



Supplementary Information

The Photodynamic Properties and the Genotoxicity of Heat-Treated Silicalite-1 Films

Ivan Jirka ^{1,*}, Ivana Kopová ², Pavel Kubát ¹, Edyta Tabor ¹, Lucie Bačáková ², Milan Bouša ¹ and Petr Sajdl ³

- ¹ J. Heyrovský Institute of Physical Chemistry of the Czech Academy of Sciences, v.v.i, Dolejškova 3, Prague 8, 182 23, Czech Republic; pavel.kubat@jh-inst.cas.cz (P.K.); Edyta.Tabor@jh-inst.cas.cz (E.T.); Milan.Bousa@jh-inst.cas.cz (M.B.)
- ² Institute of Physiology of the Czech Academy of Sciences, v.v.i., Vídeňská 1083, Prague 4, 142 20, Czech Republic; ivana.kopova@biomed.cas.cz (I.K.); Lucie.Bacakova@fgu.cas.cz (L.B.)
- ³ Power Engineering Department, University of Chemistry and Technology, Technická 3, Prague 6, 166 28, Czech Republic; Petr.Sajdl@vscht.cz
- * Correspondence: ivan.jirka@jh-inst.cas.cz



Figure S1. Chromatograms obtained by DTD-GC-MS analysis of *SC-500*: naphthalene (A), phenanthrene and anthracene (B), fluorene (C), fluoranthene and pyrene (D). The top in every panel: sample before evacuation, middle: sample evacuated at RT, bottom: standard (Supelco).



Figure S2. Mass spectrum of hydrocarbon fractions of the chloroform extract of SC-500.



Figure S3. Chromatogram of hydrocarbon fractions of the chloroform extract of sample *SC-500* (panel A) compared with the standard mixture of *n*-alkanes (panel B).



Figure S4. FTIR spectra of the sample *SC-500* (*A*) and *SF-AS*, *SF-500* (*B*).



Figure S5. Overtone region of infrared absorption spectra of *SC-500* (top) and *SF-500* (bottom). The spectra of hydrated and evacuated samples at RT and 250°C are distinguished.



Figure S6. Survey photoelectron spectrum of the sample *SF-500* composed solely from Si, O, C and in the case of non-calcinated sample also from N.