SUPPORTING INFORMATION FOR READERS

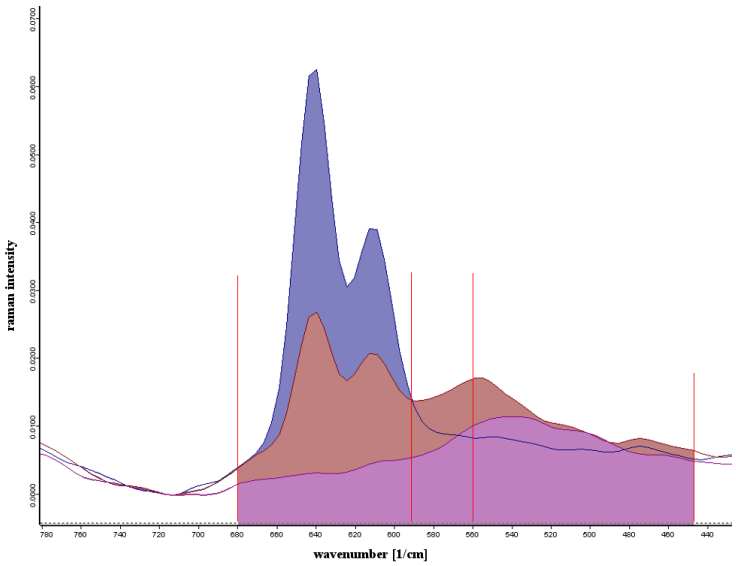

Figure S1. Snapshots of the integration procedure of the OPUS-software. Vertical lines are the integration ranges, Table S1.

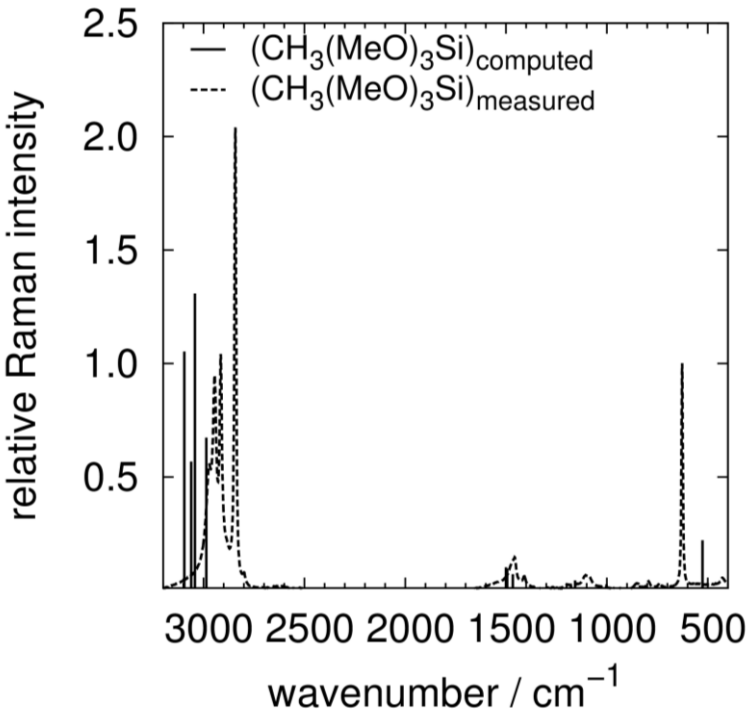

Figure S2. Comparisation of the computed and the measured spectrum of methyltrimethoxy silane. The similarity between the spectra is good.

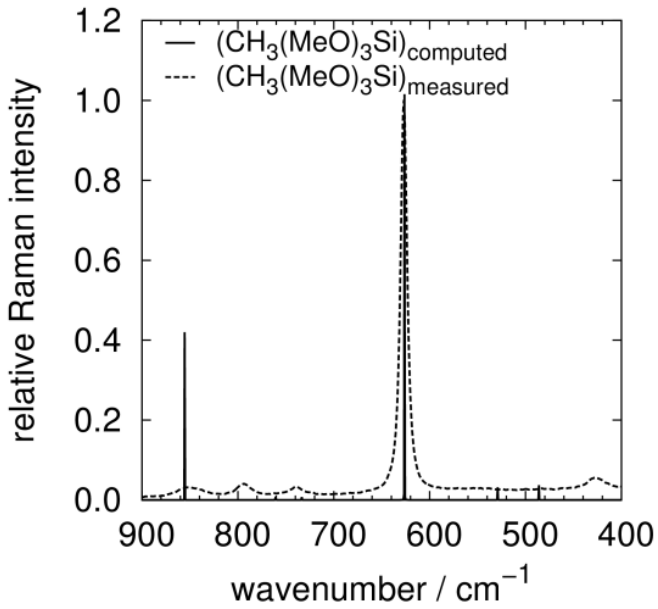

Figure S3. Comparisation of the computed and the measured spectrum of methyltrimethoxy silane between 900 and 400 cm^{-1}. The computed data are shifted by only +100 cm^{-1}. The similarity between the spectra is good.

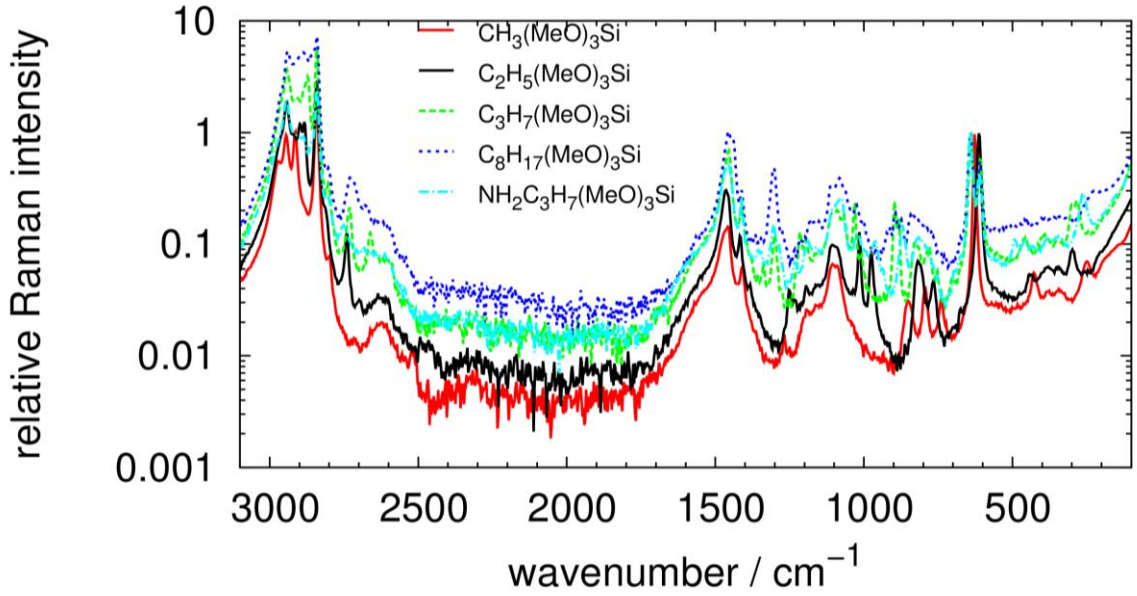

Figure S4. Raman spectra of the methoxysilanes.

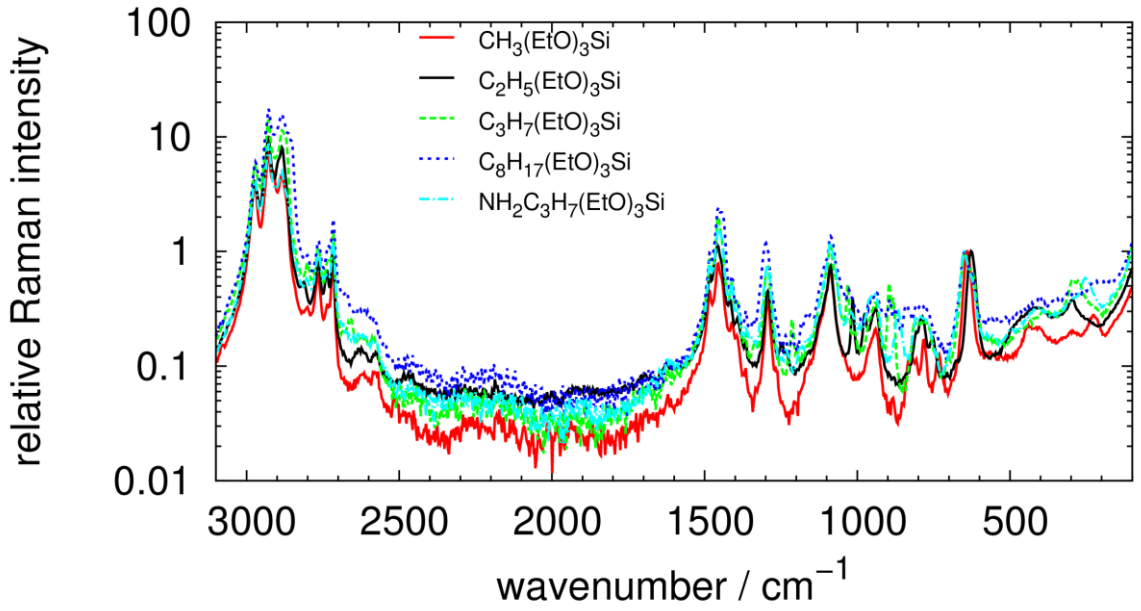

Figure S5. Raman spectra of the ethoxysilanes.

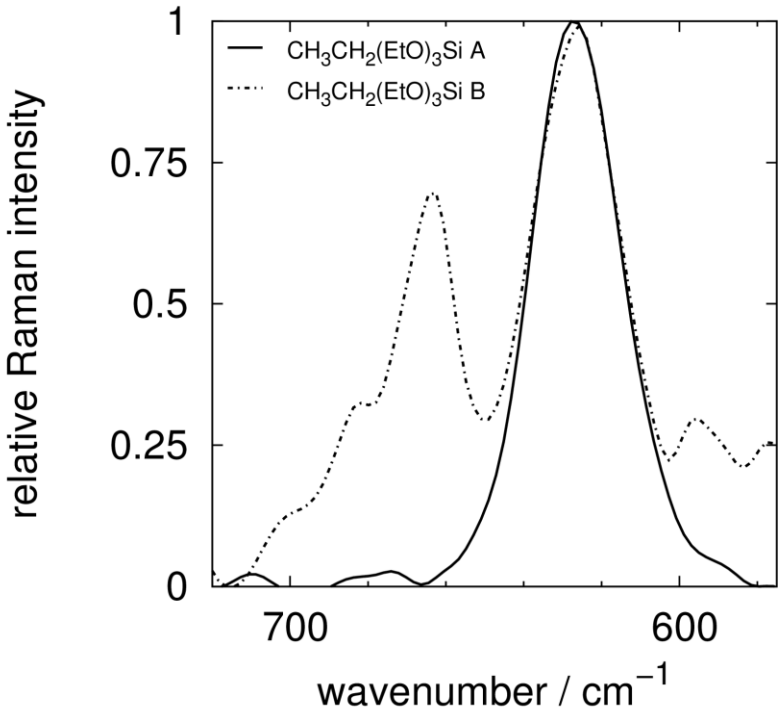

Figure S6. Selected spectra of the hydrolysis of $CH_3CH_2(OEt)_3Si$ with 2.9 mol% of water after different times (t_0=A, t_1=B). Quantitative interpretations are hardly to obtain due to scattering aspects. Three additional vibrational bands > 640 cm^{-1}, which are attributed to the hydroxylation states, are clearly recognisable.

Table S1. Boundary points for the numerical integration by OLUPS 2.6, Bruker Optics, Eislingen, Germany.

abbreviation	**silane vibration [cm^{-1}]**	**siloxane total vibration**	**siloxane 1 vibration**
Me()/a	680.46	599.95	599.95
	599.95	457.39	560.76
Et()	680.46	581.22	581.22
	581.22	438.25	550.52
Pr()	692.17	592.39	592.2
	592.39	449.42	561.29
Oc()/a	680.62	591.26	591.31
	591.31	448.25	560.76