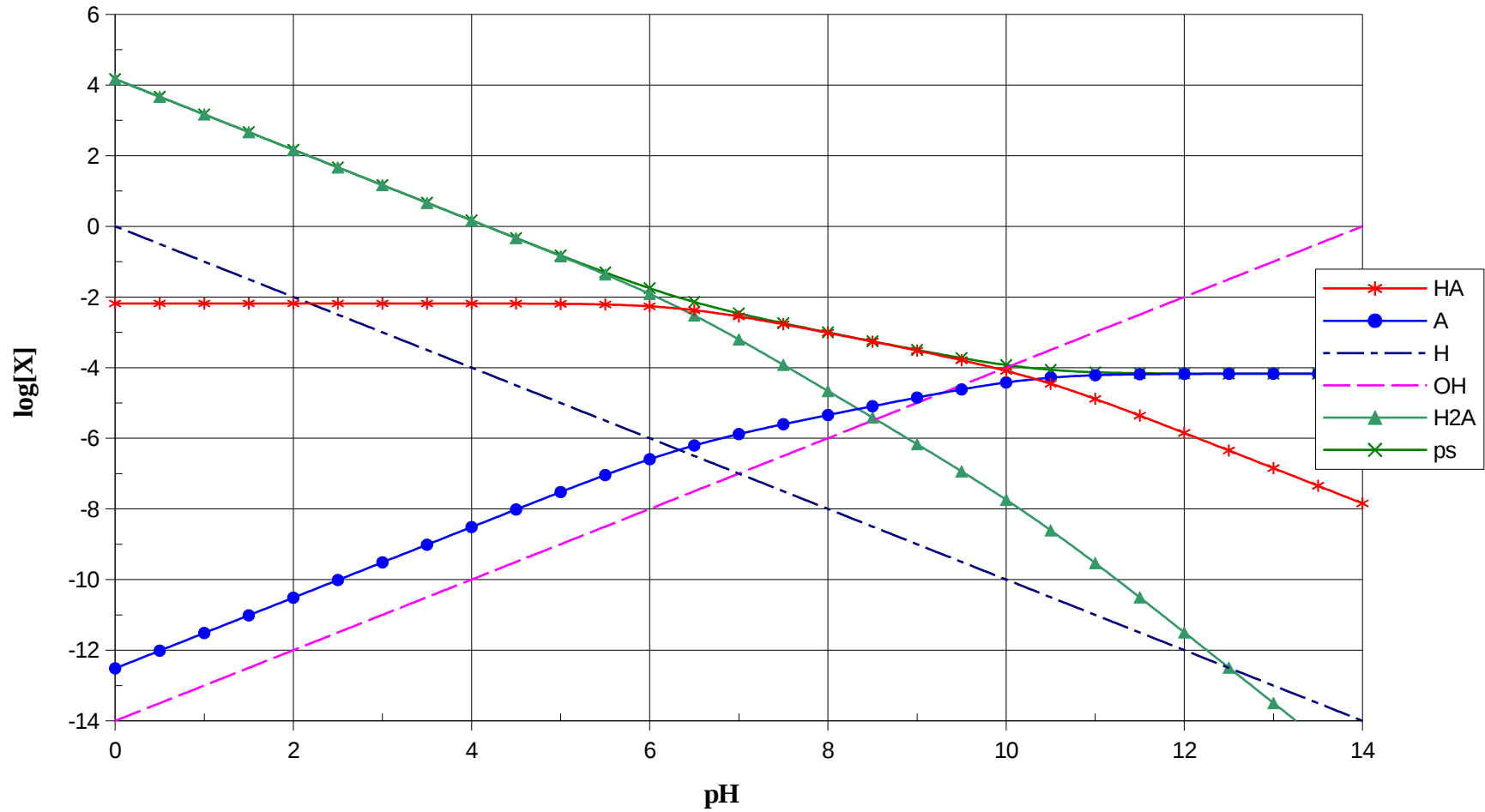


Logaritemski porazdelitveni diagram $\text{CaCO}_3(\text{s})$ 

Porazdelitveni diagram CaCO₃(s)

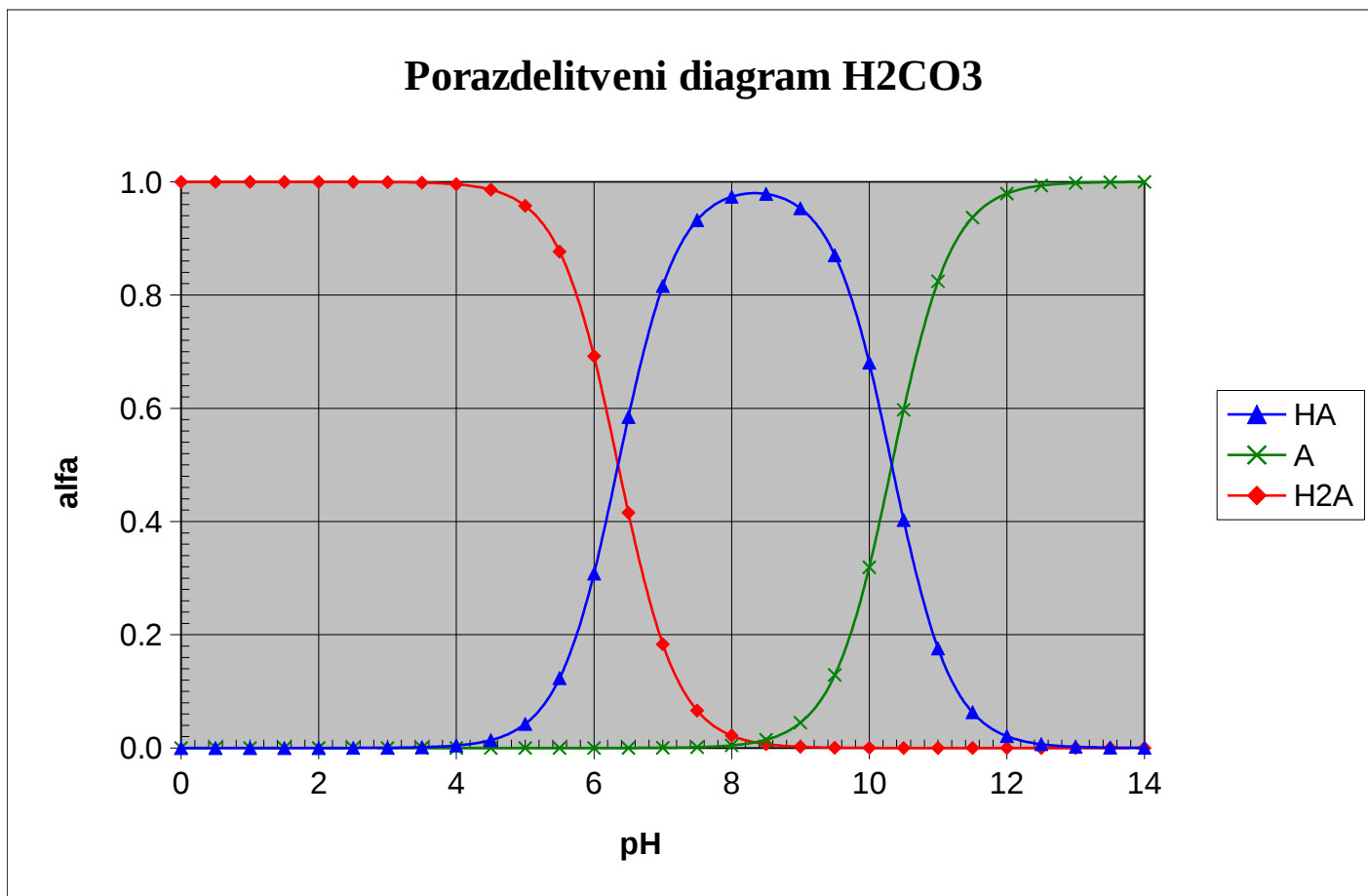
Navodilo:

V polja B4 - B8 vstavimo podatke o težko topni spojini MA(s),
v koloni C8-C36 pa pH pri katerem želimo izračunati porazdelitev.

Logaritmsko porazdelitev zvrsti prikazuje list logX.

Kislina	HA	pKa										
Ka1	4.45E-07	6.352										
Ka2	4.69E-11	10.329										
Ksp	4.50E-09											
Kw	1.00E-14											
		pH	H	OH	F	s	H₂A	HA	A	H₂A	HA	A
		0	1	1.00E-14	1.00E+00	1.47E+04	1.00E+00	4.45E-07	2.09E-17	4.167	-2.185	-12.514
		0.5	0.3162278	3.16E-14	1.00E-01	4.64E+03	1.00E+00	1.41E-06	2.09E-16	3.667	-2.185	-12.014
		1	0.1	1.00E-13	1.00E-02	1.47E+03	1.00E+00	4.45E-06	2.09E-15	3.167	-2.185	-11.514
		1.5	0.0316228	3.16E-13	1.00E-03	4.64E+02	1.00E+00	1.41E-05	2.09E-14	2.667	-2.185	-11.014
		2	0.01	1.00E-12	1.00E-04	1.47E+02	1.00E+00	4.45E-05	2.09E-13	2.167	-2.185	-10.514
		2.5	0.0031623	3.16E-12	1.00E-05	4.64E+01	1.00E+00	1.41E-04	2.09E-12	1.667	-2.185	-10.014
		3	0.001	1.00E-11	1.00E-06	1.47E+01	1.00E+00	4.45E-04	2.09E-11	1.167	-2.185	-9.514
		3.5	0.0003162	3.16E-11	1.00E-07	4.65E+00	9.99E-01	1.41E-03	2.08E-10	0.667	-2.185	-9.014
		4	0.0001	1.00E-10	1.00E-08	1.47E+00	9.96E-01	4.43E-03	2.08E-09	0.166	-2.186	-8.515
		4.5	3.16E-005	3.16E-10	1.01E-09	4.68E-01	9.86E-01	1.39E-02	2.06E-08	-0.336	-2.188	-8.017
		5	0.00001	1.00E-09	1.04E-10	1.50E-01	9.57E-01	4.26E-02	2.00E-07	-0.843	-2.194	-7.523
		5.5	3.16E-006	3.16E-09	1.14E-11	4.96E-02	8.77E-01	1.23E-01	1.83E-06	-1.362	-2.213	-7.042
		6	0.000001	1.00E-08	1.45E-12	1.77E-02	6.92E-01	3.08E-01	1.44E-05	-1.913	-2.265	-6.594
		6.5	3.16E-007	3.16E-08	2.41E-13	7.20E-03	4.15E-01	5.85E-01	8.67E-05	-2.524	-2.376	-6.204
		7	0.0000001	1.00E-07	5.45E-14	3.43E-03	1.83E-01	8.16E-01	3.83E-04	-3.201	-2.553	-5.882
		7.5	3.16E-008	3.16E-07	1.51E-14	1.80E-03	6.63E-02	9.32E-01	1.38E-03	-3.923	-2.774	-5.603
		8	1.00E-008	1.00E-06	4.57E-15	9.93E-04	2.19E-02	9.74E-01	4.57E-03	-4.663	-3.015	-5.344
		8.5	3.16E-009	3.16E-06	1.44E-15	5.57E-04	6.95E-03	9.79E-01	1.45E-02	-5.412	-3.264	-5.093
		9	1.00E-009	1.00E-05	4.67E-16	3.17E-04	2.14E-03	9.53E-01	4.47E-02	-6.168	-3.519	-4.848
		9.5	3.16E-010	3.16E-05	1.62E-16	1.87E-04	6.18E-04	8.70E-01	1.29E-01	-6.938	-3.789	-4.618
		10	1E-010	1.00E-04	6.54E-17	1.19E-04	1.53E-04	6.81E-01	3.19E-01	-7.741	-4.093	-4.421
		10.5	3.16E-011	3.16E-04	3.49E-17	8.68E-05	2.86E-05	4.03E-01	5.97E-01	-8.605	-4.456	-4.285
		11	1E-011	1.00E-03	2.53E-17	7.39E-05	3.95E-06	1.76E-01	8.24E-01	-9.535	-4.887	-4.215
		11.5	3.16E-012	3.16E-03	2.23E-17	6.93E-05	4.49E-07	6.32E-02	9.37E-01	-10.507	-5.359	-4.188
		12	1E-012	1.00E-02	2.13E-17	6.78E-05	4.69E-08	2.09E-02	9.79E-01	-11.498	-5.849	-4.178

12.5	3.16E-013	3.16E-02	2.10E-17	6.73E-05	4.76E-09	6.70E-03	9.93E-01	-12.494	-6.346	-4.175
13	1E-013	1.00E-01	2.09E-17	6.72E-05	4.78E-10	2.13E-03	9.98E-01	-13.493	-6.845	-4.174
13.5	3.16E-014	3.16E-01	2.09E-17	6.71E-05	4.79E-11	6.74E-04	9.99E-01	-14.493	-7.345	-4.174
14	1E-014	1.00E+00	2.09E-17	6.71E-05	4.79E-12	2.13E-04	1.00E+00	-15.493	-7.845	-4.173



H	OH	ps
log(H)	log(OH)	log(s)
0	-14	4.1668399
-0.5	-13.5	3.6668401
-1	-13	3.1668408
-1.5	-12.5	2.6668429
-2	-12	2.1668495
-2.5	-11.5	1.6668704
-3	-11	1.1669364
-3.5	-10.5	0.6671452
-4	-10	0.167804
-4.5	-9.5	-0.3301257
-5	-9	-0.8237059
-5.5	-8.5	-1.30457
-6	-8	-1.7532231
-6.5	-7.5	-2.142384
-7	-7	-2.4648788
-7.5	-6.5	-2.7437723
-8	-6	-3.0031607
-8.5	-5.5	-3.254268
-9	-5	-3.498562
-9.5	-4.5	-3.7288161
-10	-4	-3.9254361
-10.5	-3.5	-4.0614761
-11	-3	-4.1314232
-11.5	-2.5	-4.1592248
-12	-2	-4.1688124

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-12.5	-1.5	-4.1719345
-13	-1	-4.1729312
-13.5	-0.5	-4.1732474
-14	0	-4.1733474

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