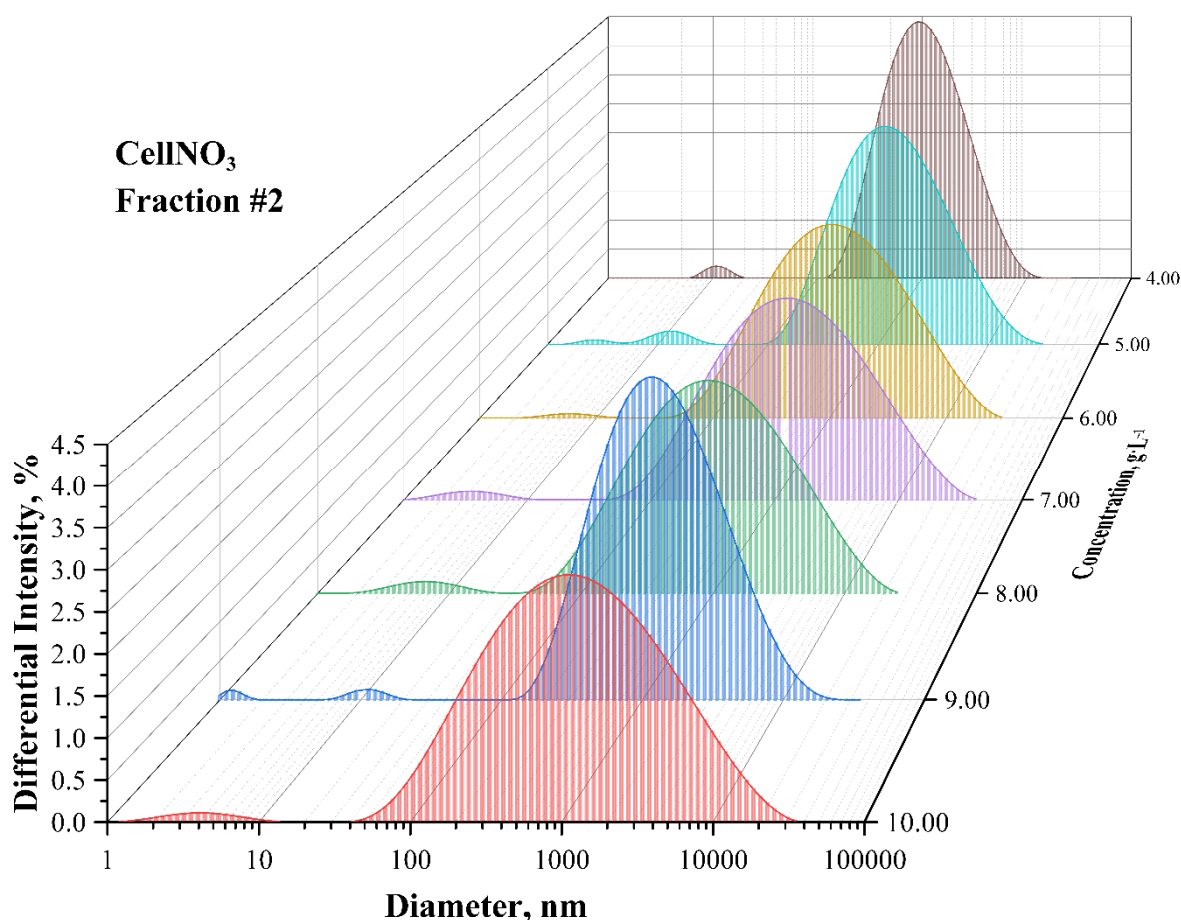


# Special aspects of nitrocellulose molar mass determination by dynamic light scattering

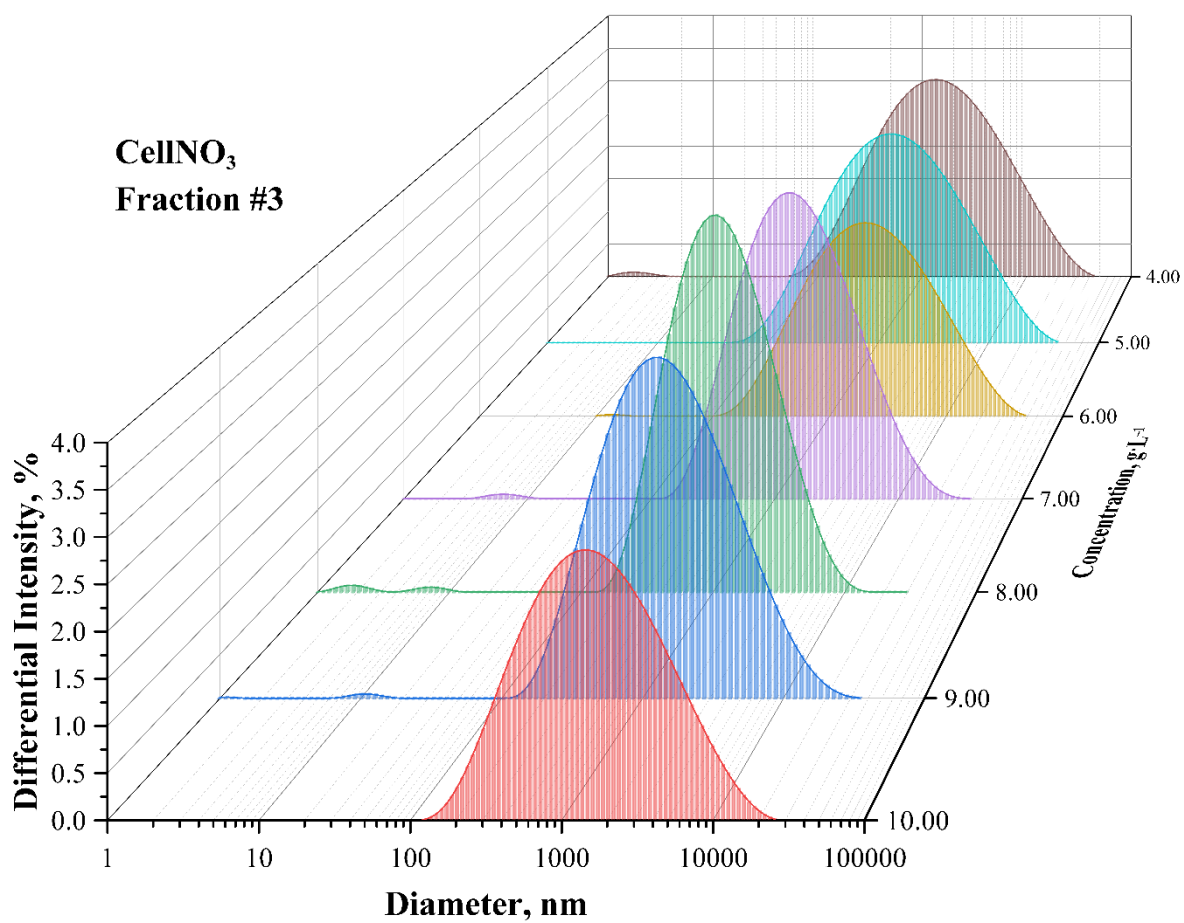
Roman Solovov\*, Anfisa Kazberova and Boris Ershov

Frumkin Institute of Physical Chemistry and Electrochemistry of the Russian Academy of Sciences, 40 Obruchev Street, Moscow, 117342 Russia; perevoznikova1723@mail.ru (A.K.); ershov@ipc.rssi.ru (B.E.)

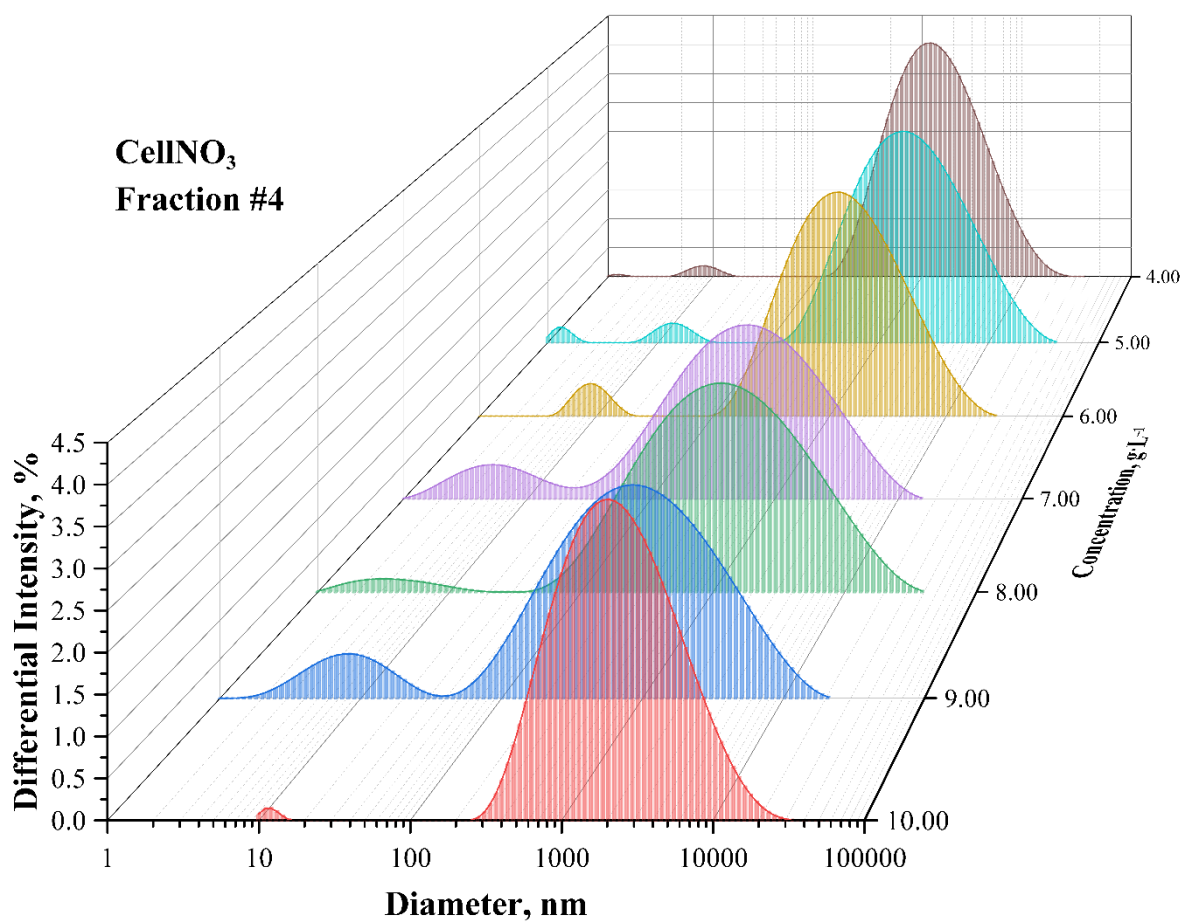
\* Correspondence: roman\_solovov@mail.ru



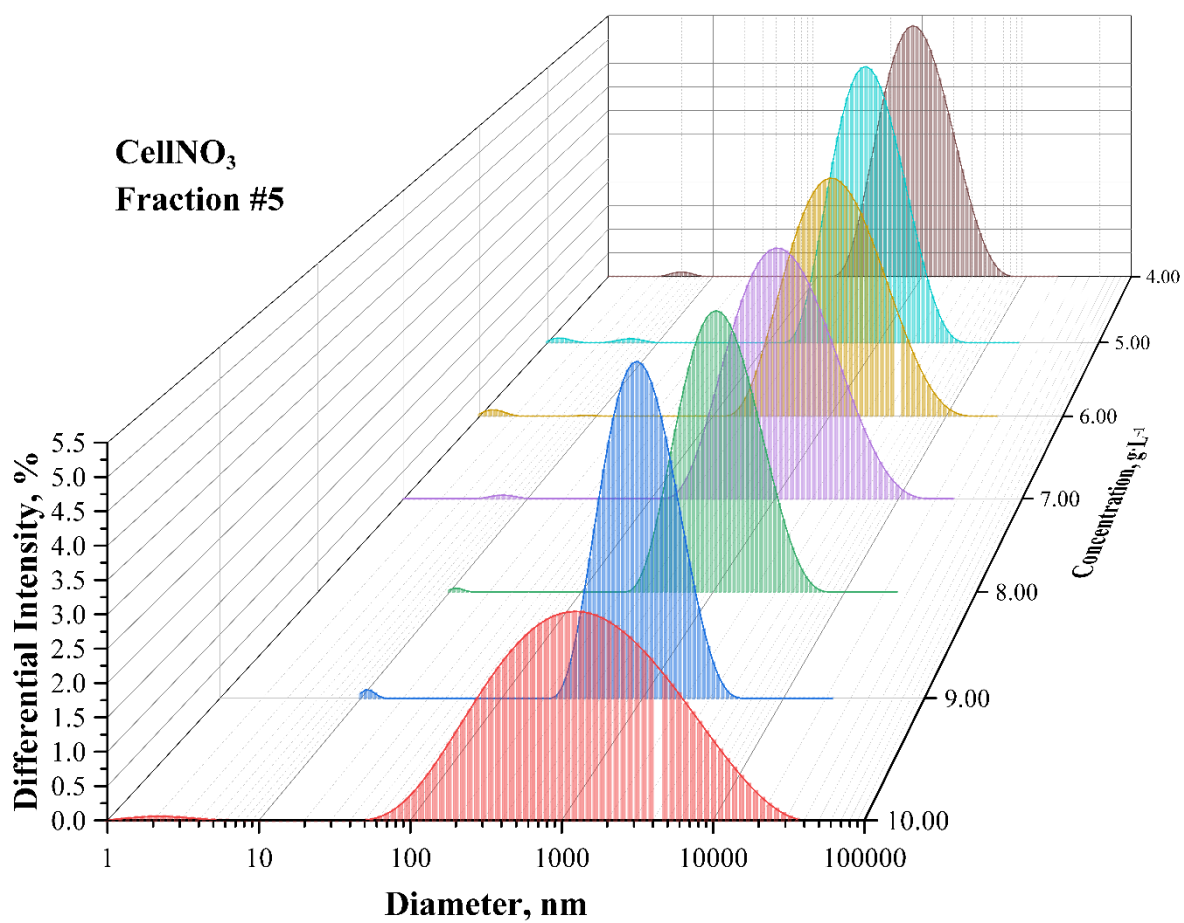
**Figure S1.** Scattering intensity distribution histograms vs the hydrodynamic diameter for different concentrations solutions of a certain fraction of nitrocellulose (Fraction №2). The data is obtained by the dynamic light scattering method.



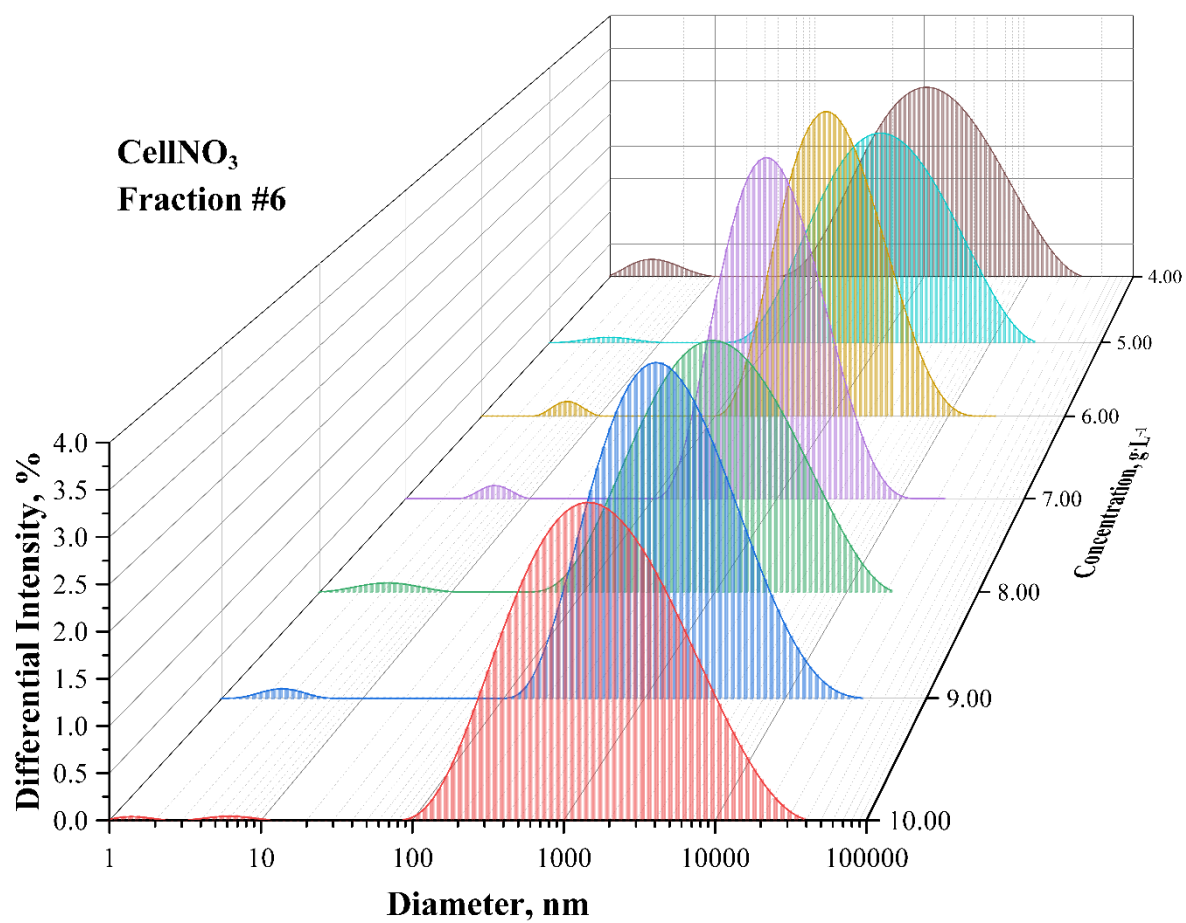
**Figure S2.** Scattering intensity distribution histograms vs the hydrodynamic diameter for different concentrations solutions of a certain fraction of nitrocellulose (Fraction №3). The data is obtained by the dynamic light scattering method.



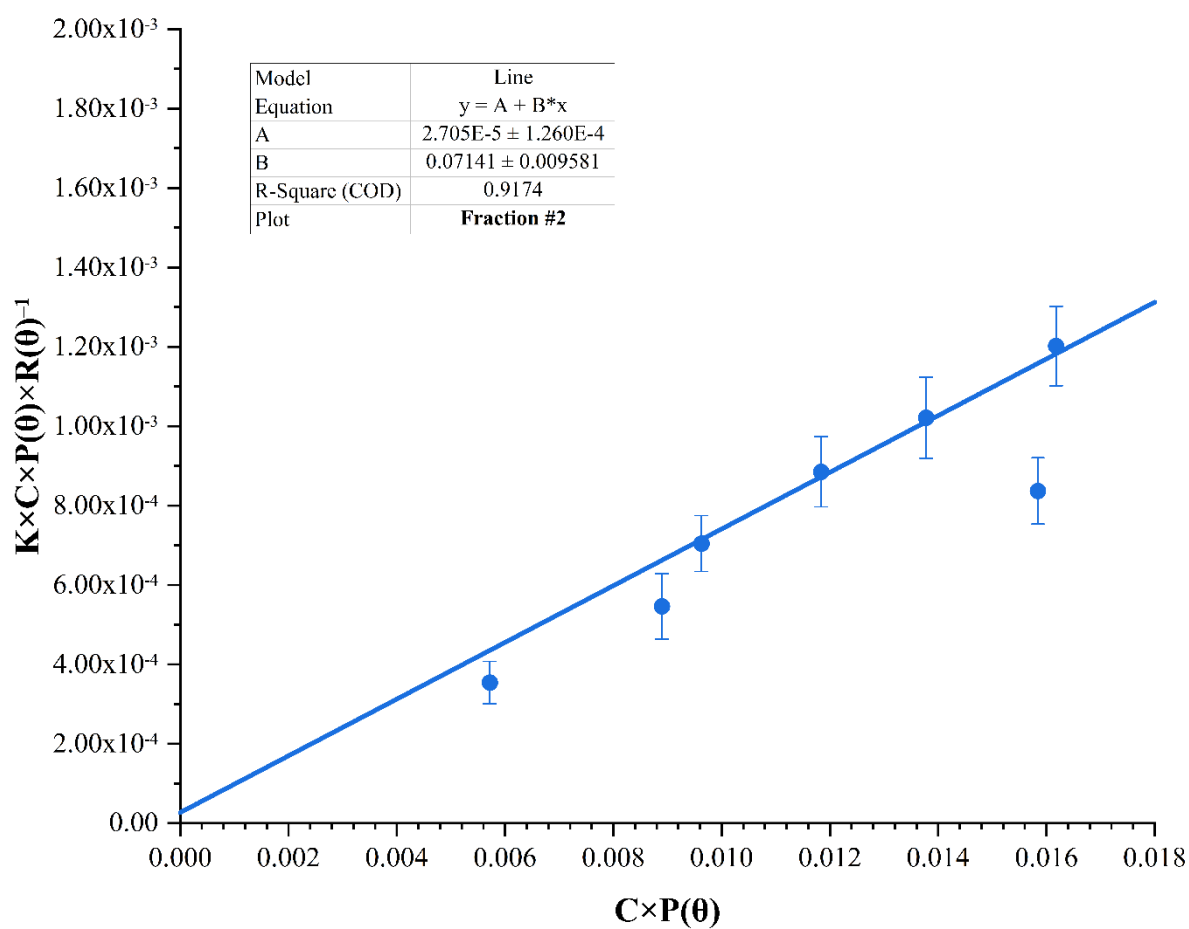
**Figure S3.** Scattering intensity distribution histograms vs the hydrodynamic diameter for different concentrations solutions of a certain fraction of nitrocellulose (Fraction №4). The data is obtained by the dynamic light scattering method.



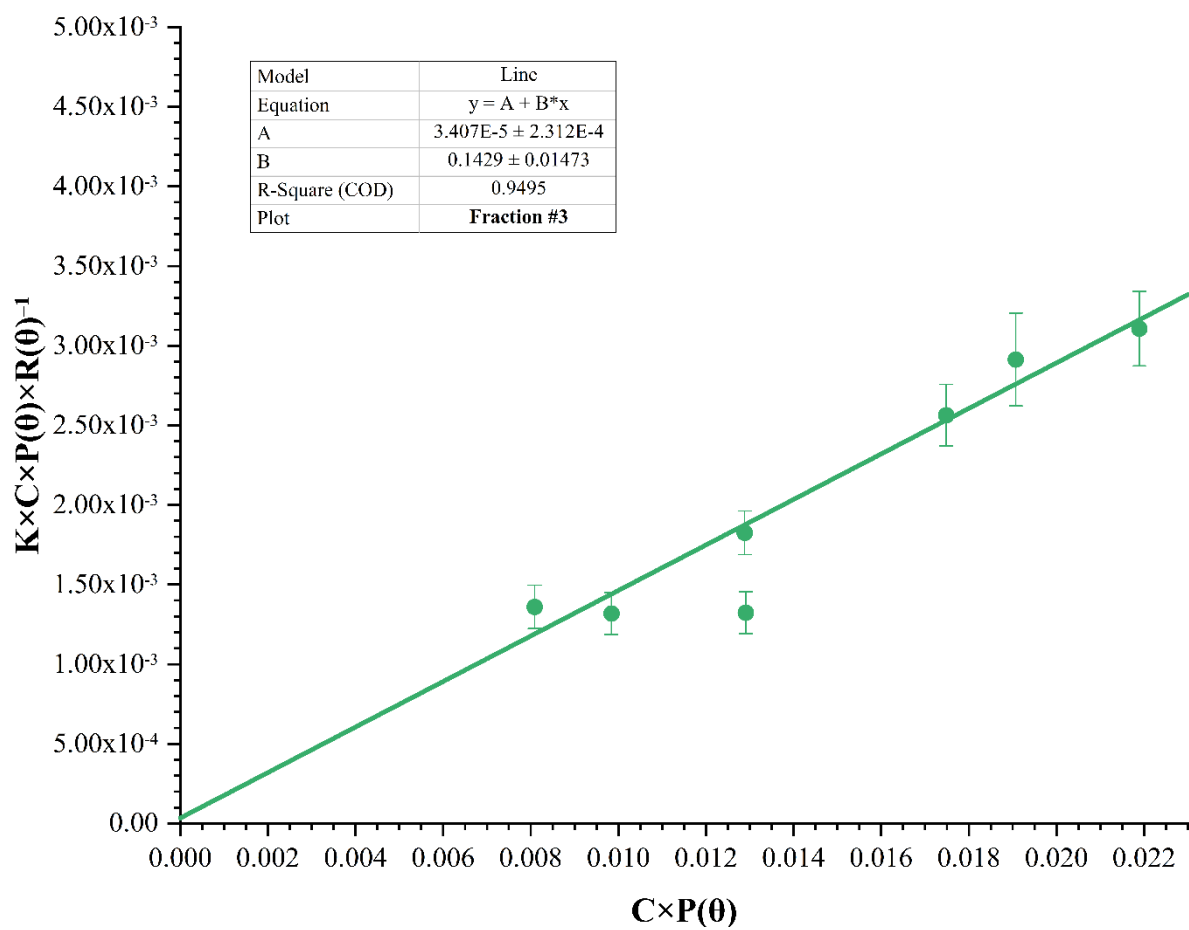
**Figure S4.** Scattering intensity distribution histograms vs the hydrodynamic diameter for different concentrations solutions of a certain fraction of nitrocellulose (Fraction №5). The data is obtained by the dynamic light scattering method.



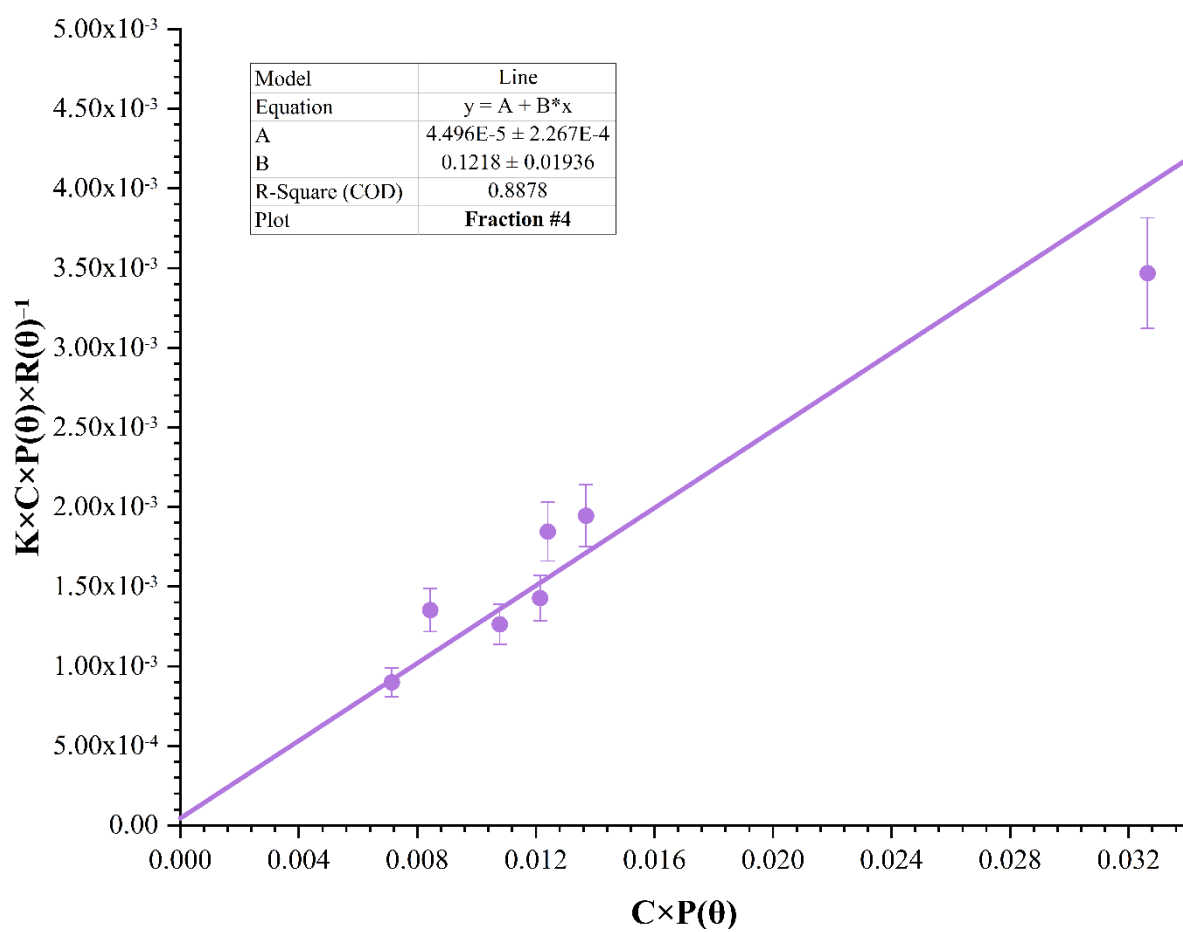
**Figure S5.** Scattering intensity distribution histograms vs the hydrodynamic diameter for different concentrations solutions of a certain fraction of nitrocellulose (Fraction №6). The data is obtained by the dynamic light scattering method.



**Figure S6.** Dependence of specific viscosity  $\eta_{sp}$  on nitrocellulose mass concentration  $C$  (fraction №2).

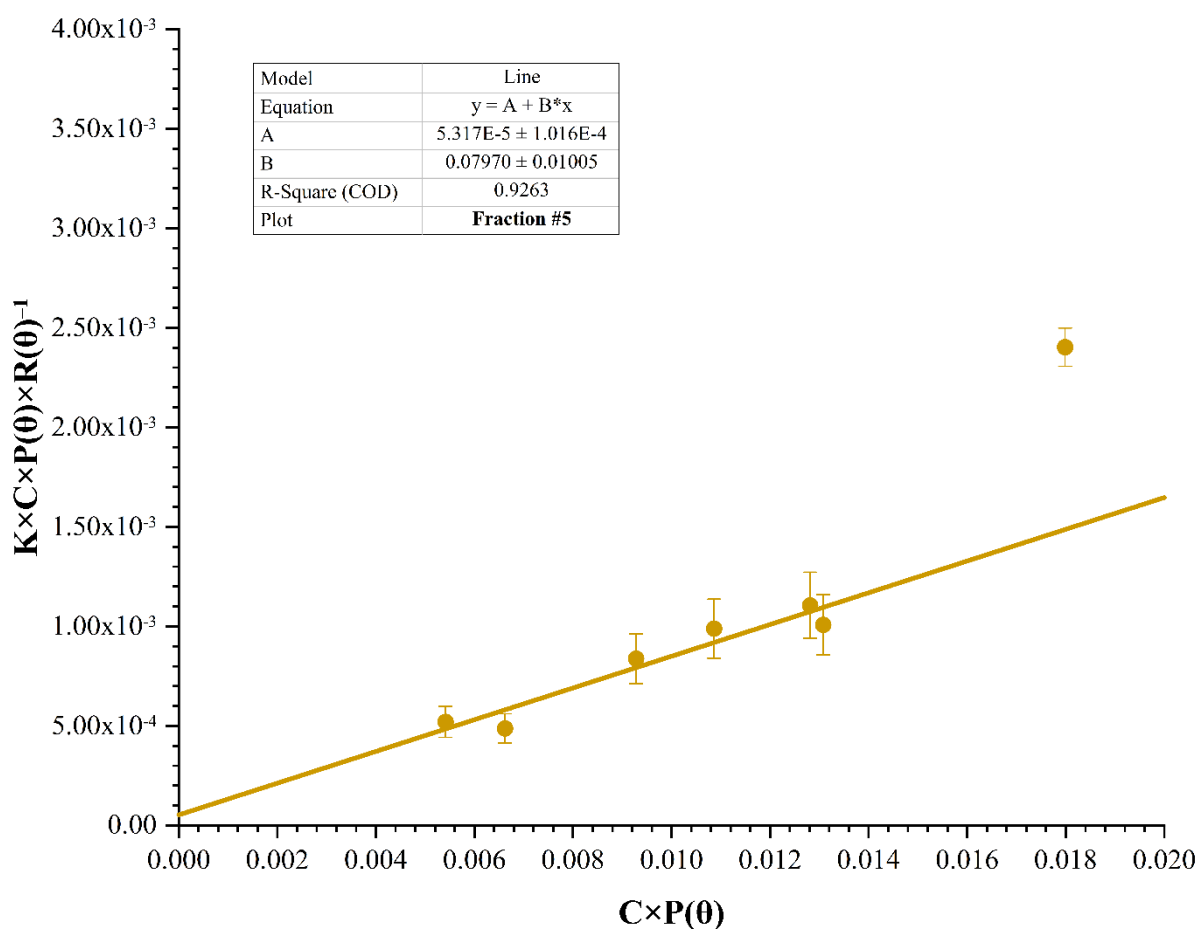


**Figure S7.** Dependence of specific viscosity  $\eta_{sp}$  on nitrocellulose mass concentration C (fraction №3).

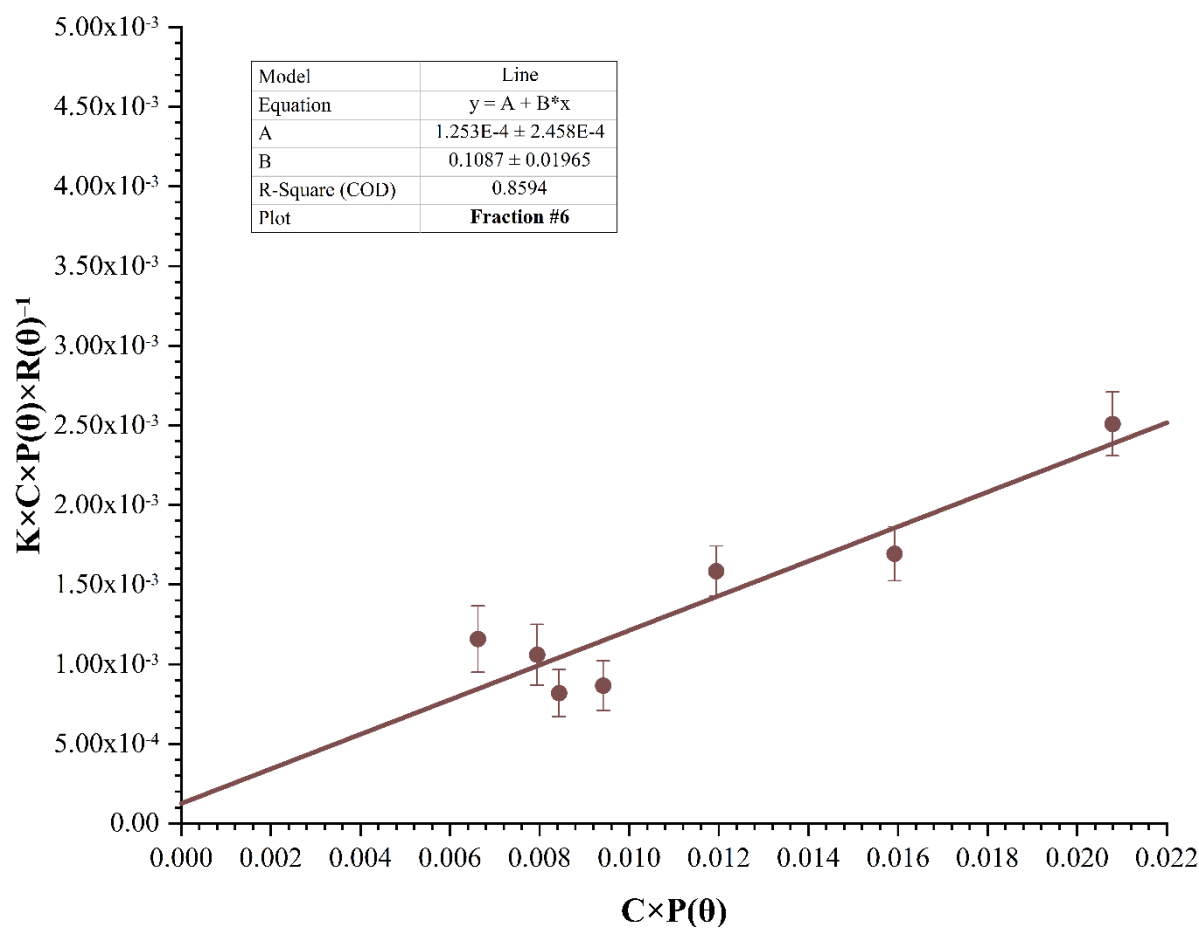


**Figure S8.** Dependence of specific viscosity  $\eta_{sp}$  on nitrocellulose mass concentration C (fraction №4).

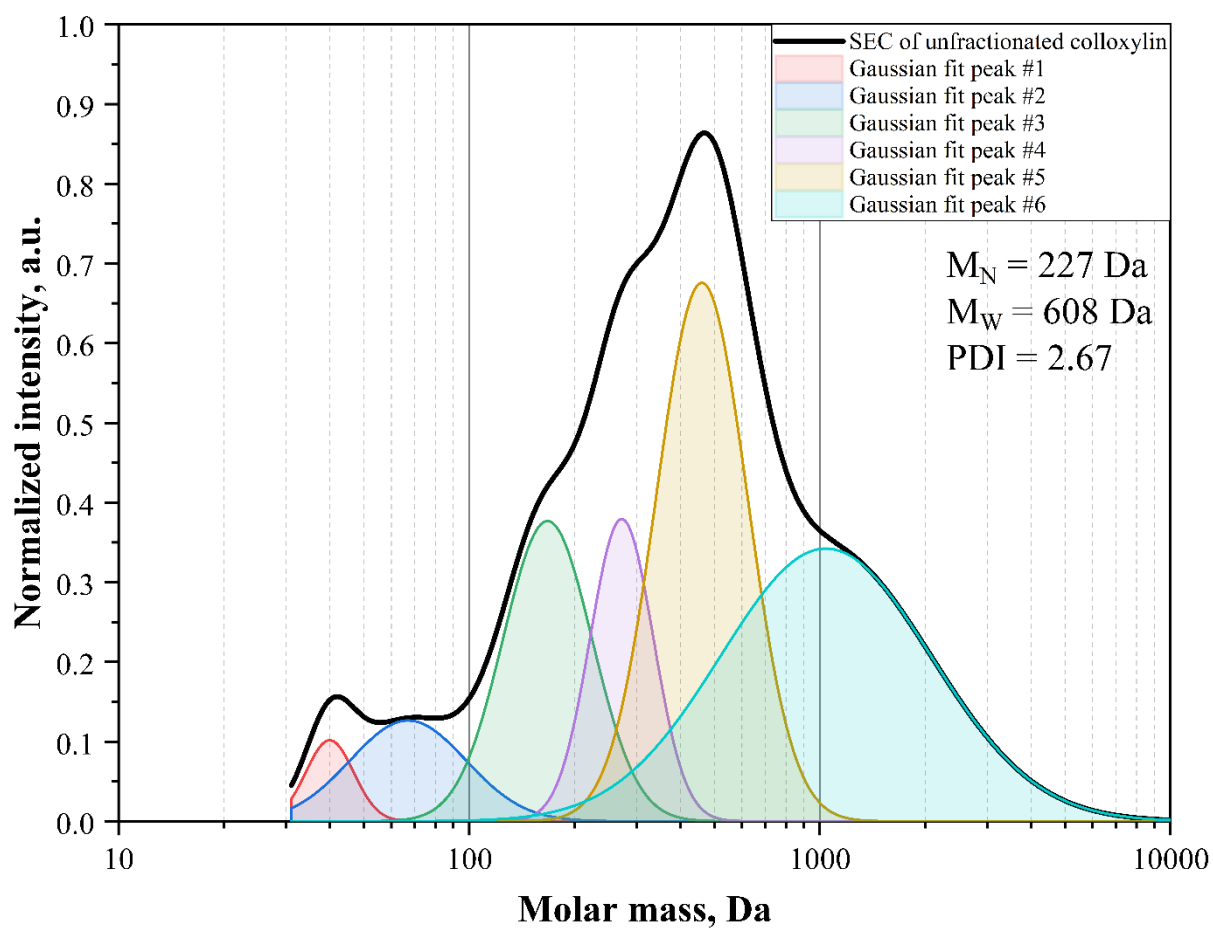




**Figure S9.** Dependence of specific viscosity  $\eta_{sp}$  on nitrocellulose mass concentration C (fraction №5).



**Figure S10.** Dependence of specific viscosity  $\eta_{sp}$  on nitrocellulose mass concentration  $C$  (fraction №6).



**Figure S11.** Size exclusion chromatography curves (black line) normalized to unit area of unfractionated colloxylin and deconvolution of data by Gaussian fitting (color curves).