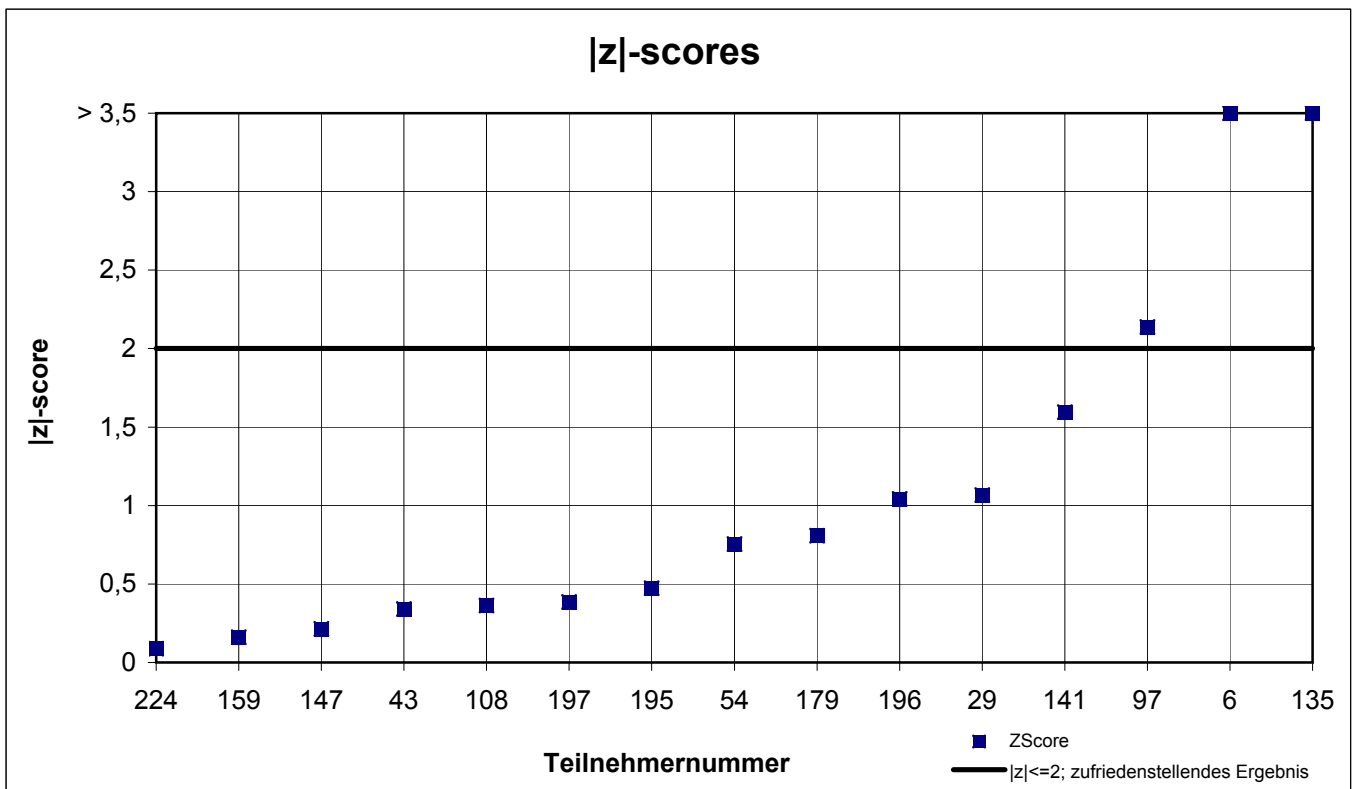
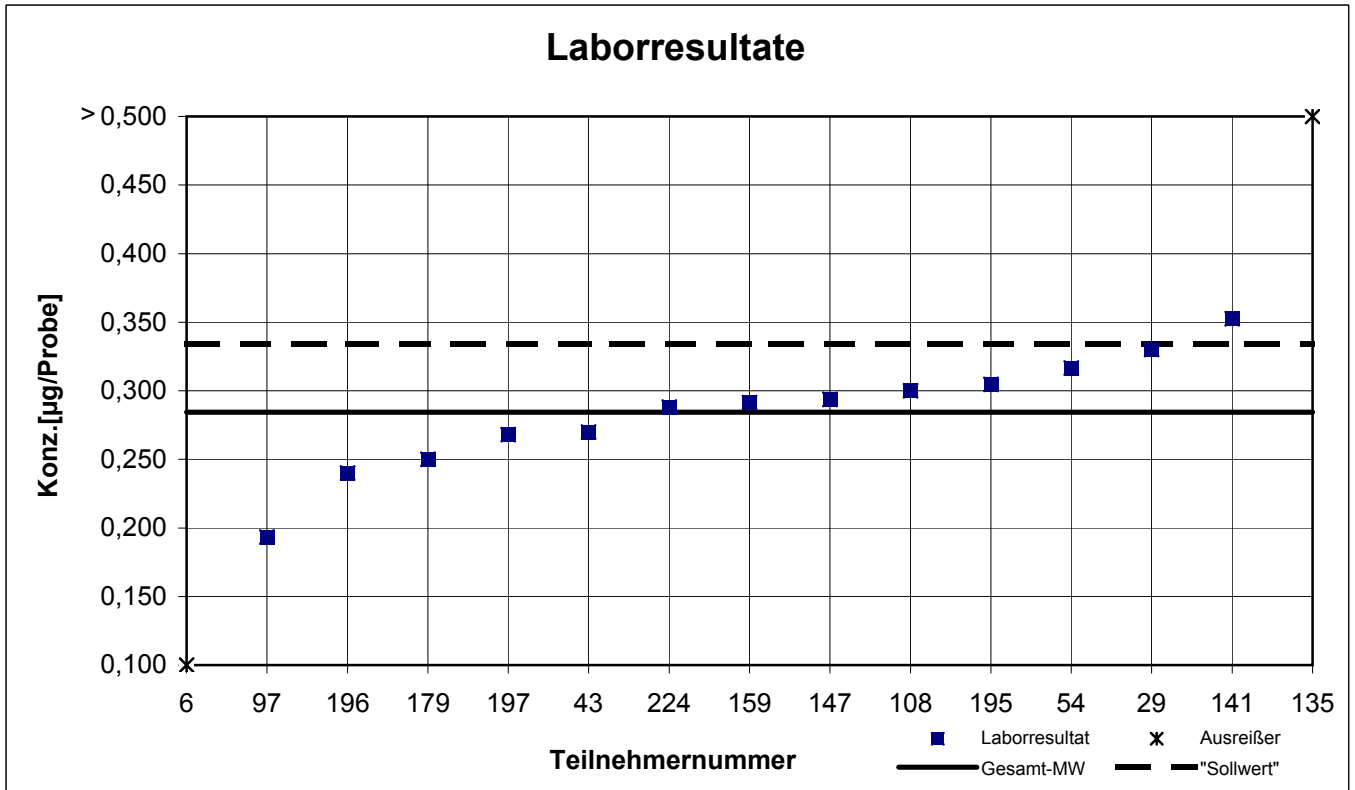
Filter 1

Benzo[ghi]perylen



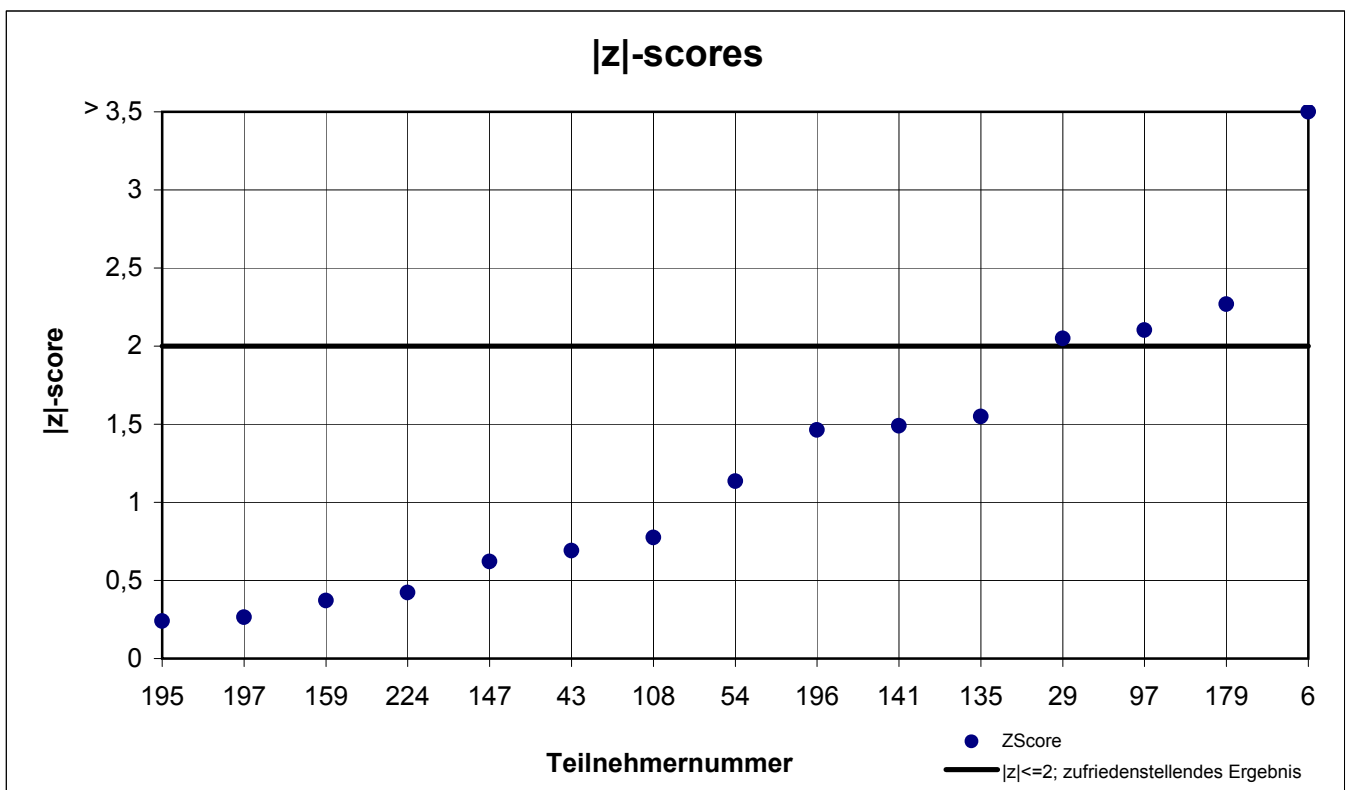
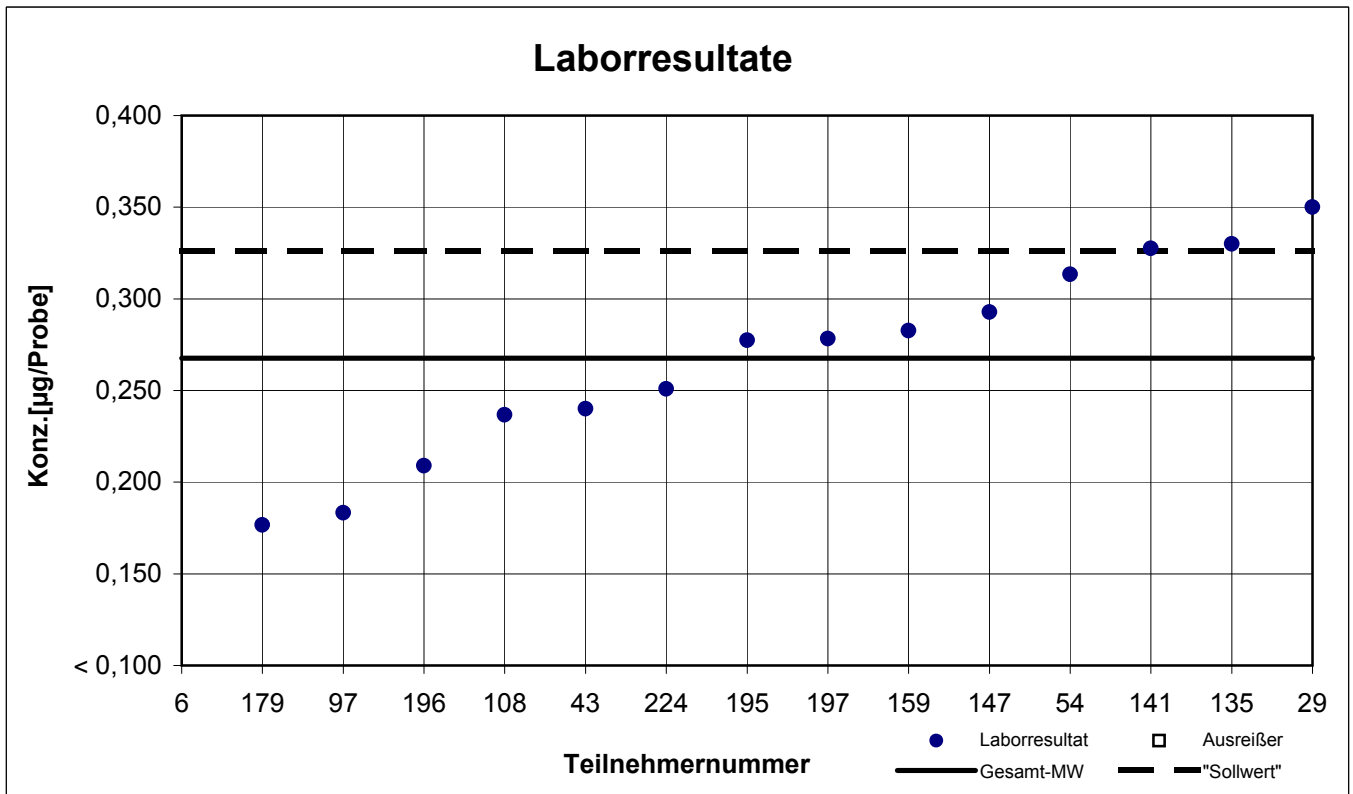
Filter 1

Benzo[k]fluoranthen



Filter 1

Indeno[1,2,3-cd]pyren



results filter 2

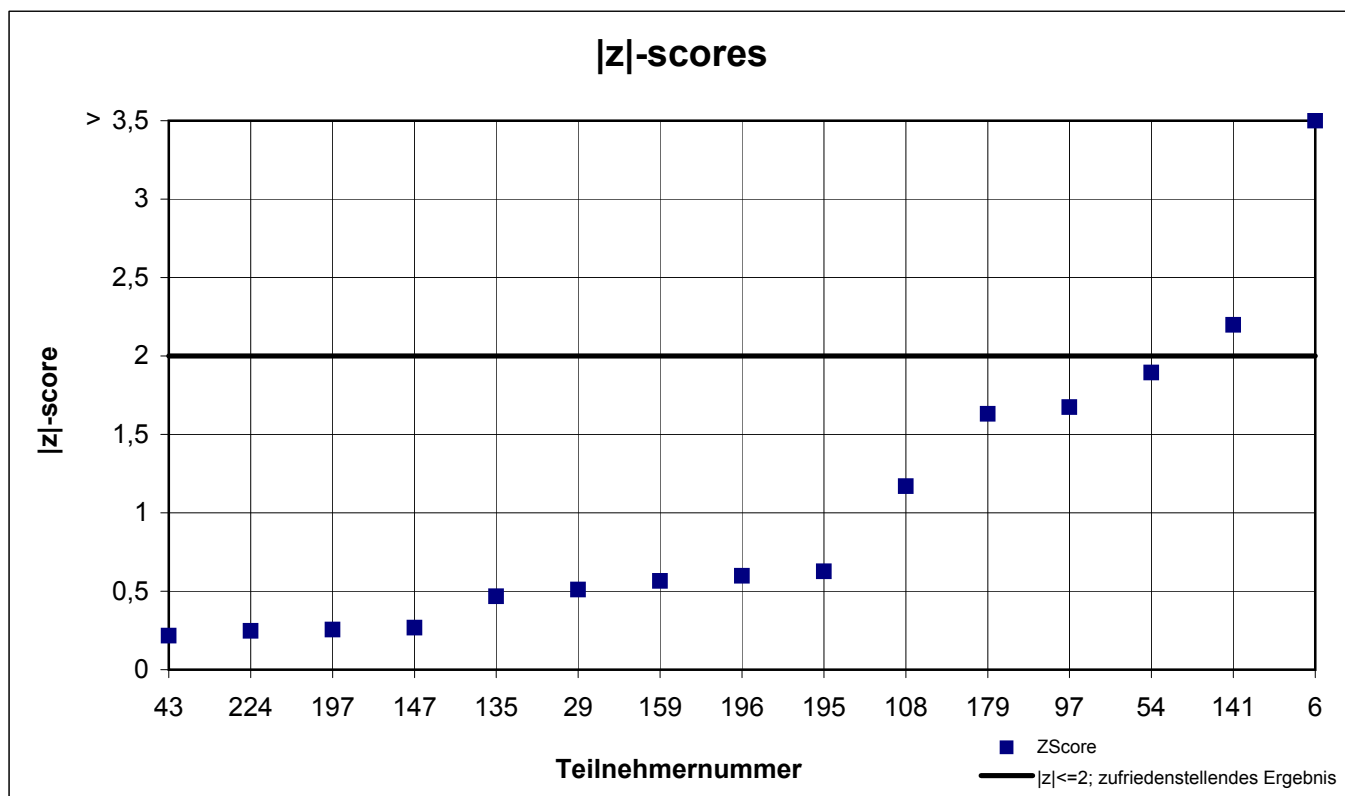
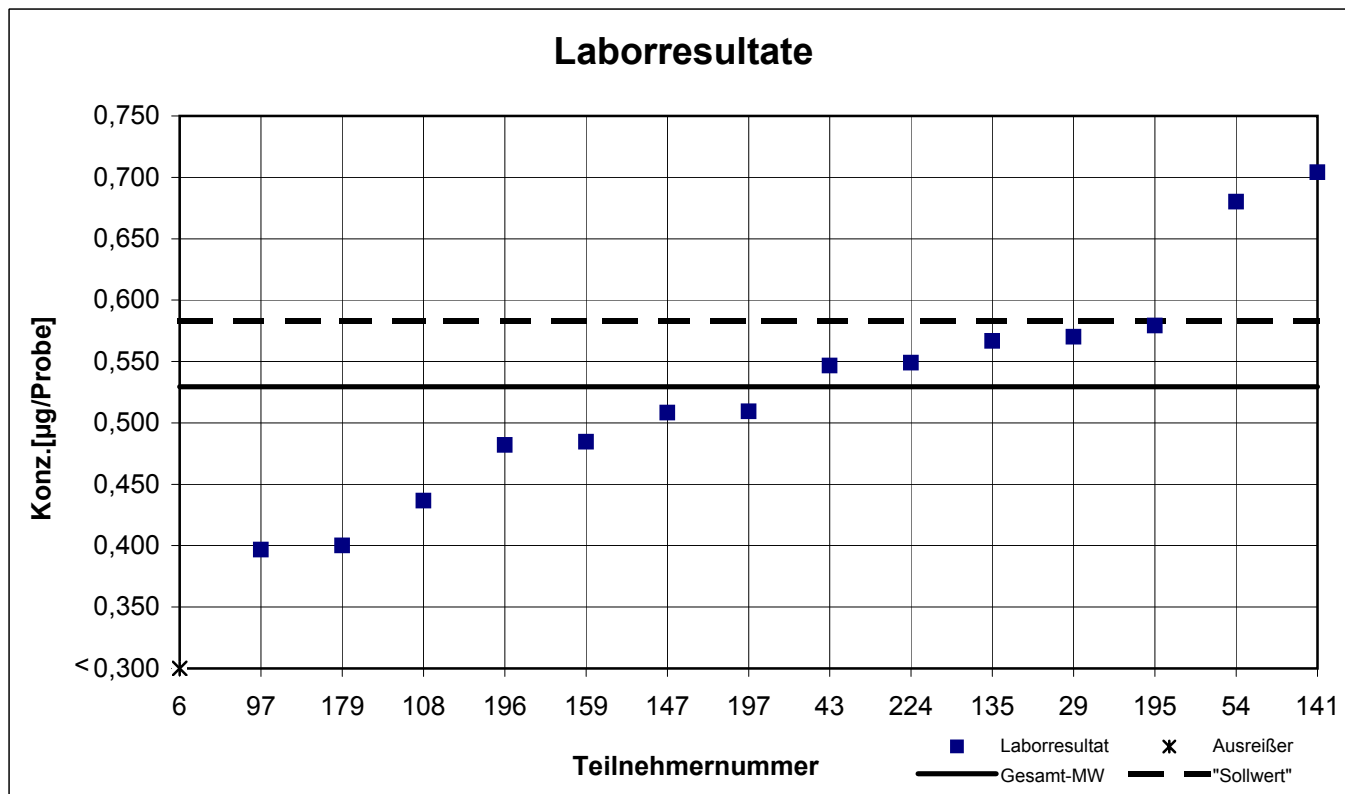
participant number	benzo[a]pyrene		benzo[b]fluoranthene		benzo[e]pyrene		benzo[ghi]perylene		indeno[1,2,3-cd]pyrene	
	result [µg/sample]	z - score	result [µg/sample]	z - score	result [µg/sample]	z - score	result [µg/sample]	z - score	result [µg/sample]	z - score
6	0,177	4,4	0,238	4,5	0,232	4,3	0,184	4,5	0,183	4,4
29	0,570	0,5	0,820	0,7	0,730	0,8	0,650	0,9	0,700	1,8
43	0,547	0,2	0,800	0,5	0,673	0,2	0,643	0,8	0,560	0,1
54	0,680	1,9	0,807	0,6	0,753	1,0	0,613	0,4	0,657	1,3
97	0,397	1,7	0,630	1,0	0,443	2,2	0,410	1,9	0,403	1,8
108	0,437	1,2	0,627	1,0	0,530	1,3	0,497	0,9	0,420	1,6
135	0,567	0,5	1,570	7,5	0,687	0,3	0,517	0,7	0,590	0,5
141	0,704	2,2	0,803	0,6	0,958	3,1	0,772	2,3	0,722	2,1
147	0,508	0,3	0,712	0,3	0,654	0,0	0,608	0,4	0,601	0,6
159	0,485	0,6	0,759	0,2	0,645	0,1	0,575	0,0	0,561	0,1
179	0,400	1,6	k.A.	k.A.	0,470	1,9	0,457	1,4	0,403	1,8
195	0,579	0,6	0,270	4,2	0,857	2,0	0,664	1,0	0,574	0,3
196	0,482	0,6	0,592	1,3	0,620	0,4	0,562	0,1	0,524	0,3
197	0,509	0,3	0,056	6,2	0,523	1,4	0,454	1,4	0,463	1,0
224	0,549	0,2	0,856	1,0	0,641	0,2	0,626	0,6	0,506	0,5

marked fields are outliers

	benzo[a]-pyrene	benzo[e]-pyrene	benzo[ghi]-perylene	benzo[k]-fluoranthene	indeno[1,2,3-cd]pyrene
mean value c_k [µg / sample]	0,530	0,741	0,656	0,575	0,549
standard deviation S_k [µg / sample]	0,0909	0,0941	0,1421	0,0991	0,1032
relative standard deviation [%]	17,17	12,72	21,68	17,24	18,80
"true result" [µg / sample]	0,583	0,780	0,701	0,657	0,644

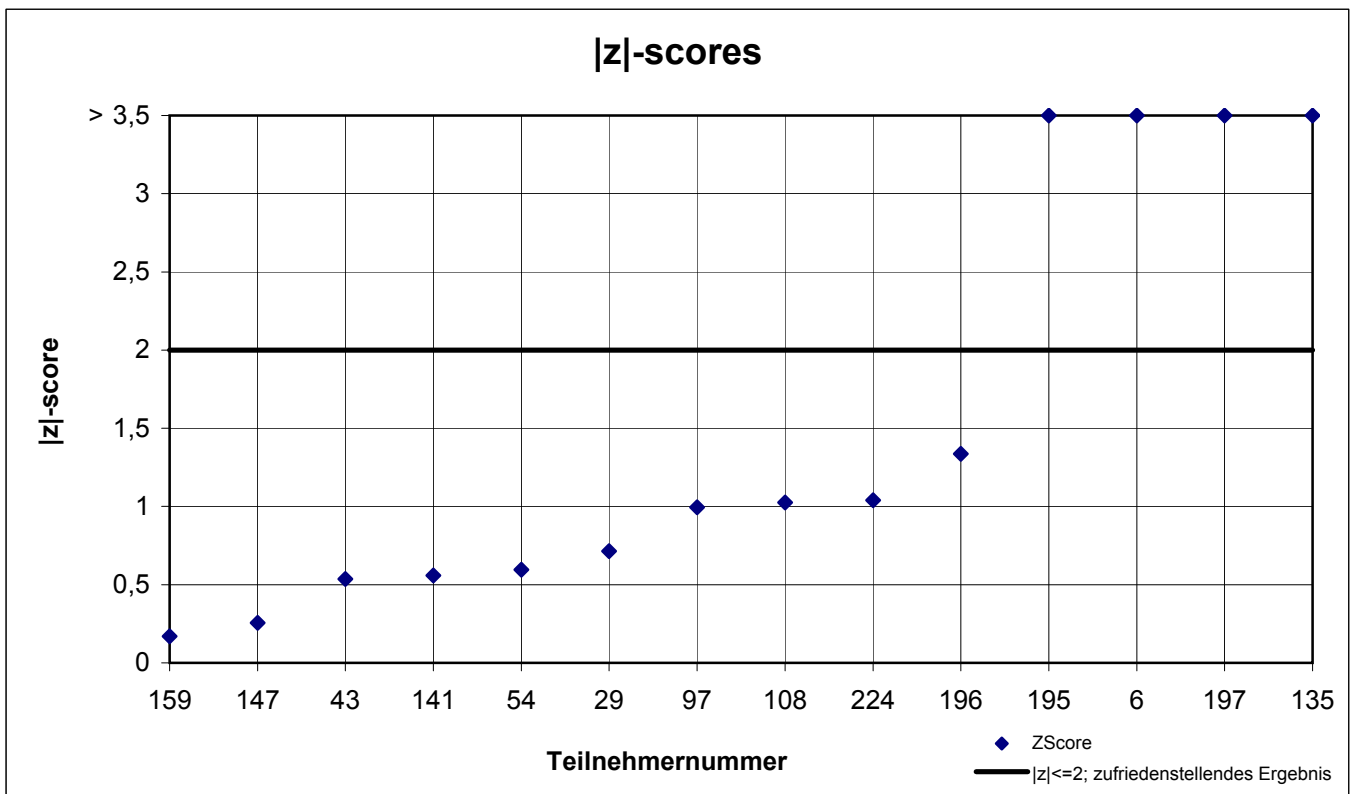
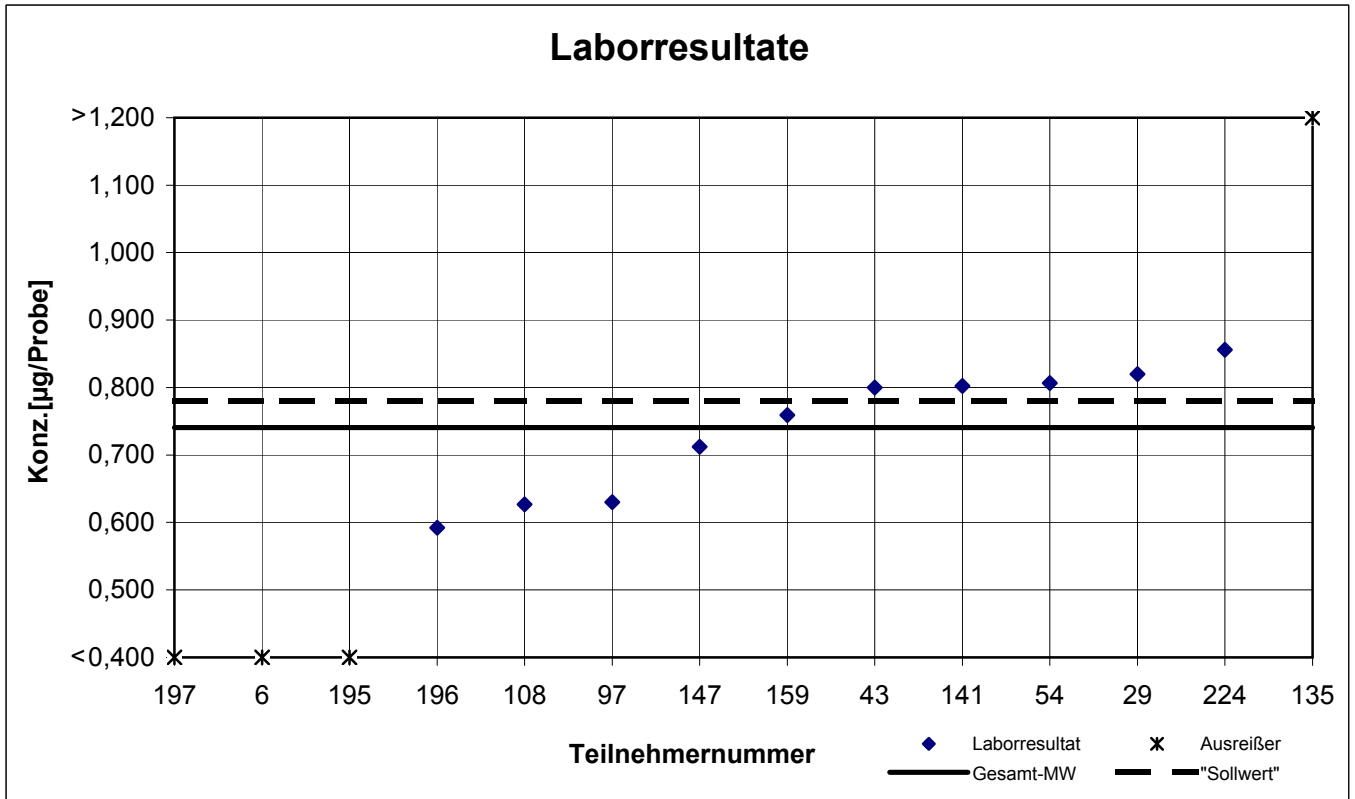
Filter 2

Benzo[a]pyren



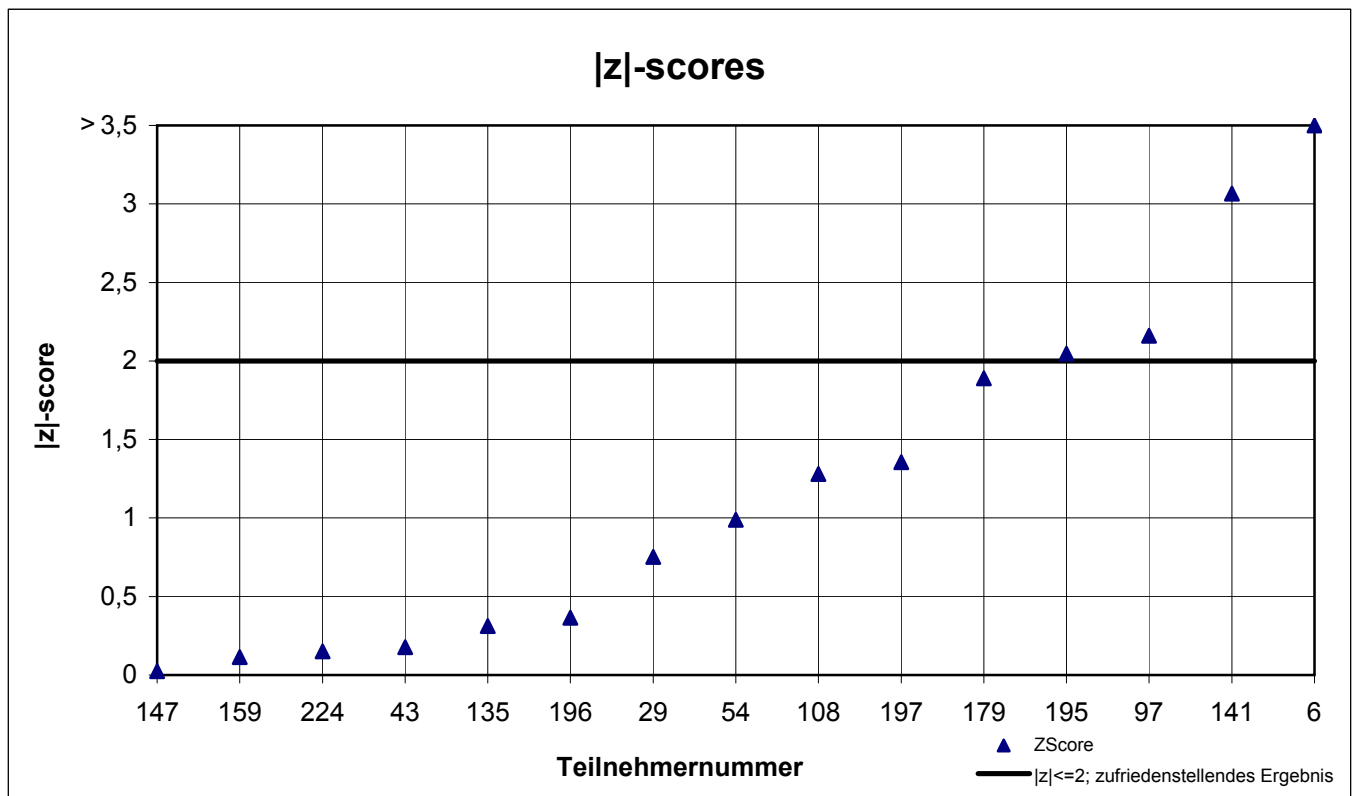
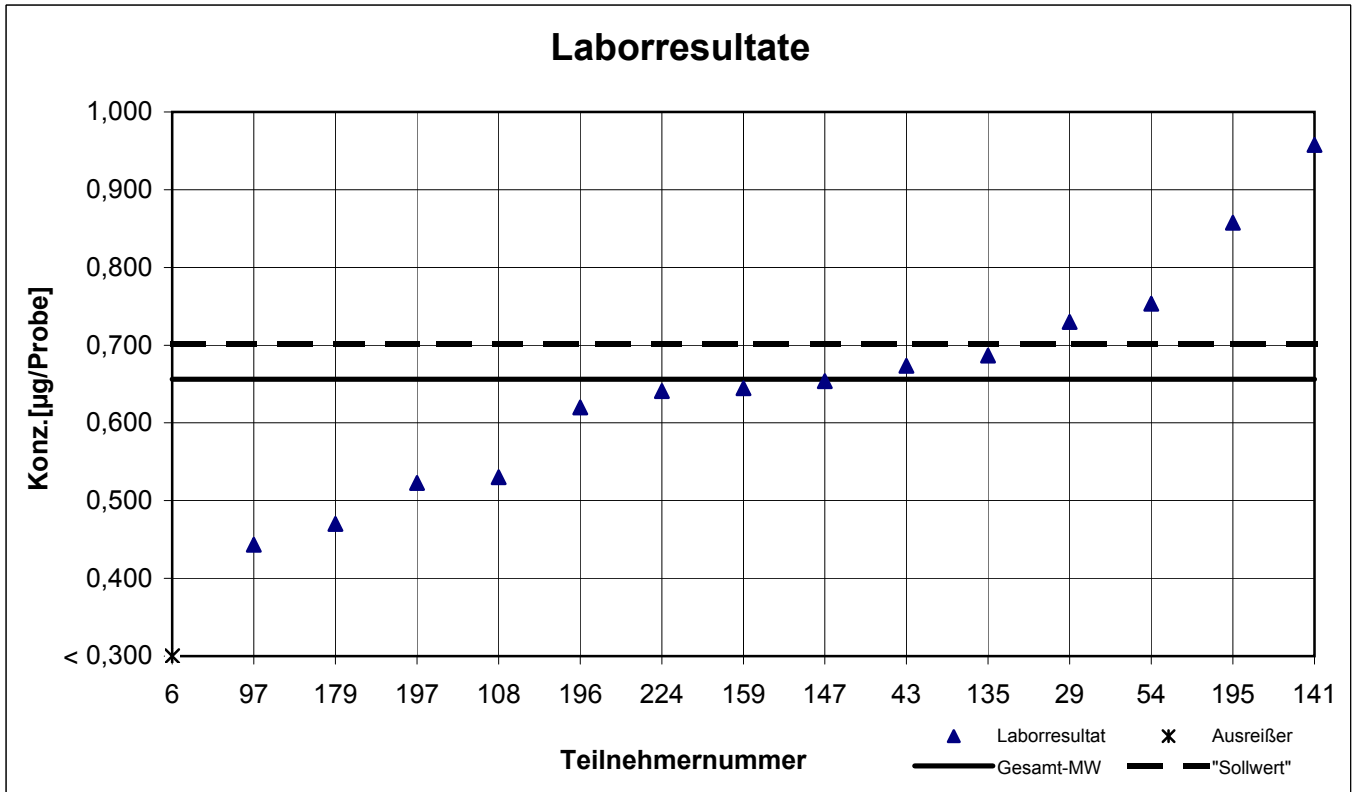
Filter 2

Benzo[e]pyren



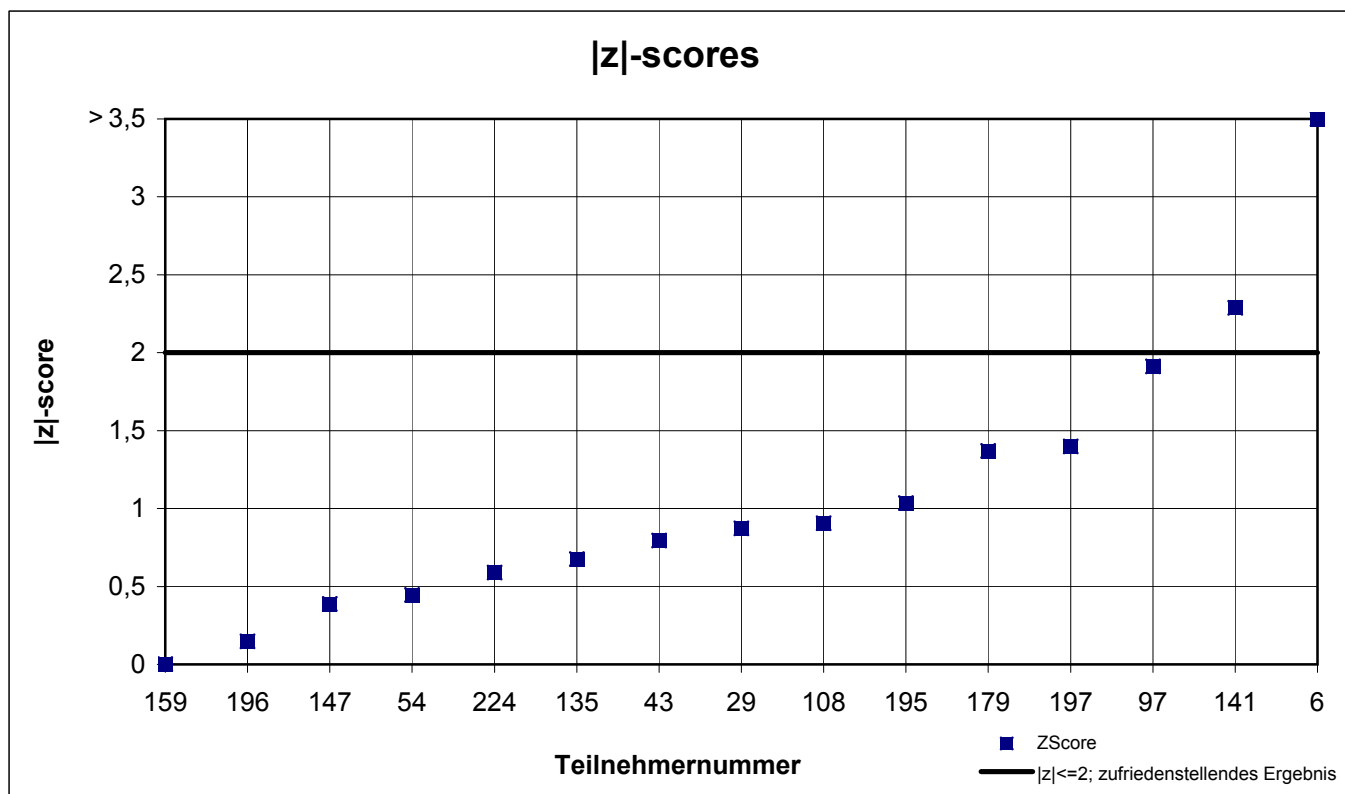
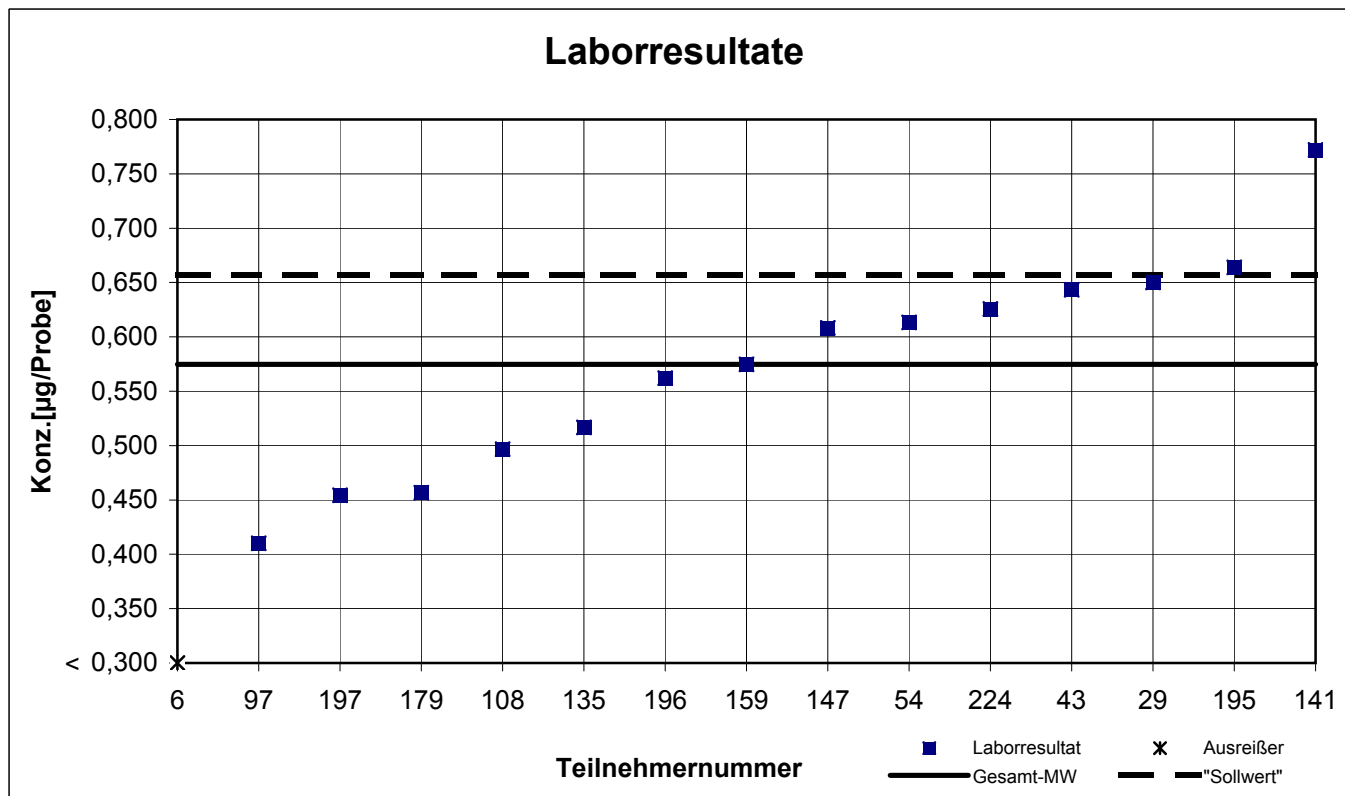
Filter 2

Benzo[ghi]perylen



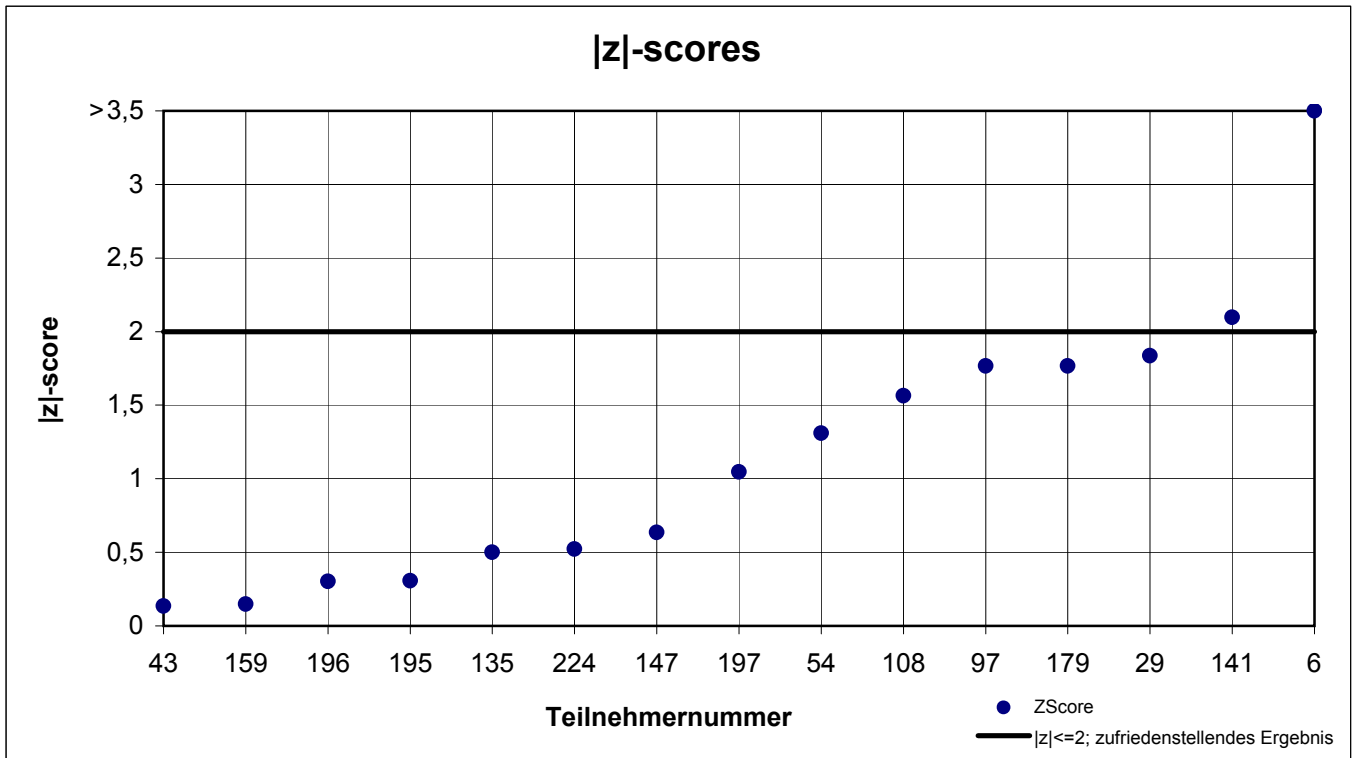
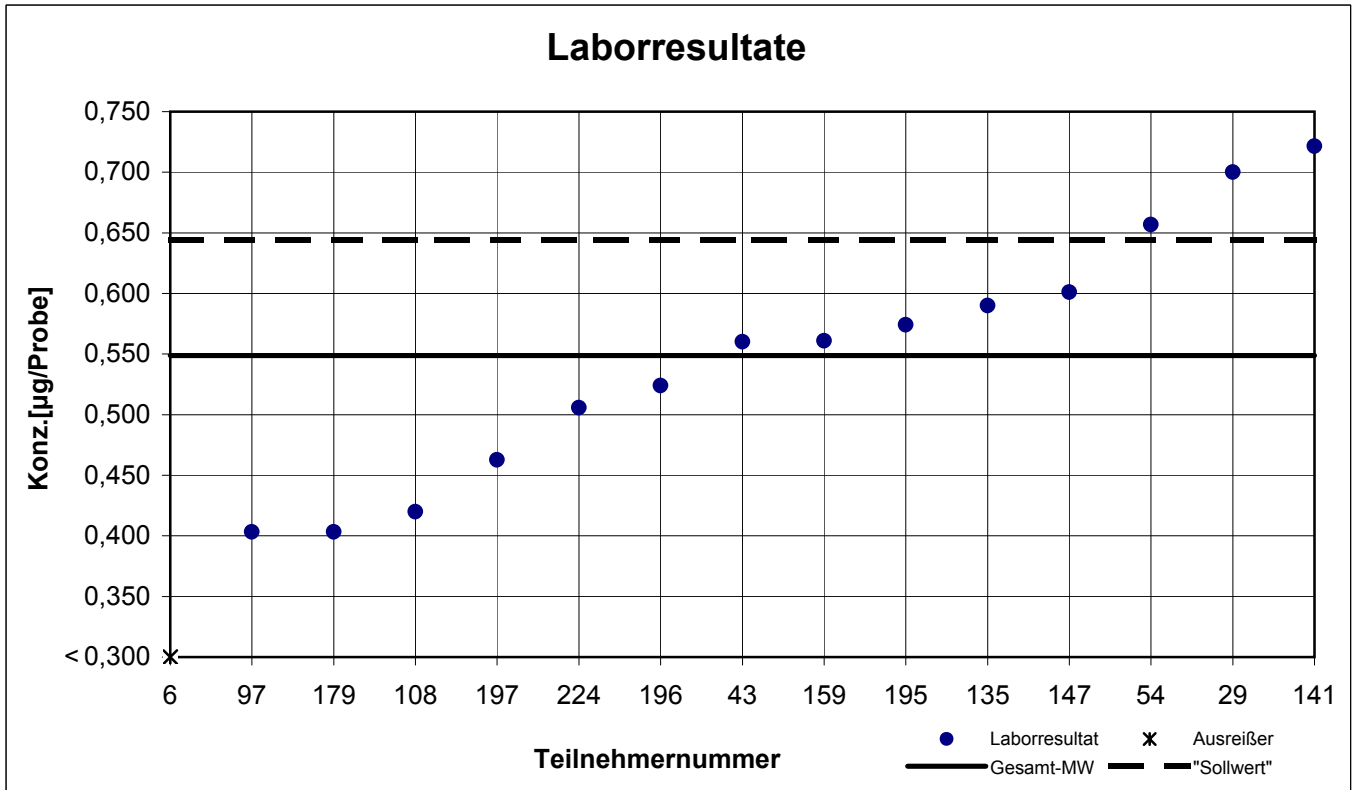
Filter 2

Benzo[k]fluoranthen



Filter 2

Indeno[1,2,3-cd]pyren



results filter 3

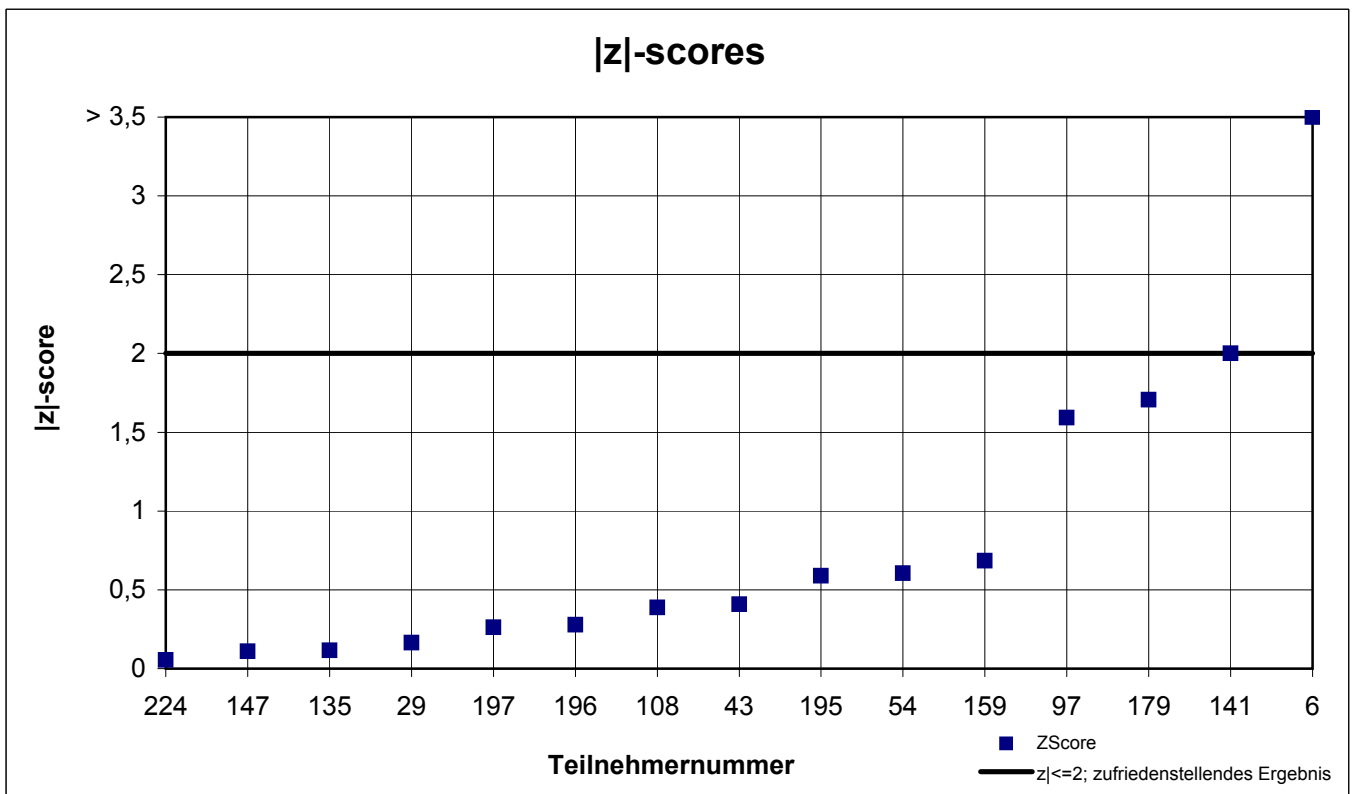
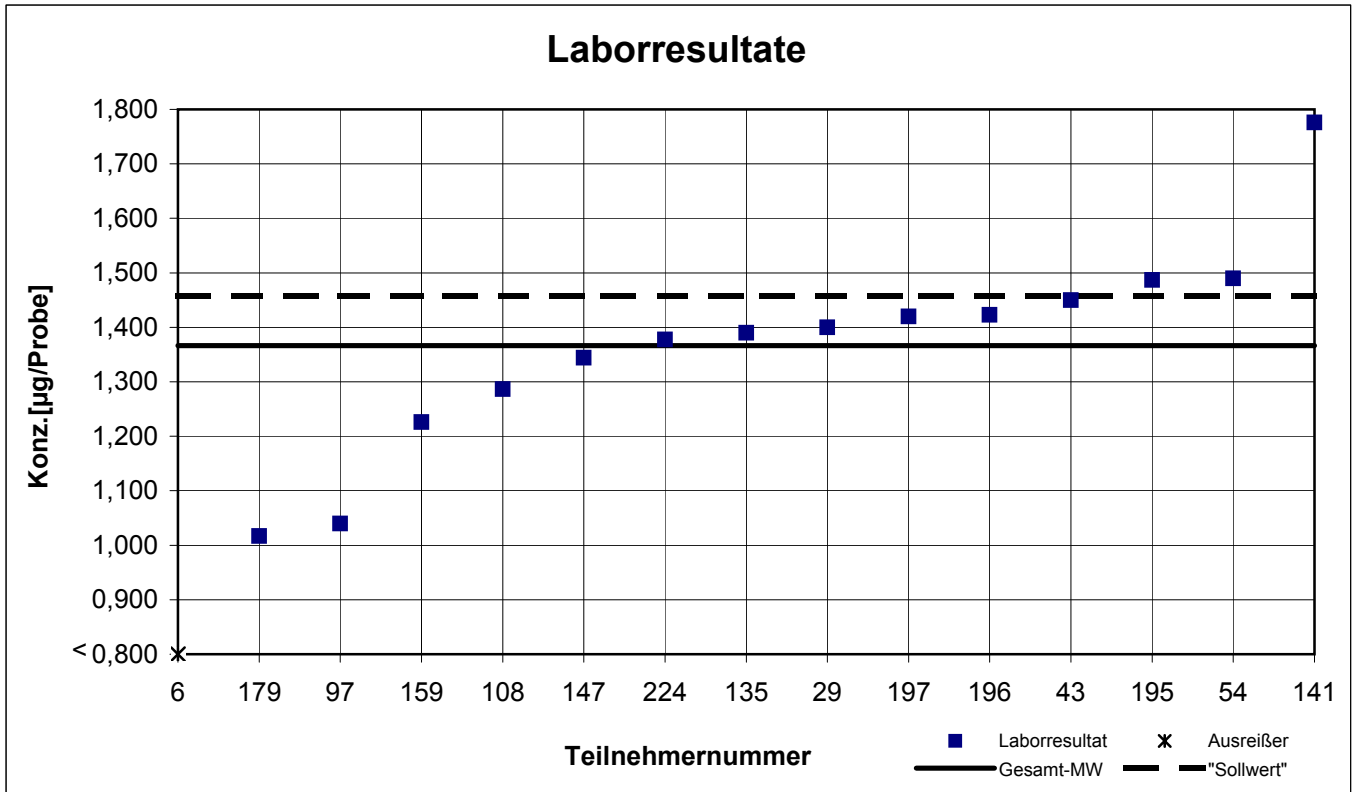
participant number	benzo[a]pyrene		benzo[b]fluoranthene		benzo[e]pyrene		benzo[ghi]perylene		indeno[1,2,3-cd]pyrene	
	result [µg/sample]	z - score	result [µg/sample]	z - score	result [µg/sample]	z - score	result [µg/sample]	z - score	result [µg/sample]	z - score
6	0,522	4,1	0,621	4,5	0,661	4,1	0,541	4,2	0,507	4,4
29	1,400	0,2	2,000	0,2	1,700	0,0	1,600	0,5	1,700	1,1
43	1,450	0,4	2,053	0,4	1,727	0,1	1,607	0,5	1,550	0,4
54	1,490	0,6	1,910	0,1	1,687	0,0	1,490	0,0	1,543	0,3
97	1,040	1,6	1,697	0,8	1,203	1,9	1,043	2,0	1,060	1,8
108	1,287	0,4	2,077	0,5	1,600	0,4	1,477	0,1	1,517	0,2
135	1,390	0,1	3,807	6,5	1,700	0,0	1,350	0,6	1,467	0,0
141	1,776	2,0	2,080	0,5	2,453	3,0	1,990	2,2	1,888	1,9
147	1,344	0,1	1,889	0,1	1,642	0,2	1,538	0,2	1,529	0,3
159	1,226	0,7	1,918	0,0	1,626	0,2	1,476	0,1	1,423	0,2
179	1,017	1,7	0,000	0,0	1,217	1,9	1,160	1,5	1,243	1,0
195	1,487	0,6	0,687	4,3	2,135	1,8	1,633	0,6	1,470	0,0
196	1,423	0,3	1,657	0,9	1,820	0,5	1,504	0,1	1,495	0,1
197	1,420	0,3	0,155	6,1	1,451	0,9	1,254	1,1	1,315	0,7
224	1,378	0,1	2,024	0,3	1,682	0,0	1,724	1,1	1,338	0,6

marked fields are outliers

	benzo[a]-pyrene	benzo[e]-pyrene	benzo[ghi]-perylene	benzo[k]-fluoranthene	indeno[1,2,3-cd]pyrene
mean value c_k [µg / sample]	1,366	1,930	1,689	1,489	1,467
standard deviation S_k [µg / sample]	0,1896	0,1506	0,3199	0,2381	0,1977
relative standard deviation [%]	13,89	7,80	18,95	16,00	13,48
"true result" [µg / sample]	1,458	1,913	1,750	1,635	1,610

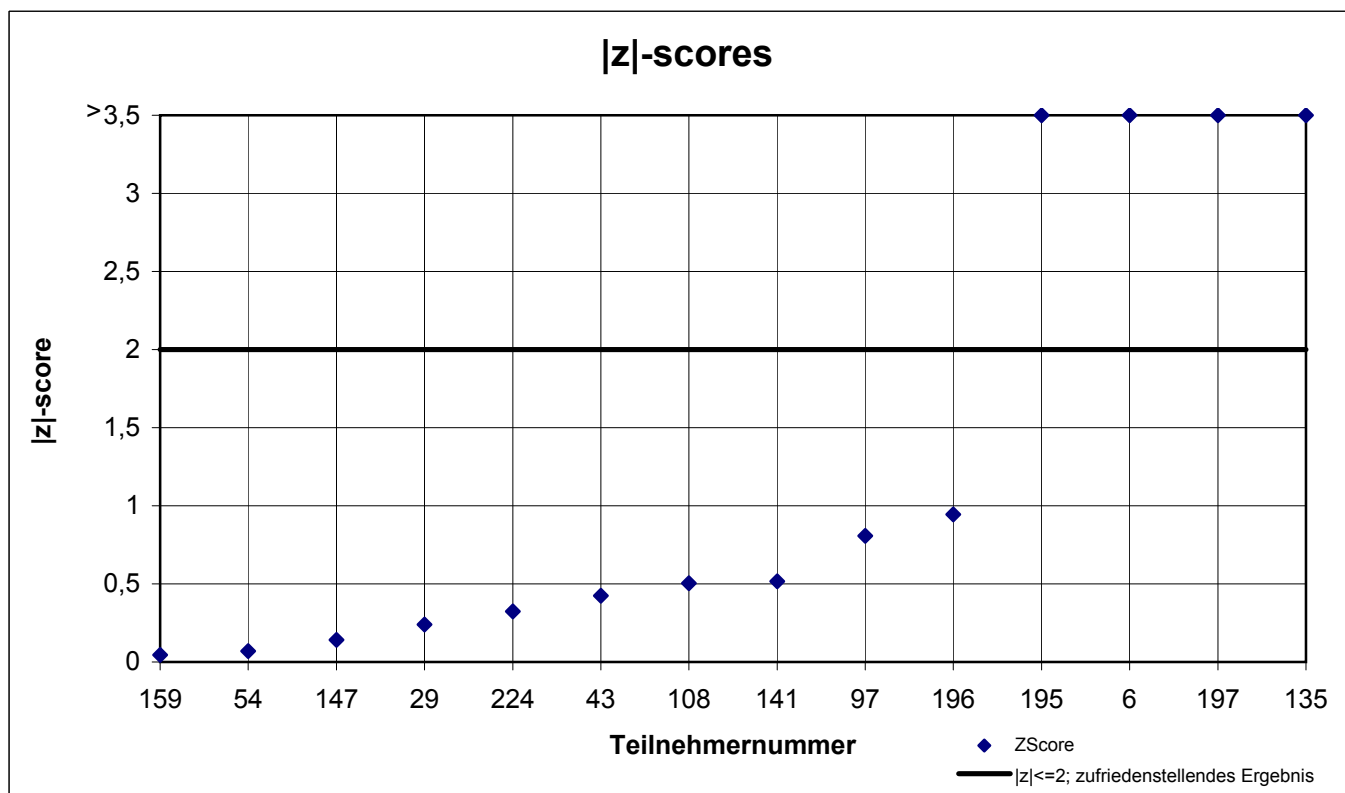
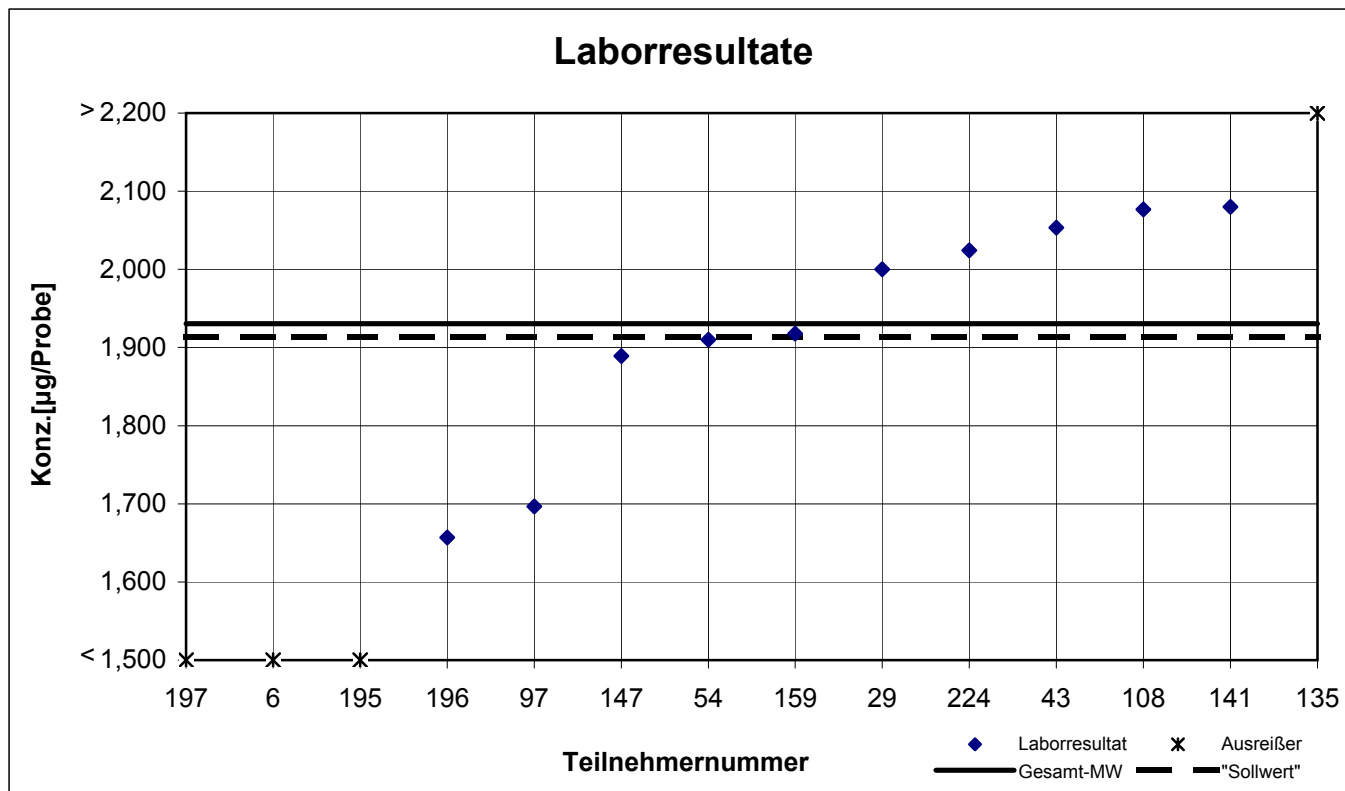
Filter 3

Benzo[a]pyren



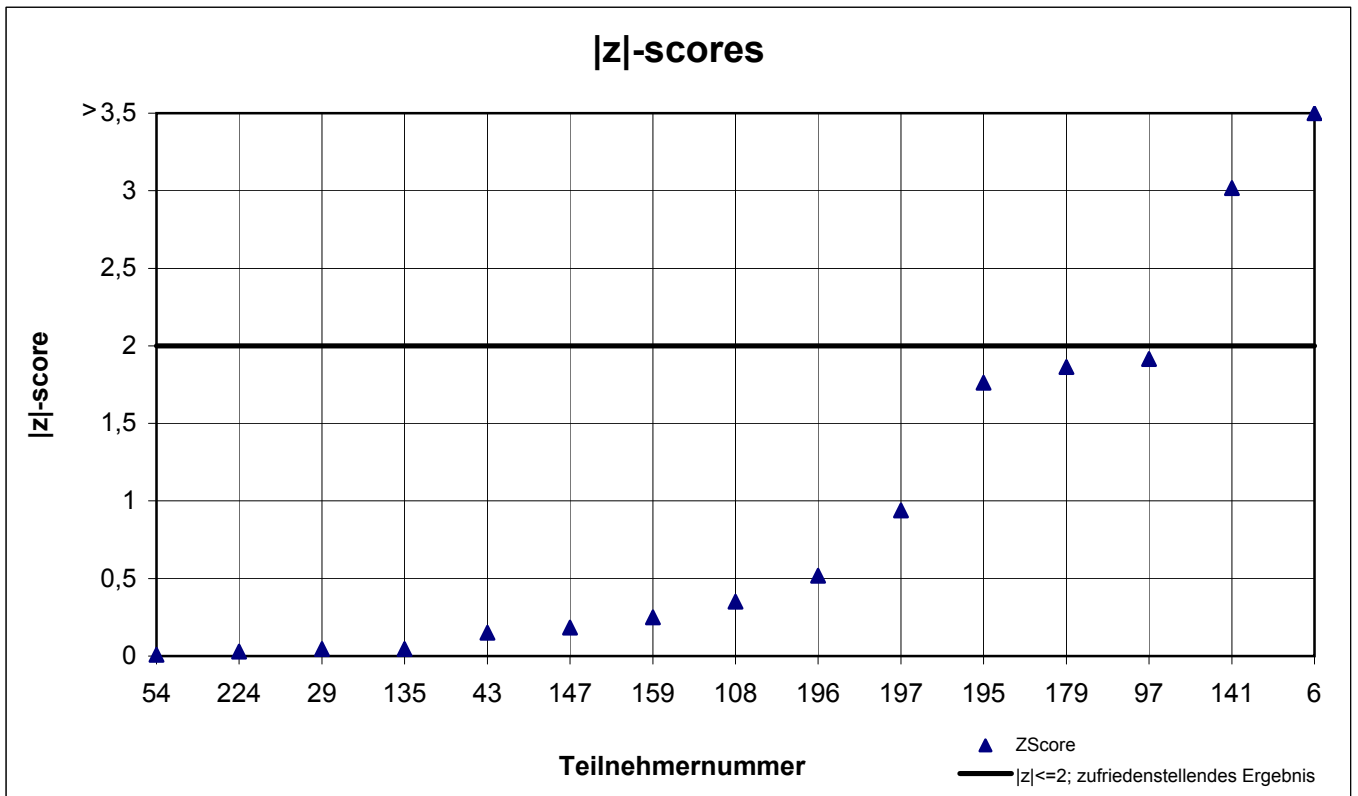
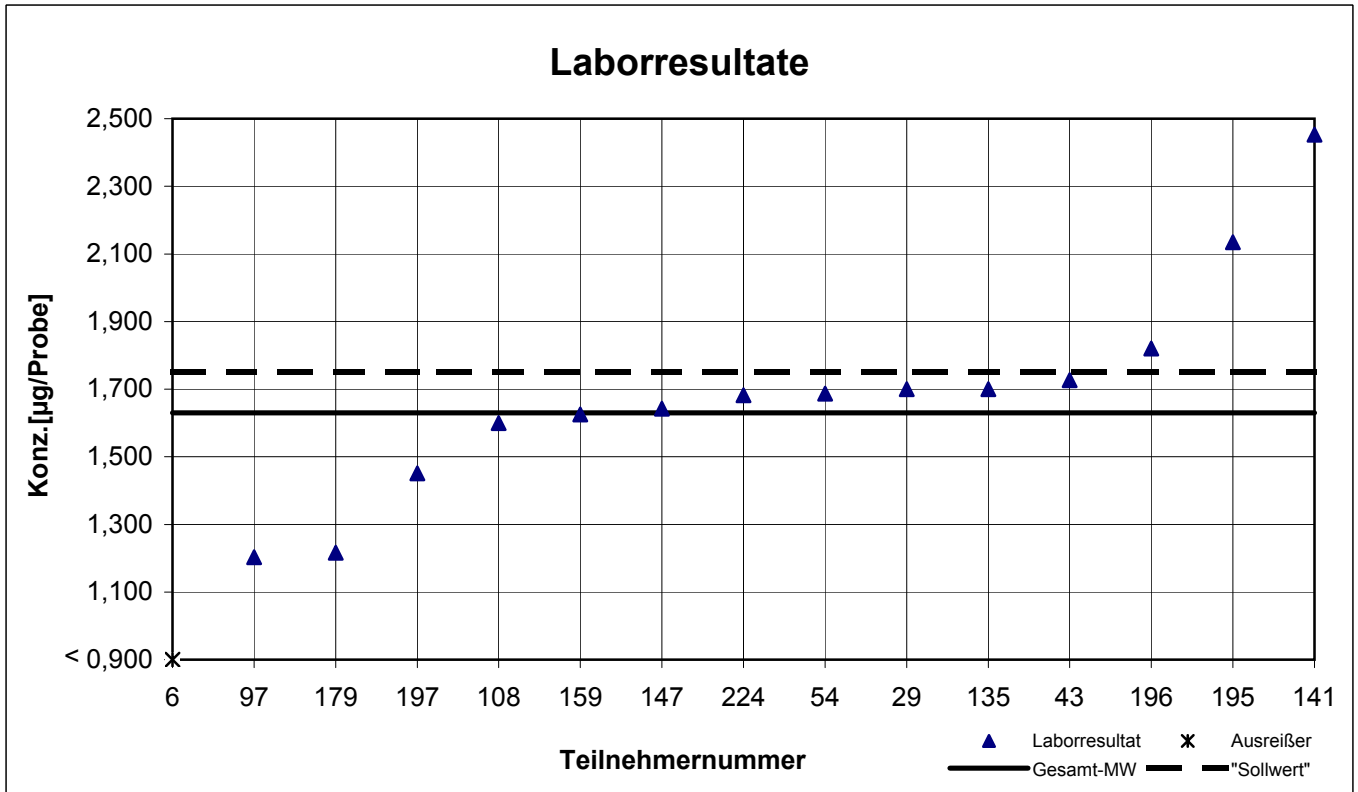
Filter 3

Benzo[e]pyren



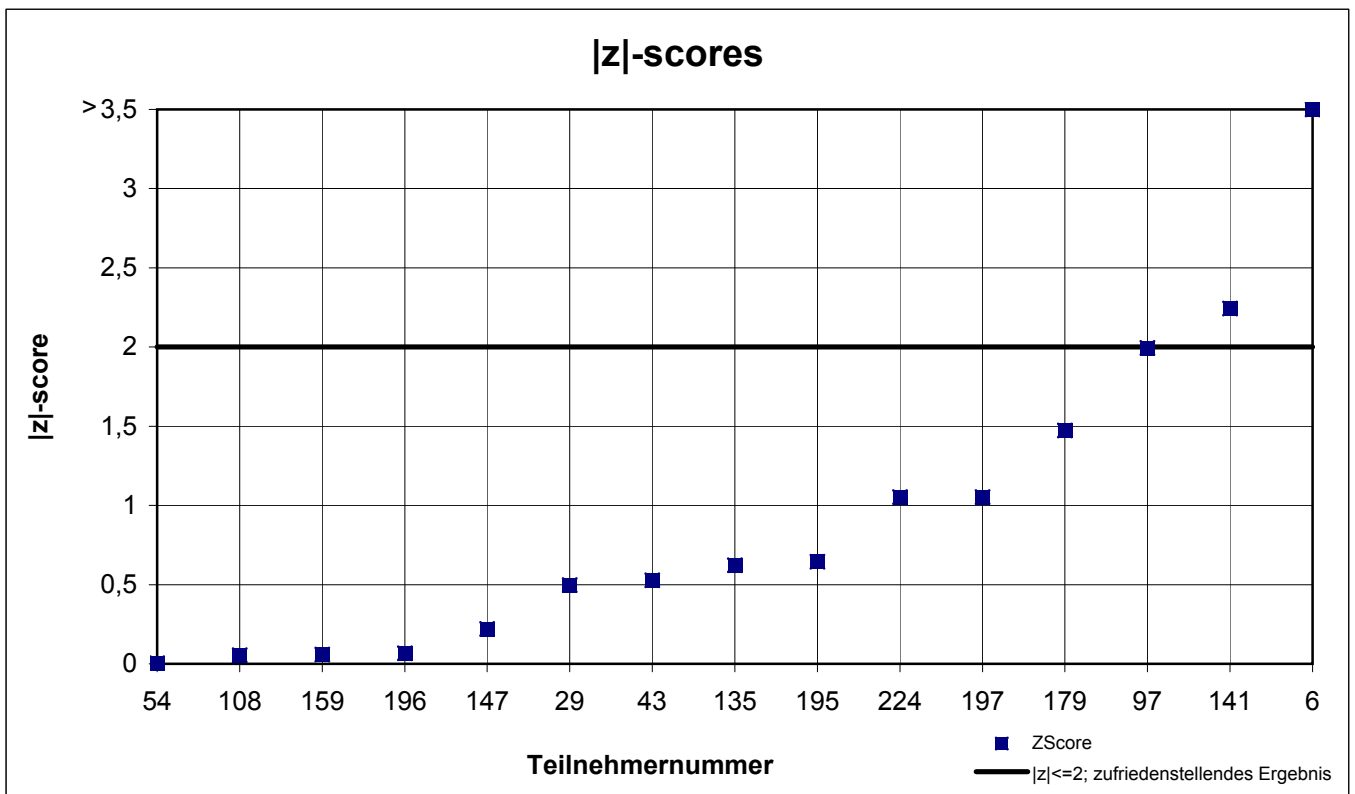
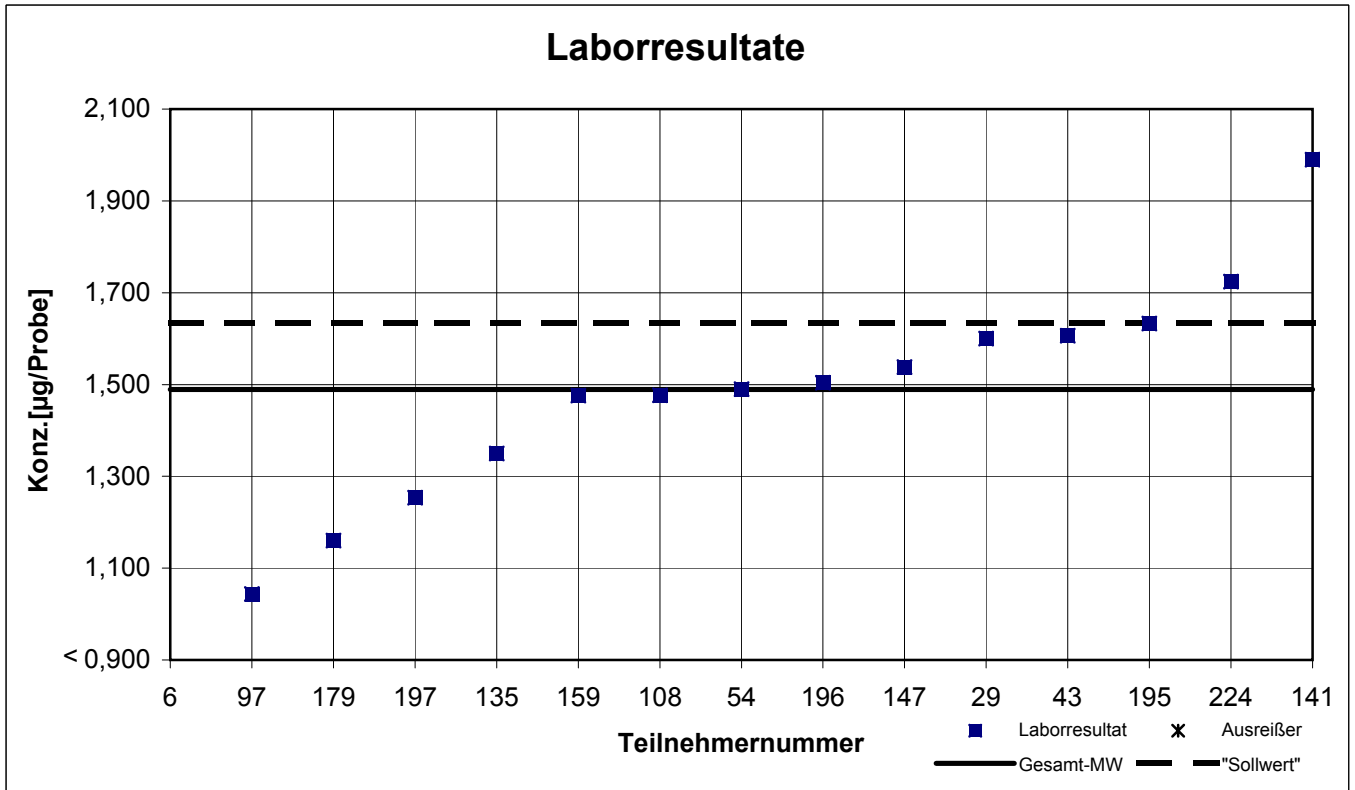
Filter 3

Benzo[ghi]perylen



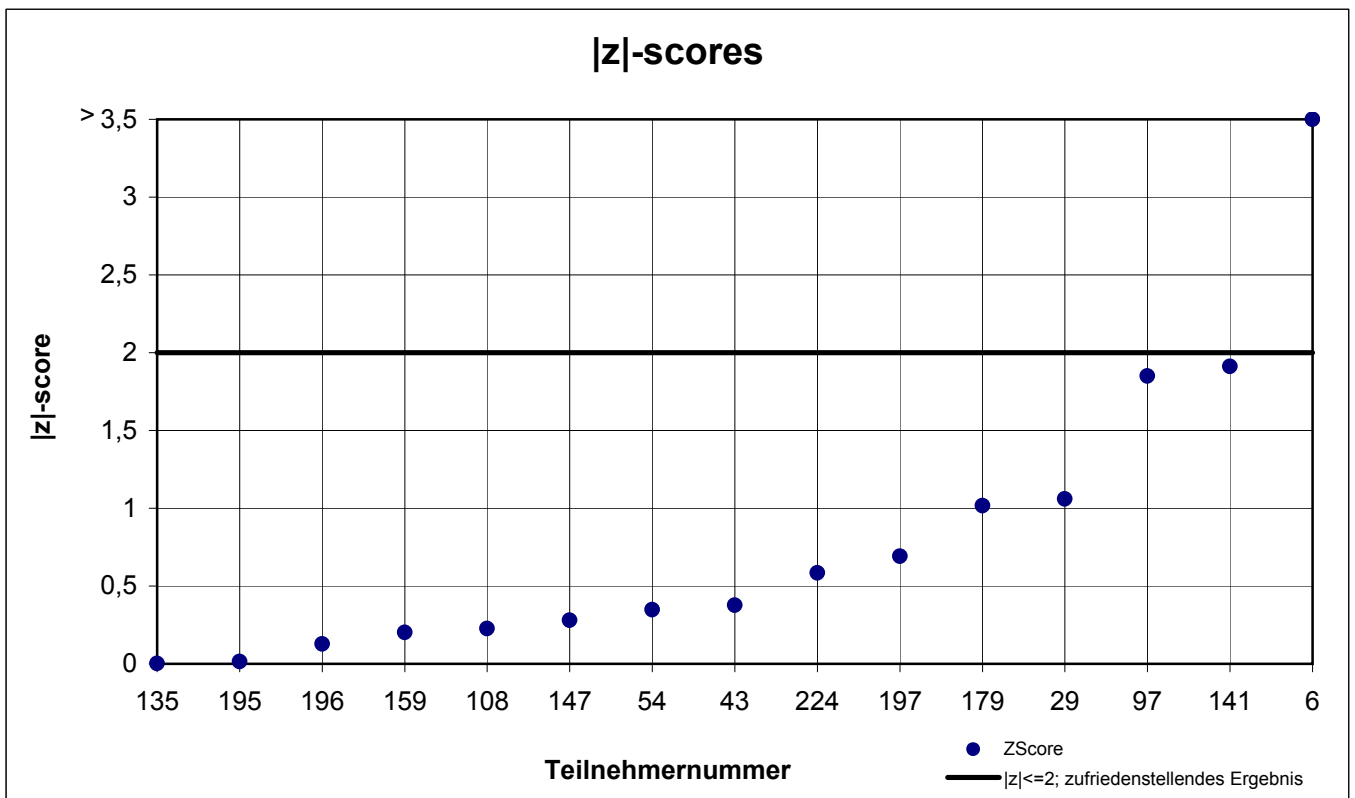
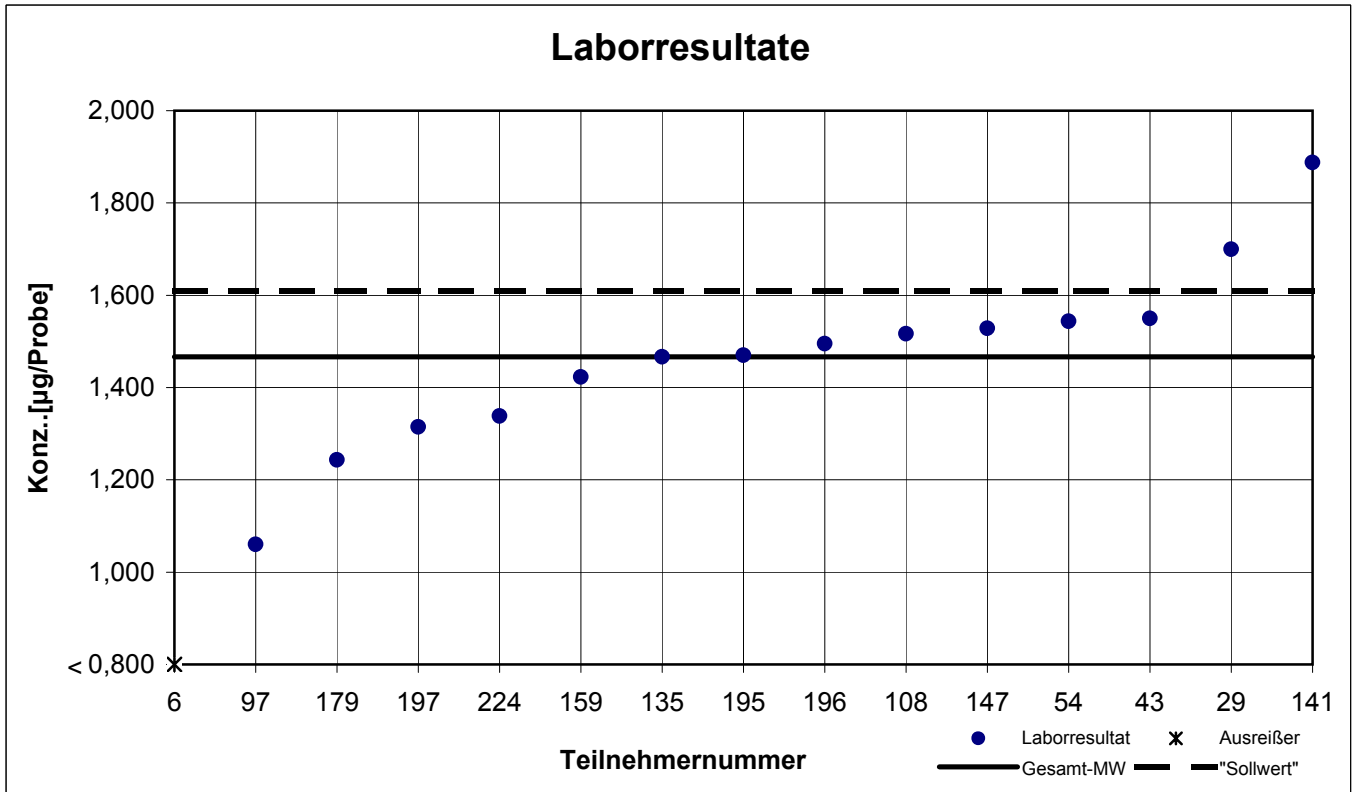
Filter 3

Benzo[k]fluoranthen



Filter 3

Indeno[1,2,3-cd]pyren



results XAD 1

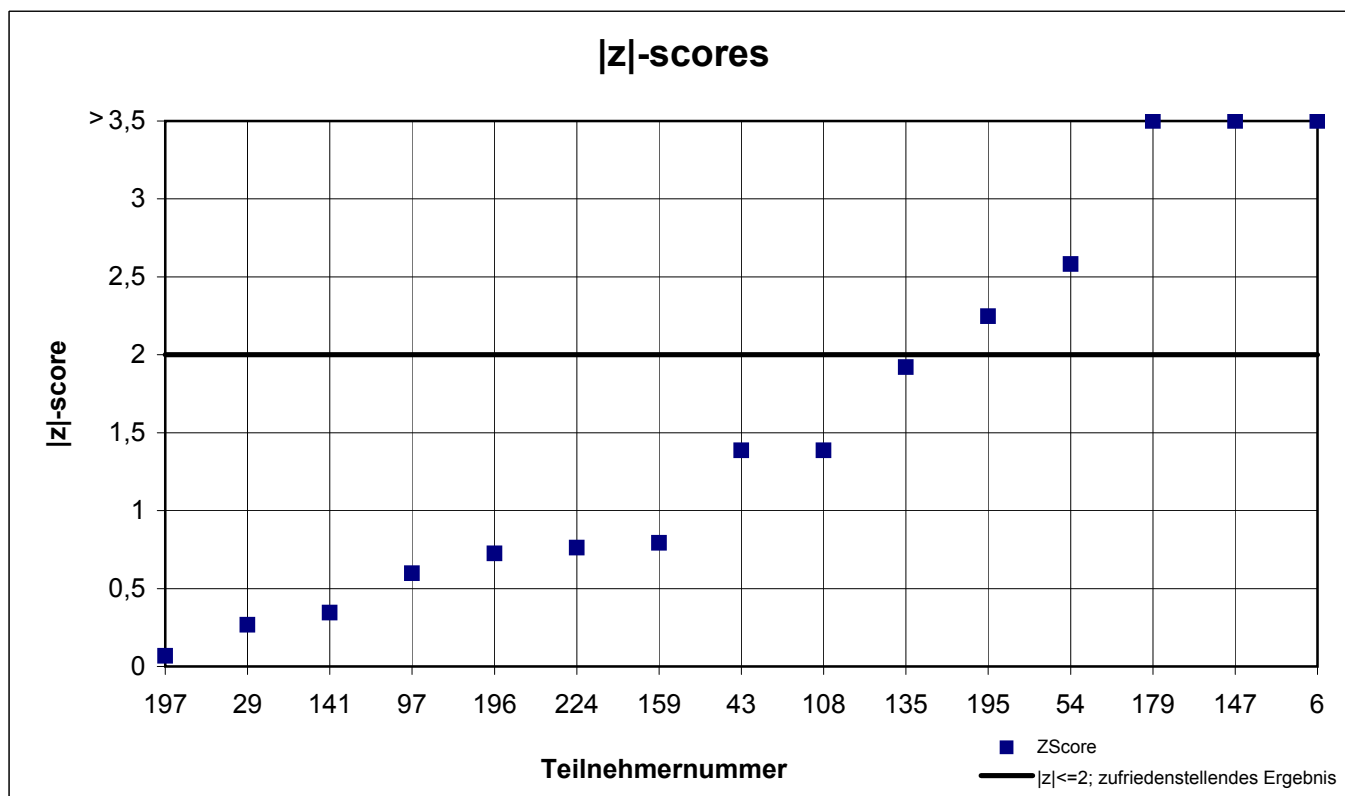
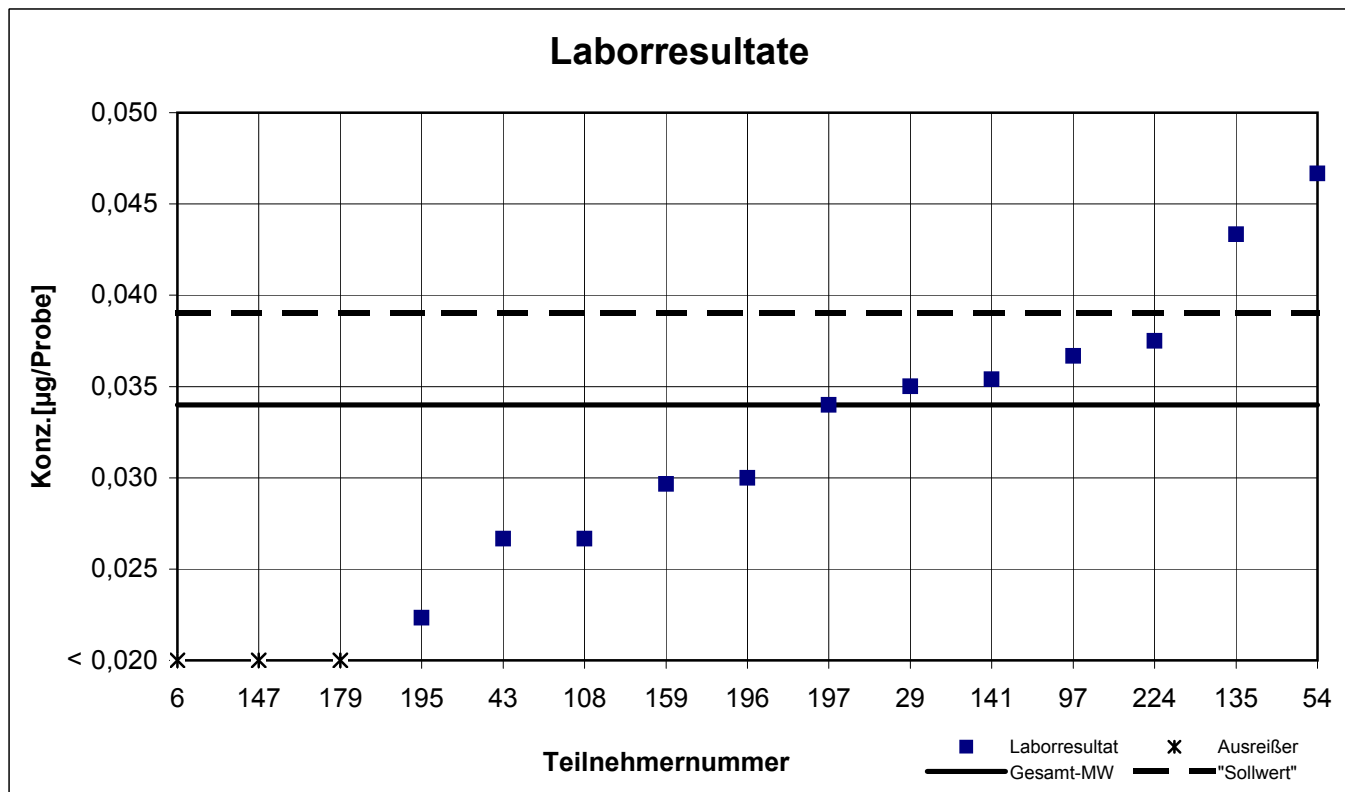
participant number	anthracene		fluoranthene		phenanthrene	
	results [µg/sample]	z -score	results [µg/sample]	z -score	results [µg/sample]	z -score
6	0,003	6,0	0,025	6,2	0,012	6,2
29	0,035	0,3	0,390	1,3	0,190	0,6
43	0,027	1,4	0,227	2,0	0,117	2,2
54	0,047	2,6	0,400	1,5	0,167	0,3
97	0,037	0,6	0,323	0,1	0,180	0,2
108	0,027	1,4	0,330	0,1	0,157	0,7
135	0,043	1,9	0,443	2,4	0,233	2,2
141	0,035	0,3	0,334	0,2	0,232	2,2
147	0,008	5,1	0,406	1,6	0,187	0,4
159	0,030	0,8	0,307	0,4	0,176	0,0
179	0,013	4,0	0,173	3,1	0,097	3,0
195	0,022	2,2	0,213	2,3	0,138	1,4
196	0,030	0,7	0,350	0,5	0,200	0,9
197	0,034	0,1	0,310	0,3	0,172	0,1
224	0,038	0,8	0,365	0,8	0,208	1,2

marked fields are outliers!

	anthracene	fluoranthene	phenanthrene
mean value c_k [µg / sample]	0,034	0,327	0,175
standard deviation S_k [µg / sample]	0,0070	0,0776	0,0392
relative standard deviation [%]	20,95	23,79	22,41
"true value"	0,039	0,369	0,197

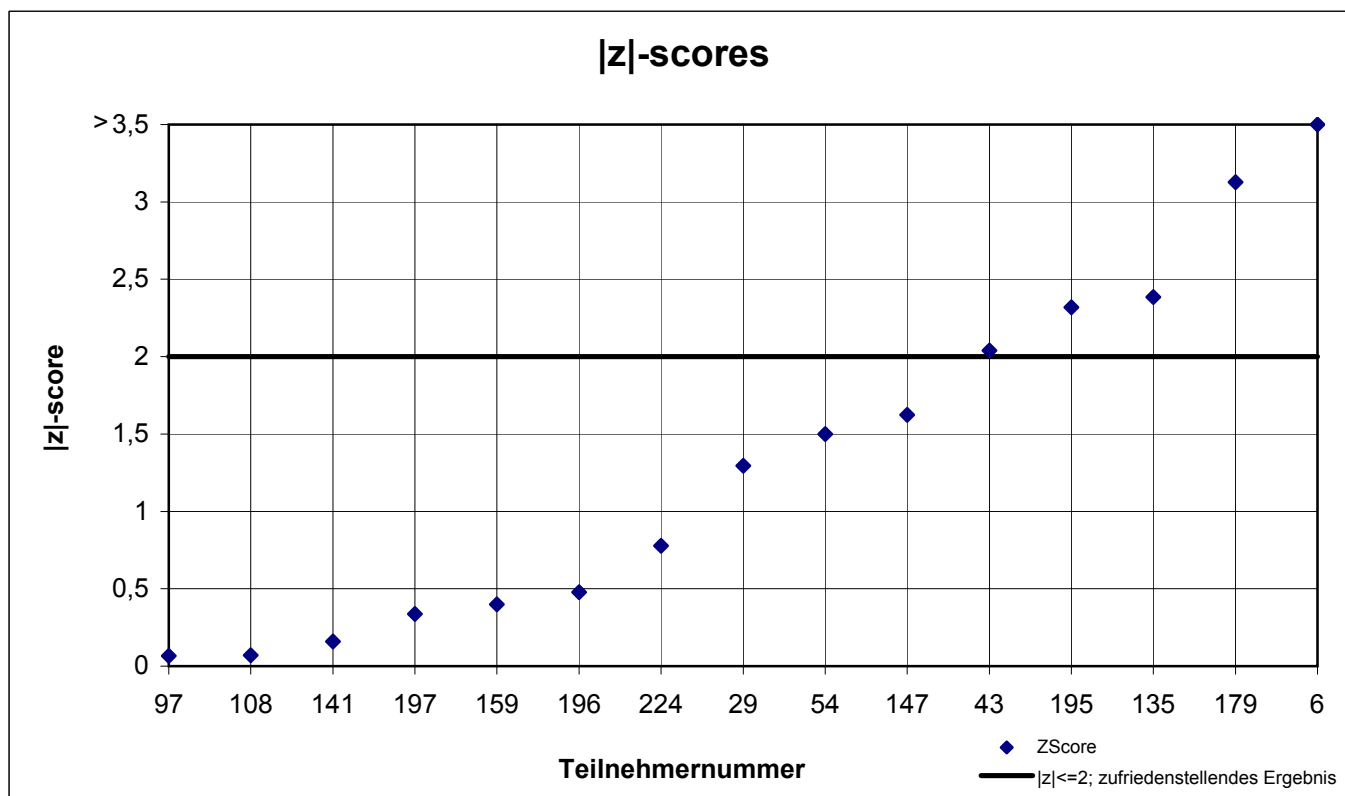
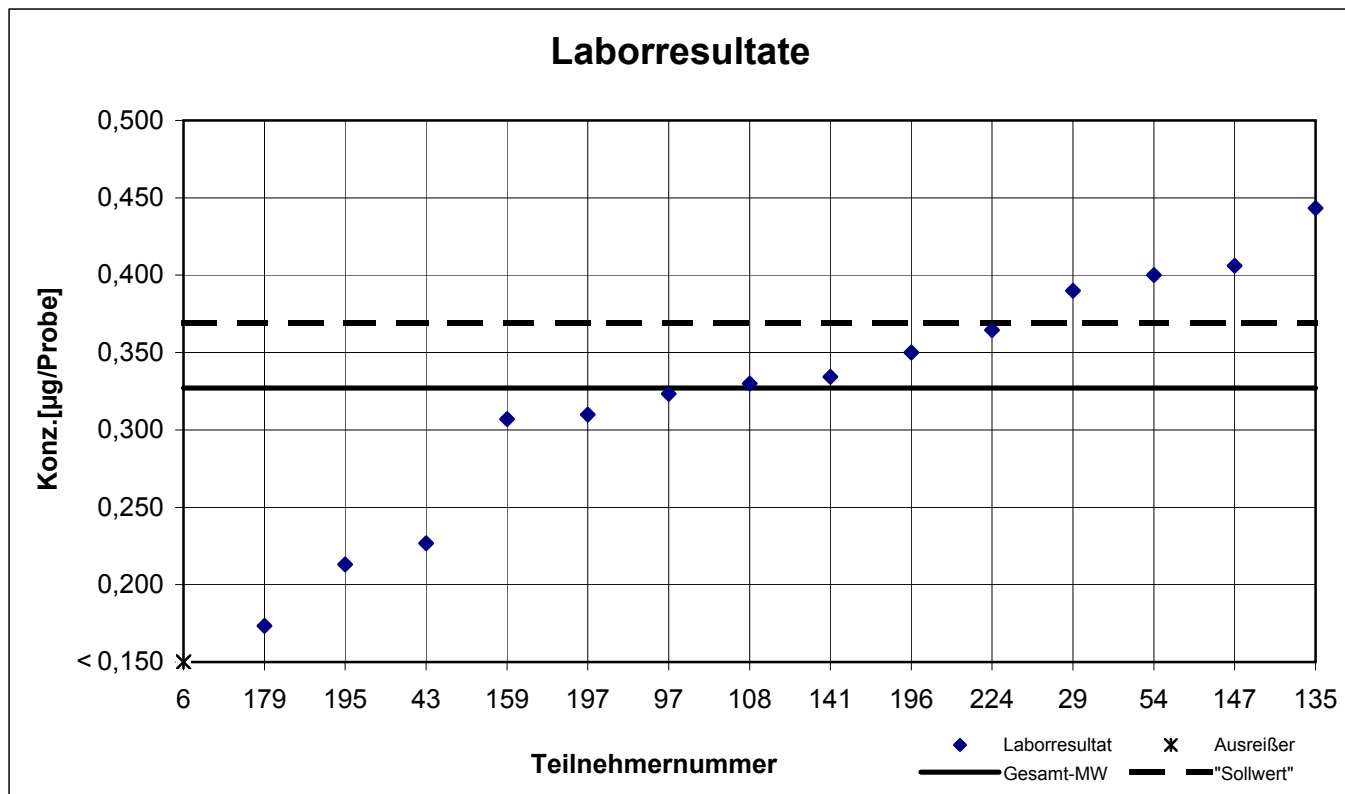
XAD-Röhrchen 1

Anthracen



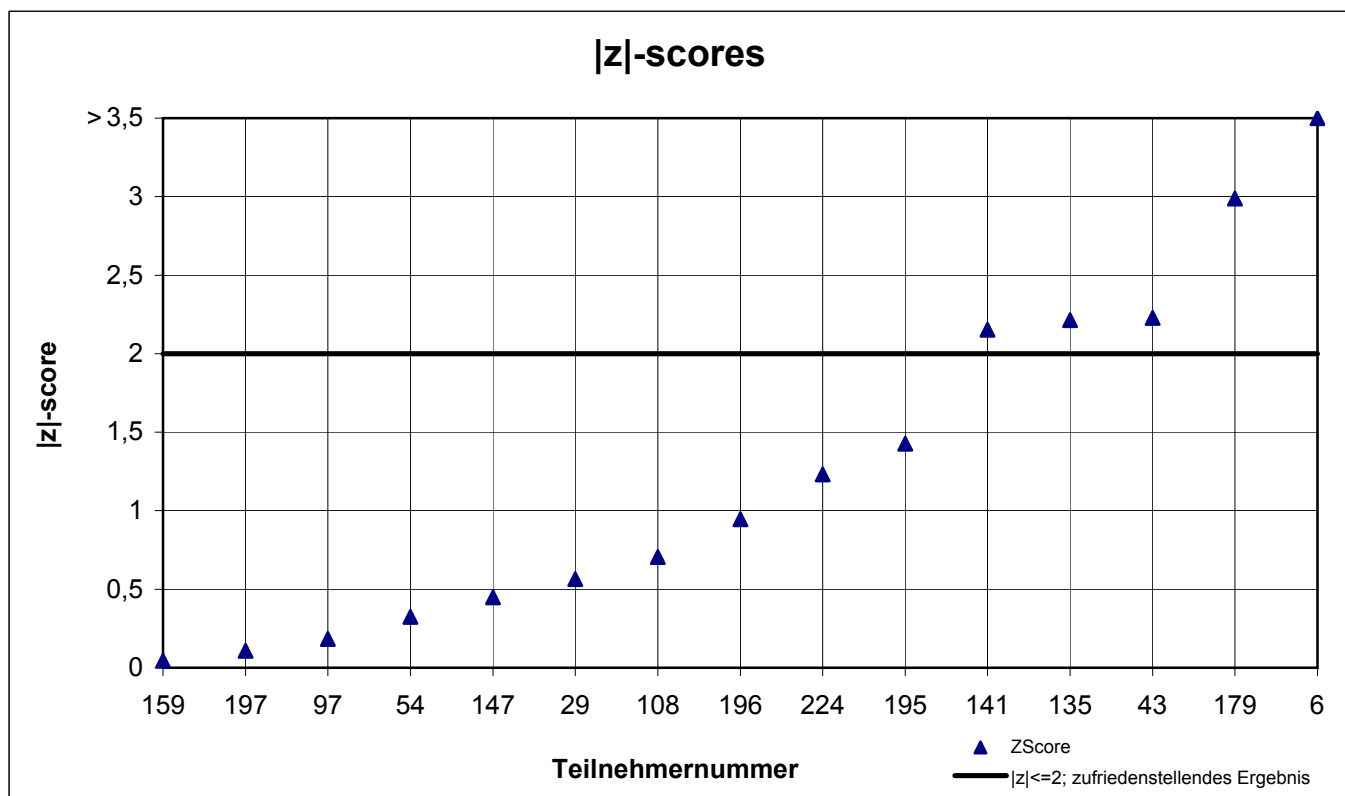
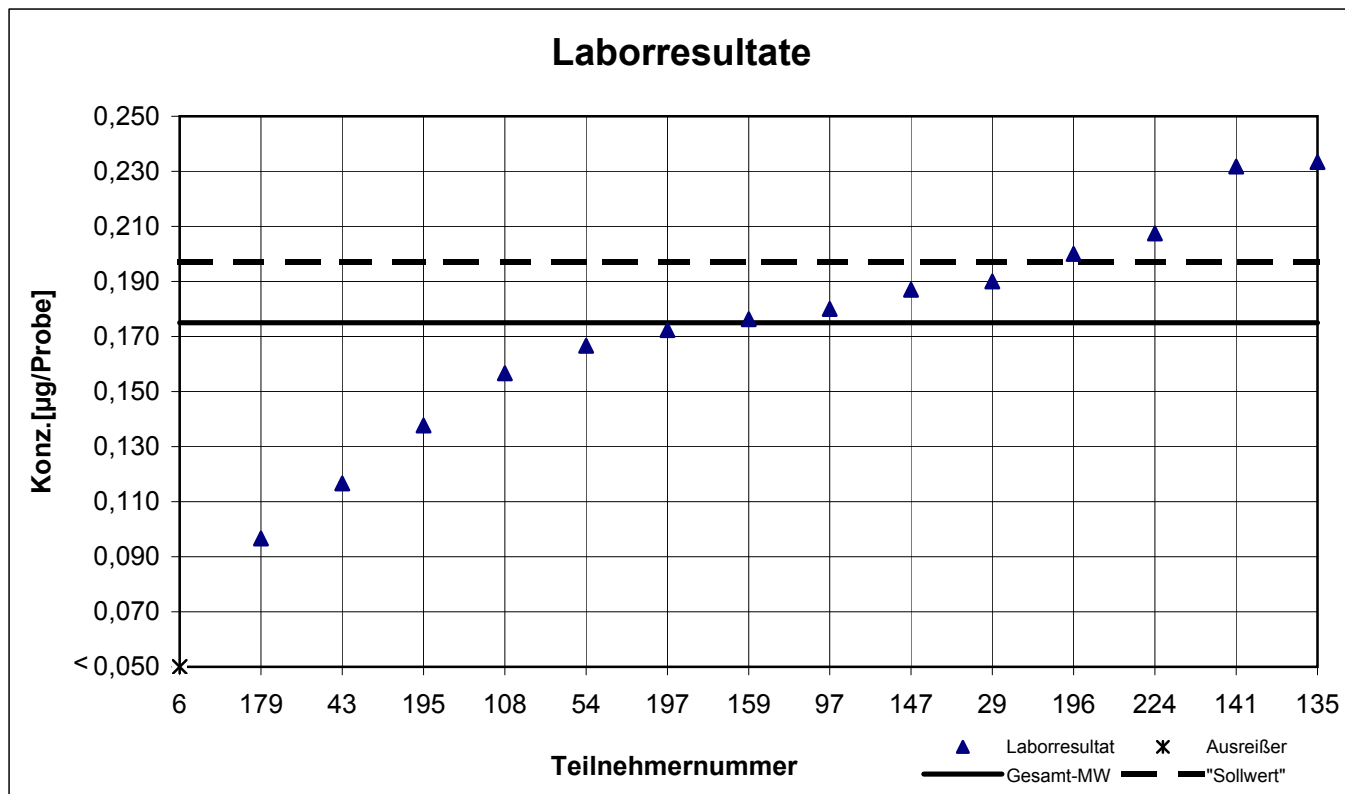
XAD-Röhrchen 1

Fluoranthen



XAD-Röhrchen 1

Phenanthren



results XAD 2

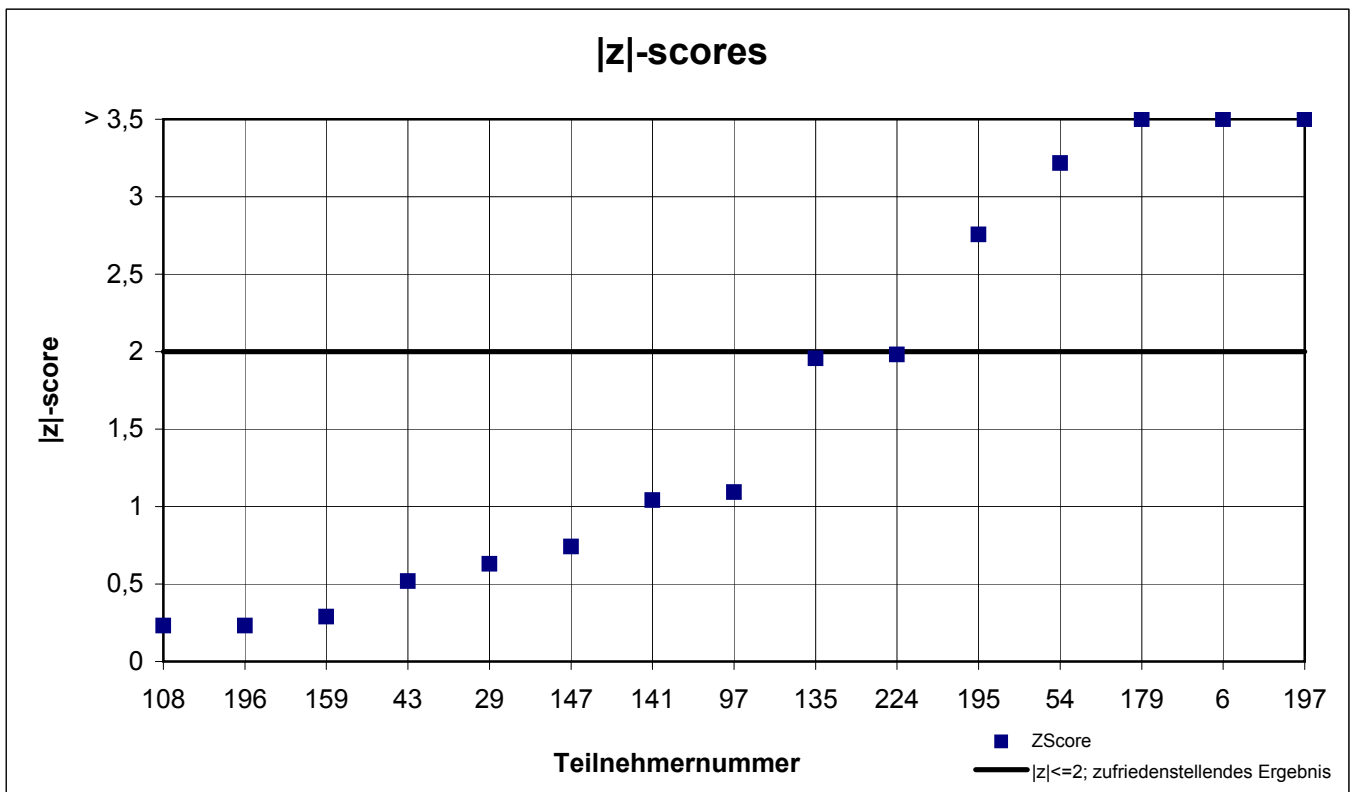
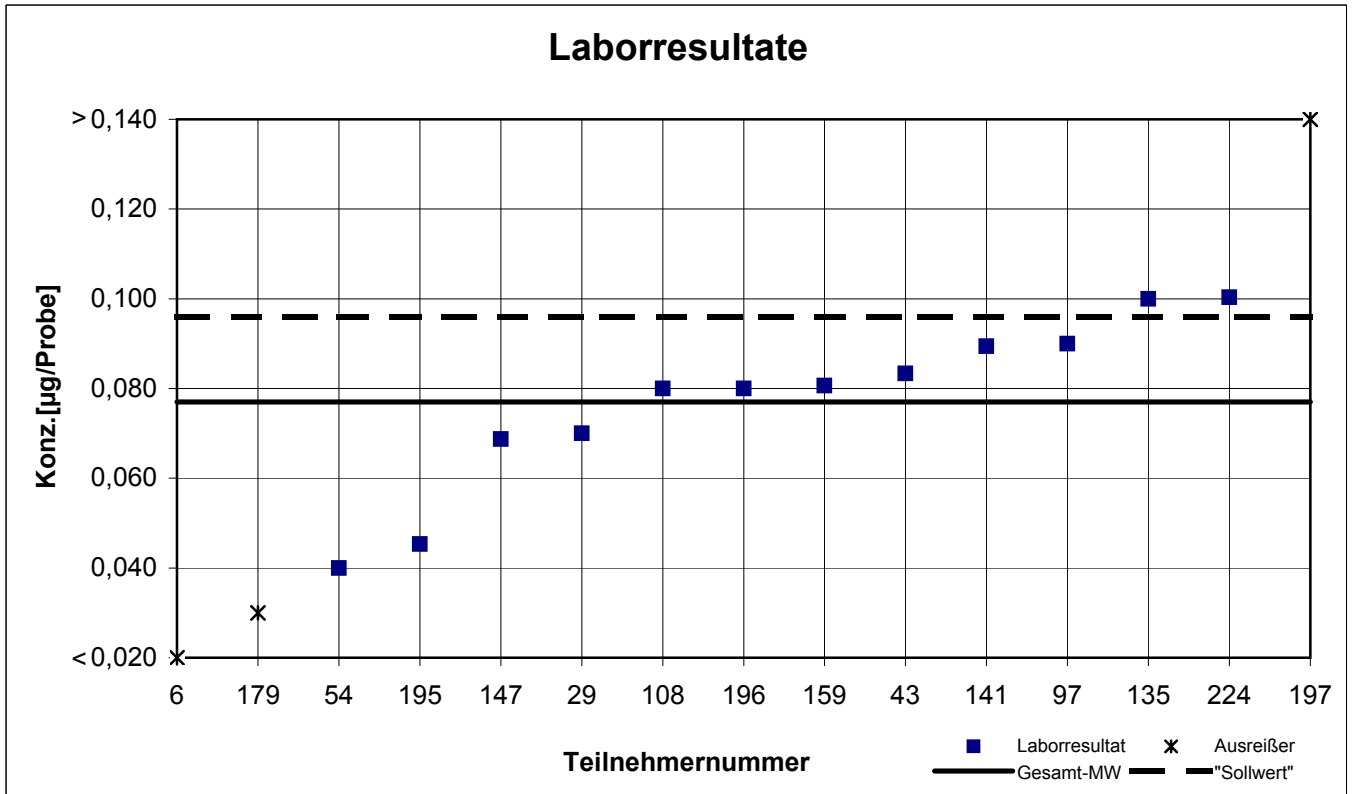
participant number	anthracene		fluoranthene		phenanthrene	
	results [µg/sample]	z -score	results [µg/sample]	z -score	results [µg/sample]	z -score
6	0,012	5,6	0,112	5,7	0,071	5,6
29	0,070	0,6	0,770	0,3	0,340	1,5
43	0,083	0,5	0,833	0,2	0,383	0,8
54	0,040	3,2	0,397	3,4	0,173	4,0
97	0,090	1,1	0,920	1,0	0,493	0,9
108	0,080	0,2	0,897	0,8	0,490	0,8
135	0,100	2,0	1,020	1,8	0,563	1,9
141	0,089	1,0	0,867	0,5	0,513	1,2
147	0,069	0,7	0,968	1,4	0,479	0,6
159	0,081	0,3	0,818	0,1	0,427	0,1
179	0,030	4,1	0,340	3,8	0,193	3,7
195	0,045	2,8	0,444	3,0	0,244	2,9
196	0,080	0,2	0,870	0,5	0,450	0,2
197	0,193	10,0	2,053	10,4	0,961	8,0
224	0,100	2,0	0,844	0,3	0,418	0,3

marked fields are outliers!

	anthracene	fluoranthene	phenanthrene
mean value c_k [µg / sample]	0,077	0,804	0,436
standard deviation S_k [µg / sample]	0,0189	0,1915	0,0892
relative standard deviation [%]	24,53	23,83	20,44
"true value"	0,096	0,923	0,491

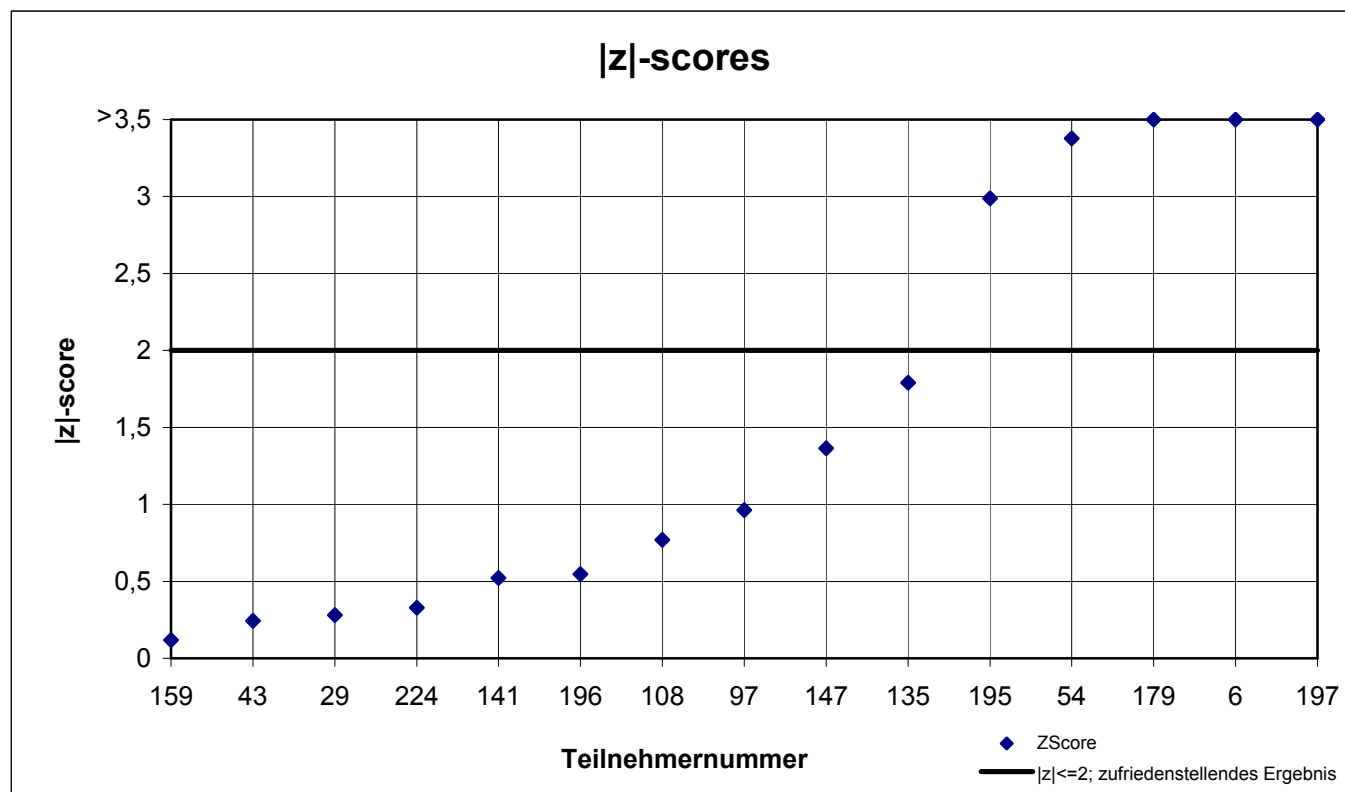
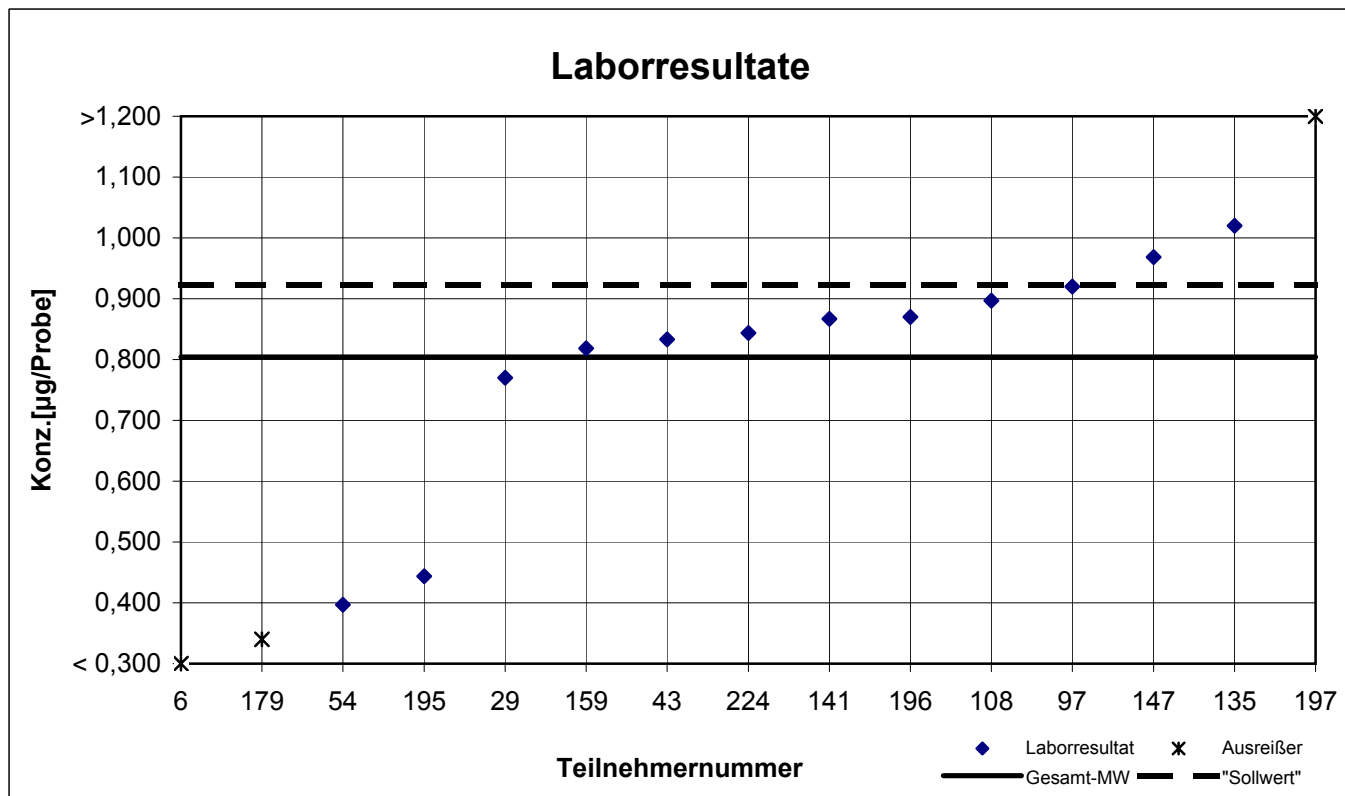
XAD-Röhrchen 2

Anthracen



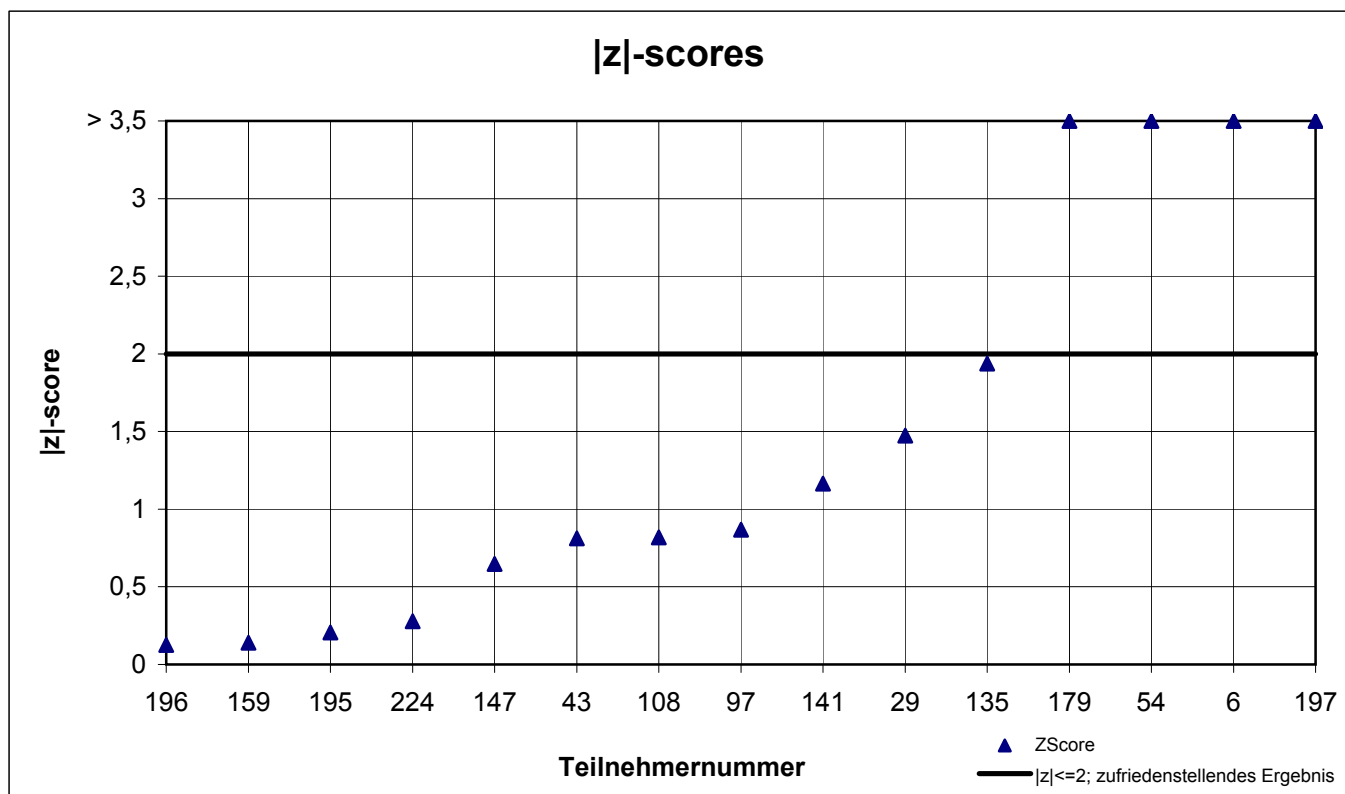
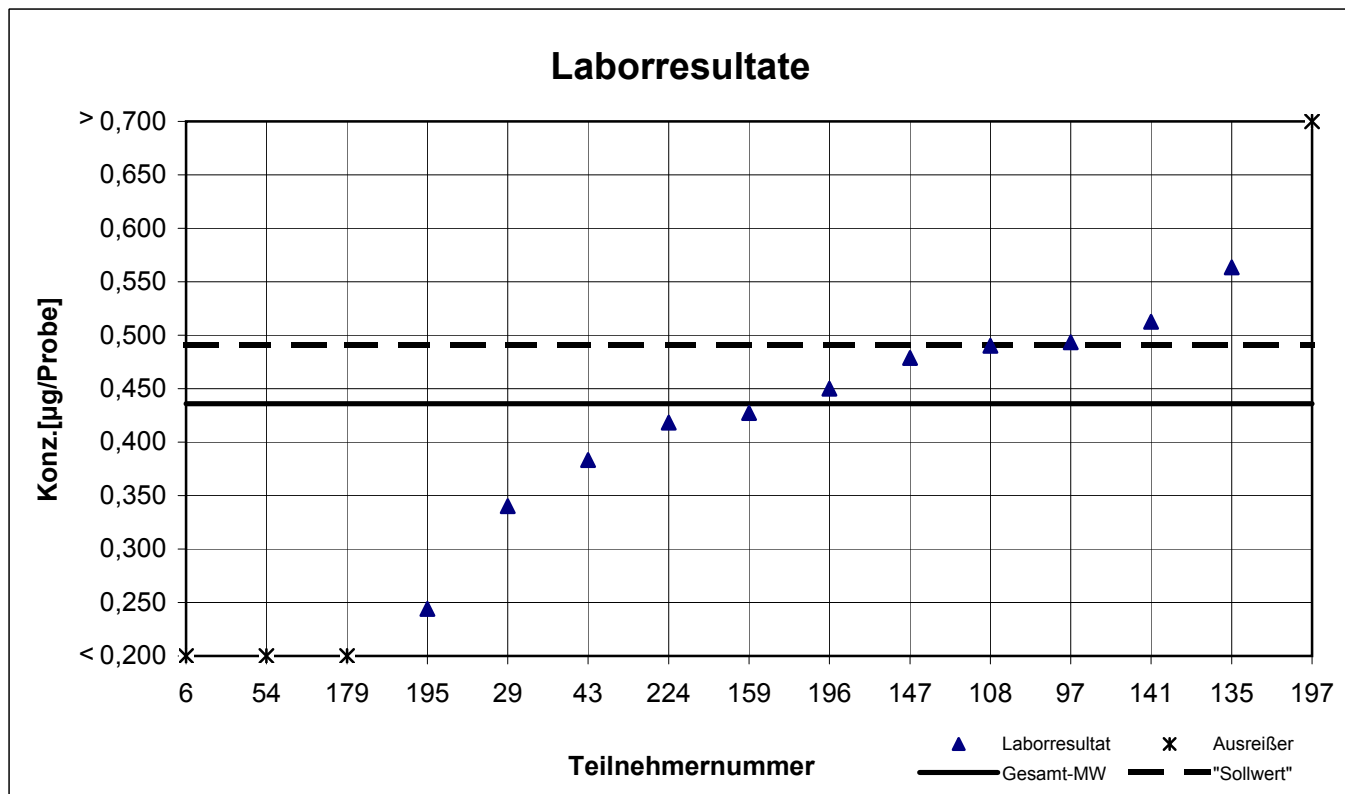
XAD-Röhrchen 2

Fluoranthen



XAD-Röhrchen 2

Phenanthren



results XAD 3

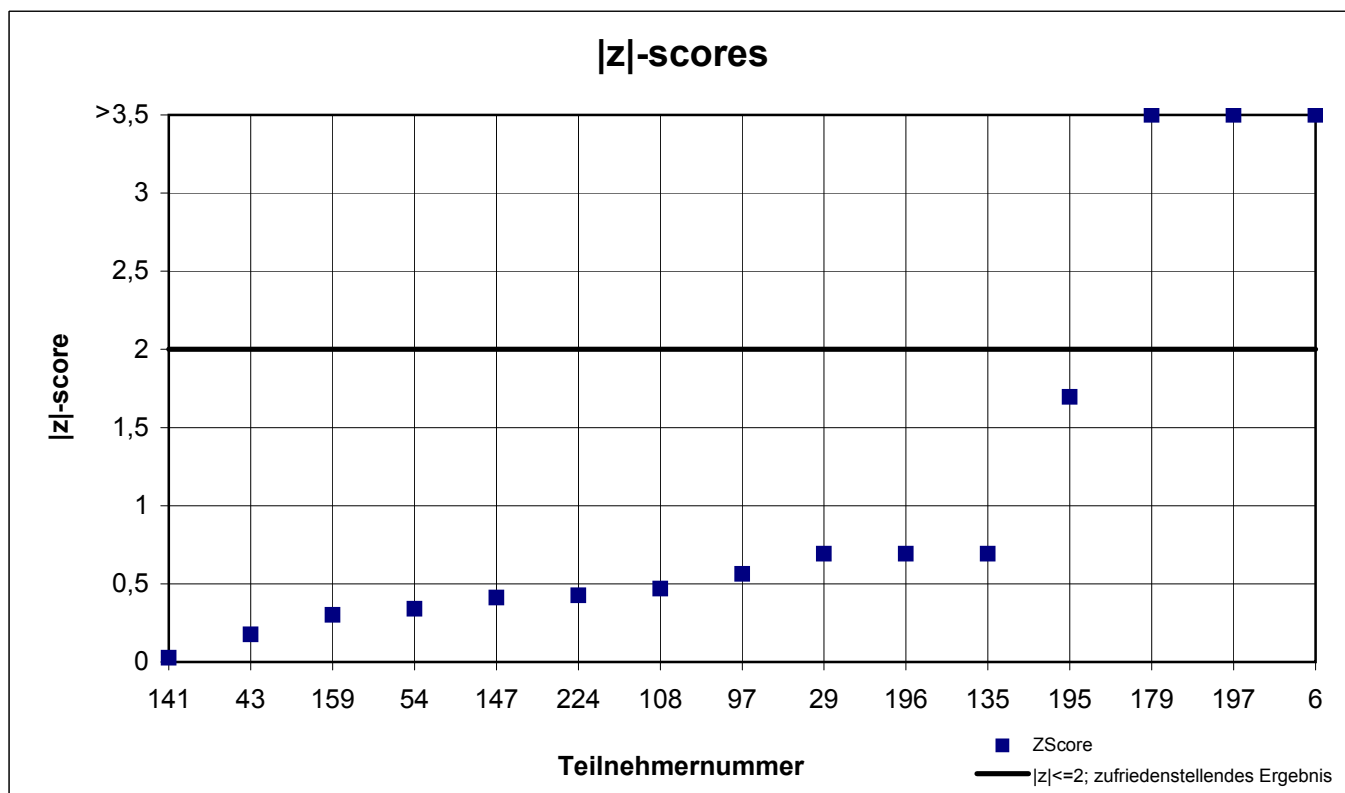
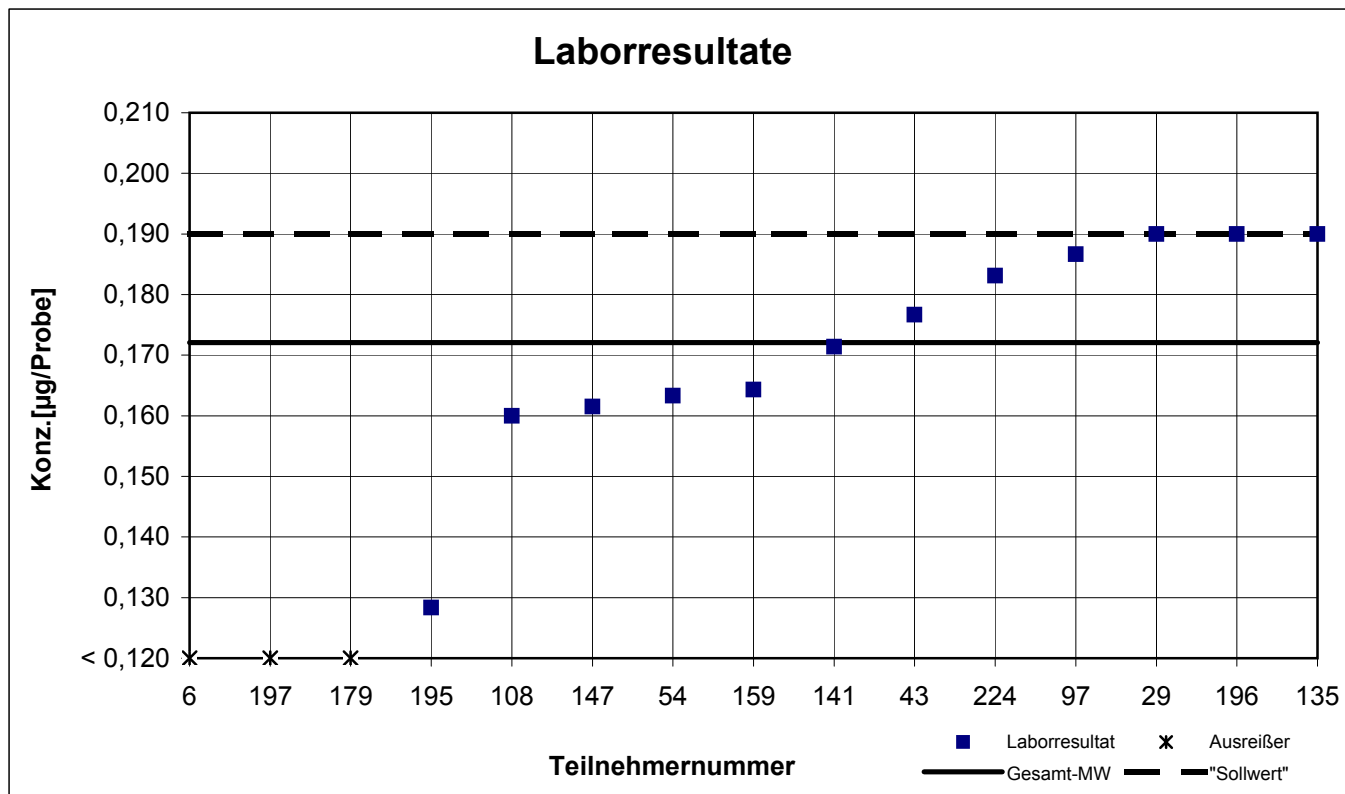
participant number	anthracene		fluoranthene		phenanthrene	
	results [µg/sample]	z -score	results [µg/sample]	z -score	results [µg/sample]	z -score
6	0,016	6,1	0,140	6,1	0,092	6,0
29	0,190	0,7	1,950	0,8	0,880	0,0
43	0,177	0,2	1,453	1,1	0,737	1,1
54	0,163	0,3	1,767	0,1	0,820	0,4
97	0,187	0,6	1,963	0,9	1,023	1,1
108	0,160	0,5	1,700	0,1	0,940	0,5
135	0,190	0,7	2,003	1,1	0,990	0,9
141	0,171	0,0	1,734	0,0	0,962	0,6
147	0,162	0,4	1,839	0,4	0,921	0,3
159	0,164	0,3	1,661	0,3	0,840	0,3
179	0,077	3,7	0,770	3,7	0,433	3,4
195	0,128	1,7	1,286	1,7	0,679	1,5
196	0,190	0,7	1,800	0,3	0,940	0,5
197	0,052	4,6	0,425	5,0	0,252	4,8
224	0,183	0,4	1,610	0,5	0,800	0,6

marked fields are outliers!

	anthracene	fluoranthene	phenanthrene
mean value c_k [µg / sample]	0,172	1,730	0,878
standard deviation S_k [µg / sample]	0,0181	0,2109	0,1047
relative standard deviation [%]	10,55	12,19	11,93
"true value"	0,190	1,868	0,978

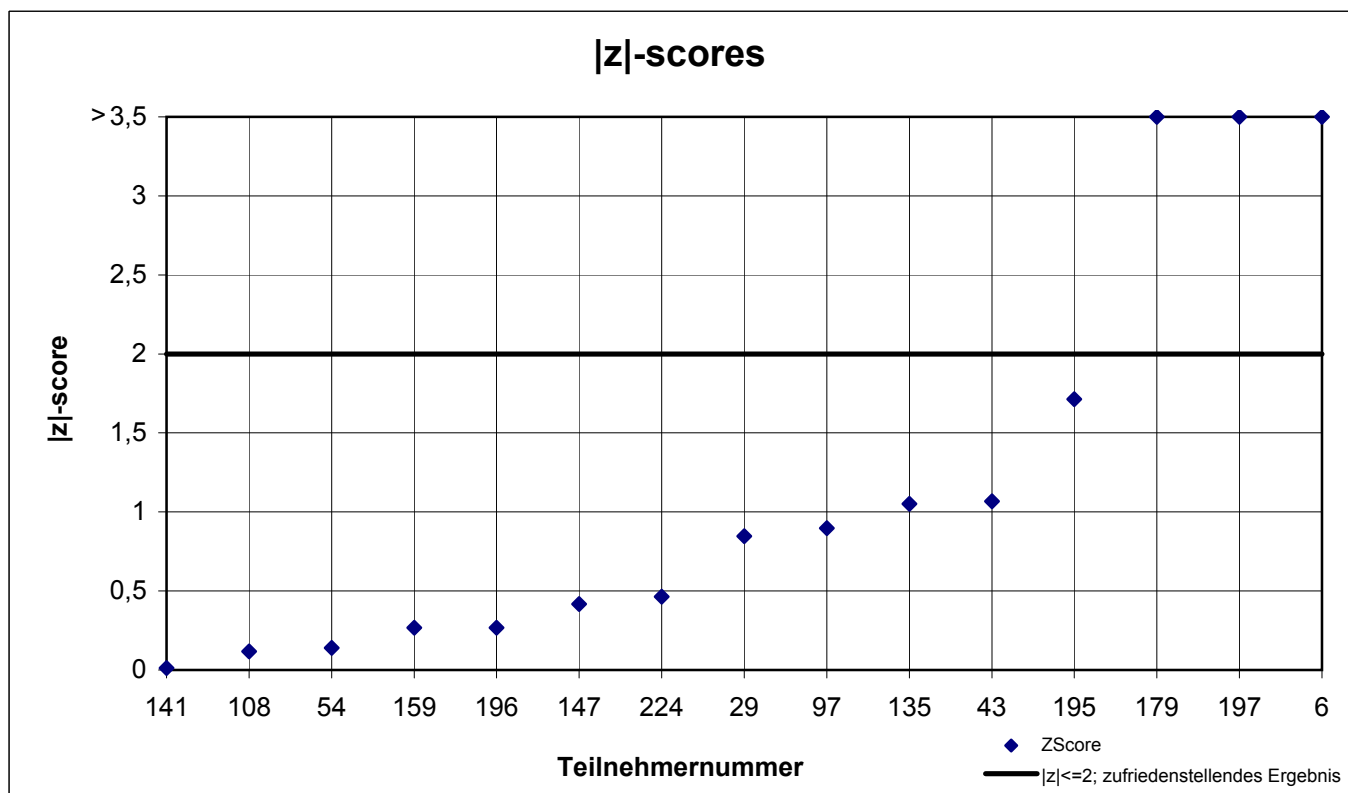
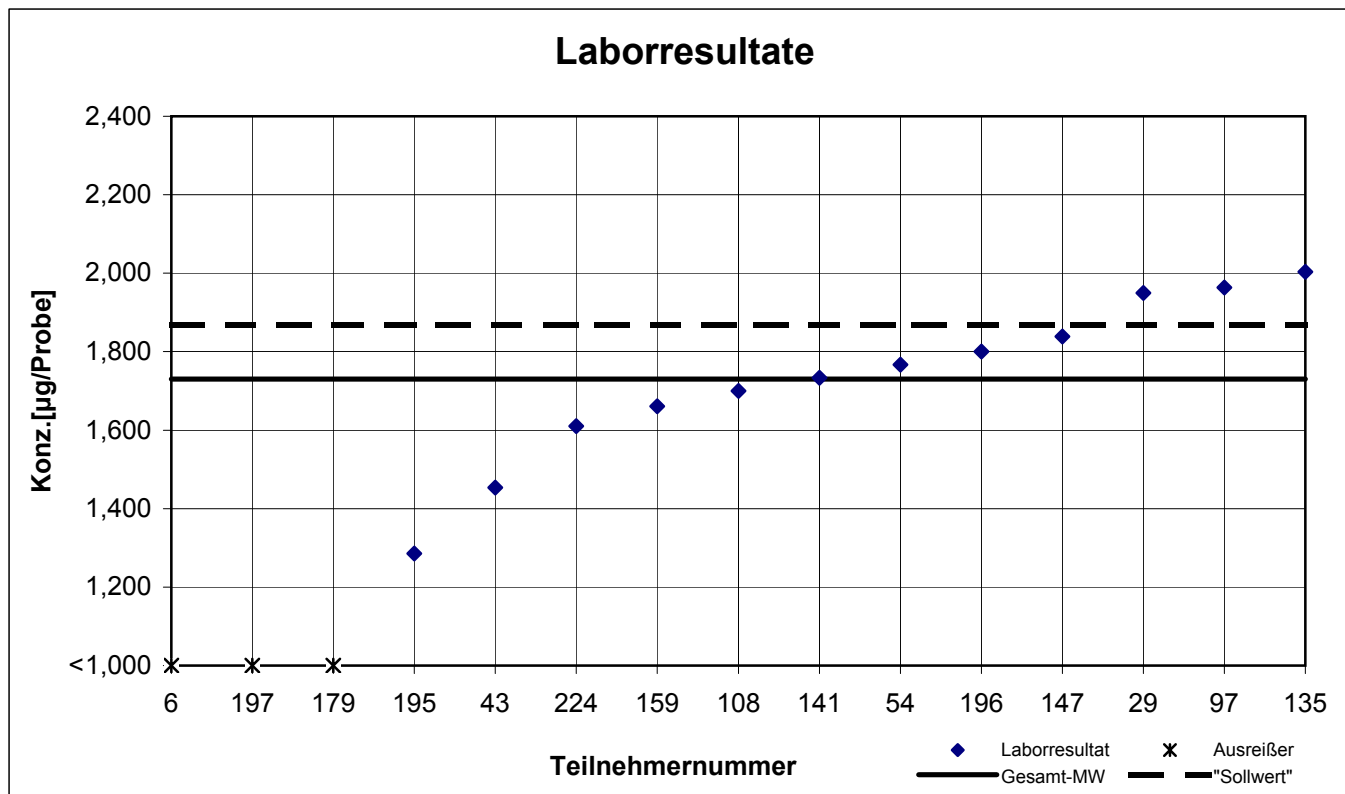
XAD-Röhrchen 3

Anthracen



XAD-Röhrchen 3

Fluoranthen



XAD-Röhrchen 3

Phenanthren

