Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.


Supplementary Electronic Information

# Modulating amyloid fibrillation in a minimalist model peptide by intermolecular disulfide chemical reduction

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**Solid Phase Synthesis Standard Protocol**

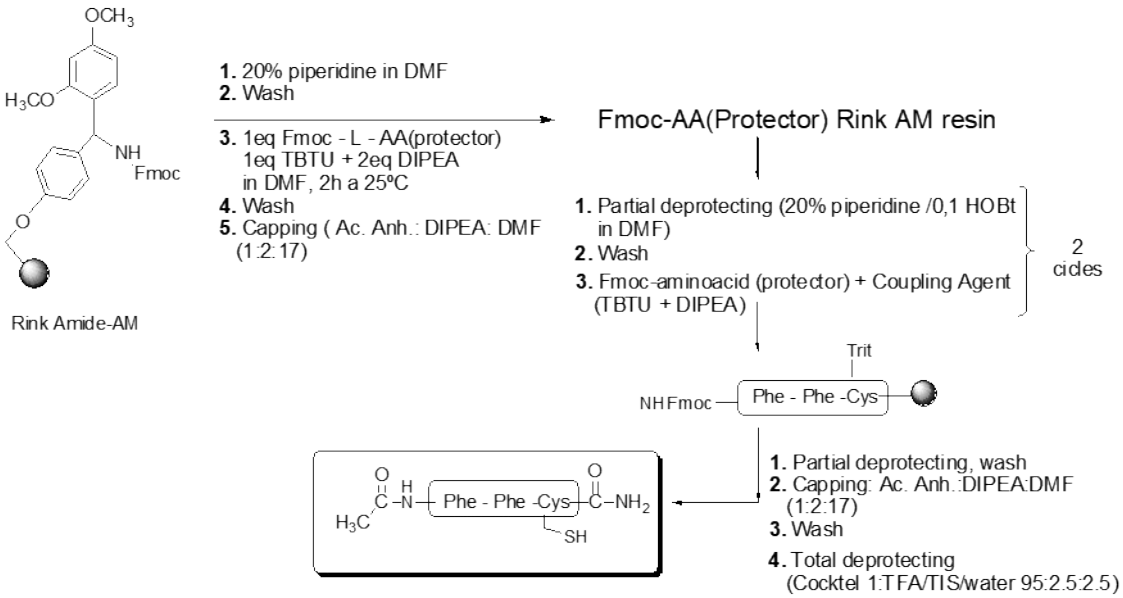


**Fig. S1** Schematic solid phase synthetic procedure of Ac-FFC-$NH_2$.

**Nuclear Magnetic Resonance Spectrum**

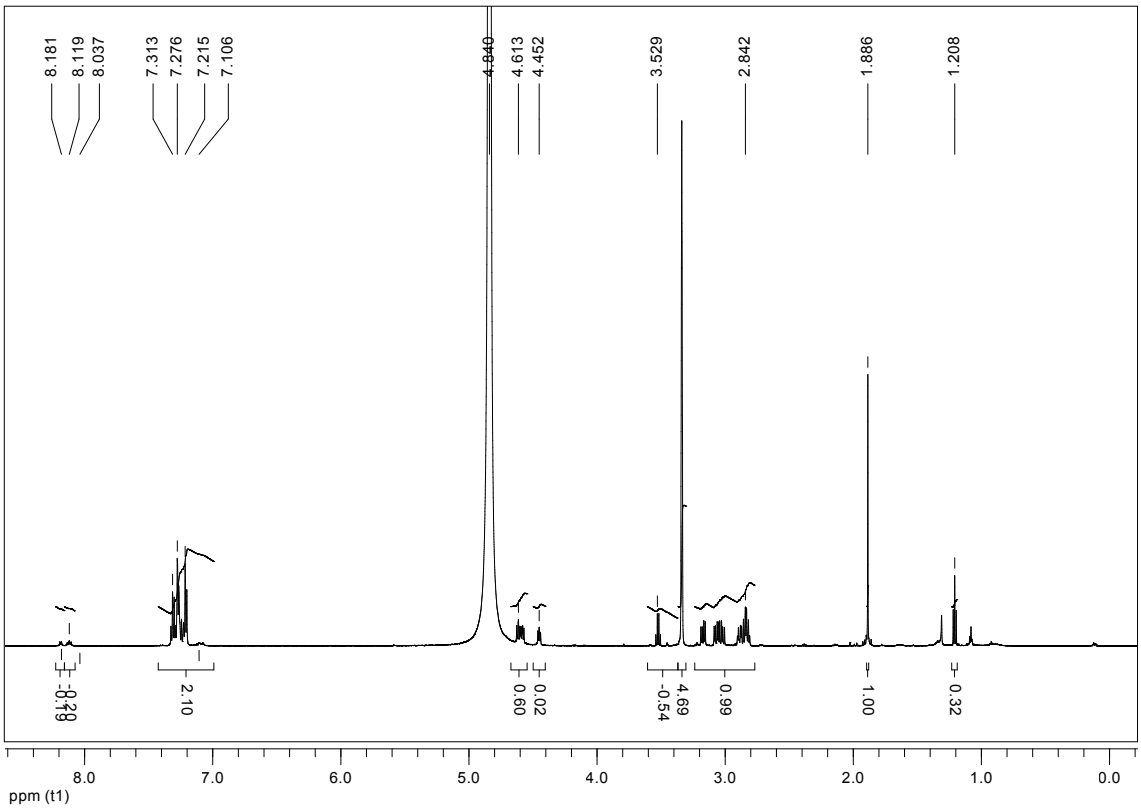


**Fig. S2** $^{1}$H-NMR Ac-FFC-$NH_2$ in Metanol-$d_4$.

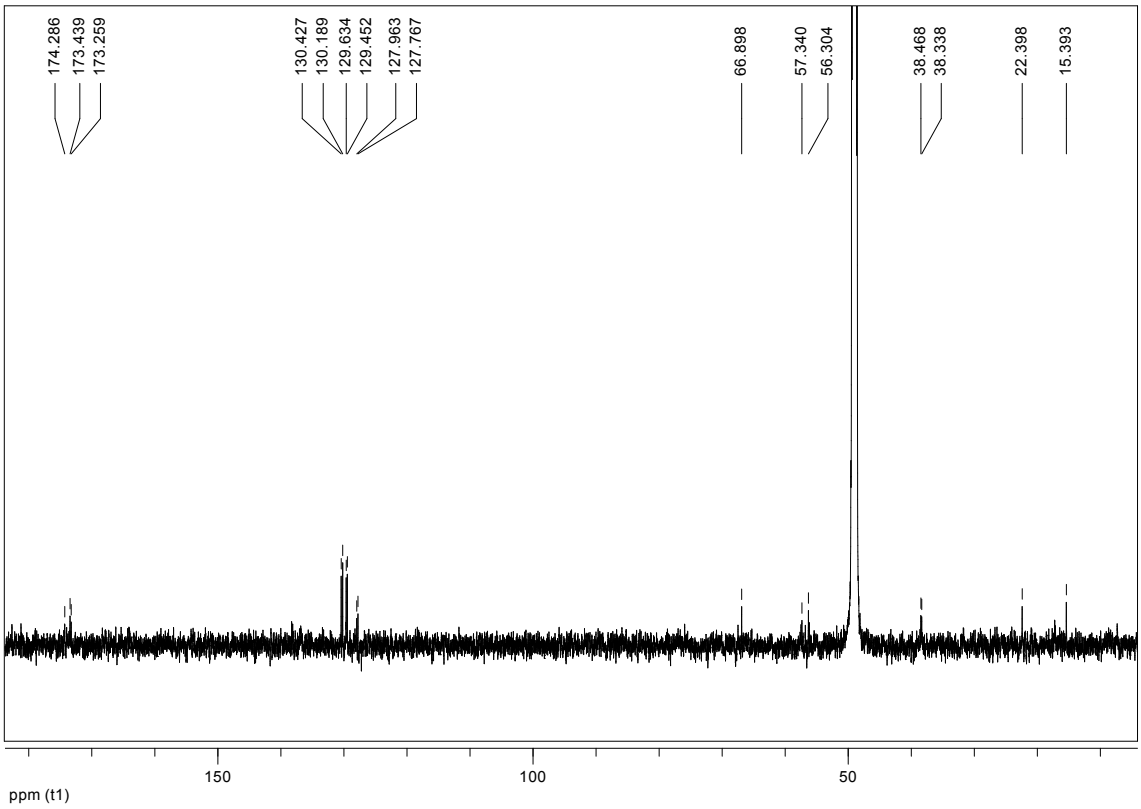


**Fig. S3** $^{13}$C-NMR of Ac-FFC-$NH_2$ in Metanol-$d_4$

**High Resolution-ESI Mass Spectrometry**

Universität Bielefeld

**Fakultät für Chemie - Organische Chemie I**
**Abteilung Massenspektrometrie F02-217**

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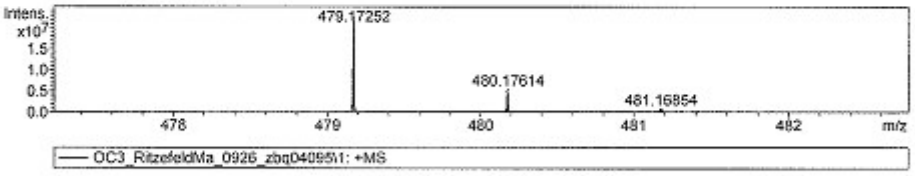
33501 Bielefeld

☎ 0521 - 106-2108

# Accurate Mass Measurement

| | |
|---|---|
| **Sample Name :** | zbq04095 |
| **Sample Supplier :** | Ritzefeld, Markus **Group :** OC3 |
| **Sample Filename :** | S:\APEX\aktuell\OC3\OC3_RitzefeldMa_0926_zbq04095\ |
| **Instrument :** | Bruker FT-ICR : APEX III (7.O T) |
| **Ionisation Method :** | ESI |
| **Matching Method :** | HR with external calibration |
| **Resolution :** | > 20000 |
| **Substance Inlet :** | ESI nano - Spray Emitter |




| | | | |
|---|---|---|---|
| **Measured Ion Mass(es) :** | 479,17252 | **Deviation [mmu] :** | 0,17 |
| **Calculated Ion Mass(es) :** | 479,17235 | **Deviation [ppm] :** | 0,36 |

**Potential Molecular Formula :** C23H28N4O4S1Na+

Comment : Measured and calculated masses are true ion masses, taking into account the mass of lost (or added) electrons.

Bielefeld, 01.10.2012

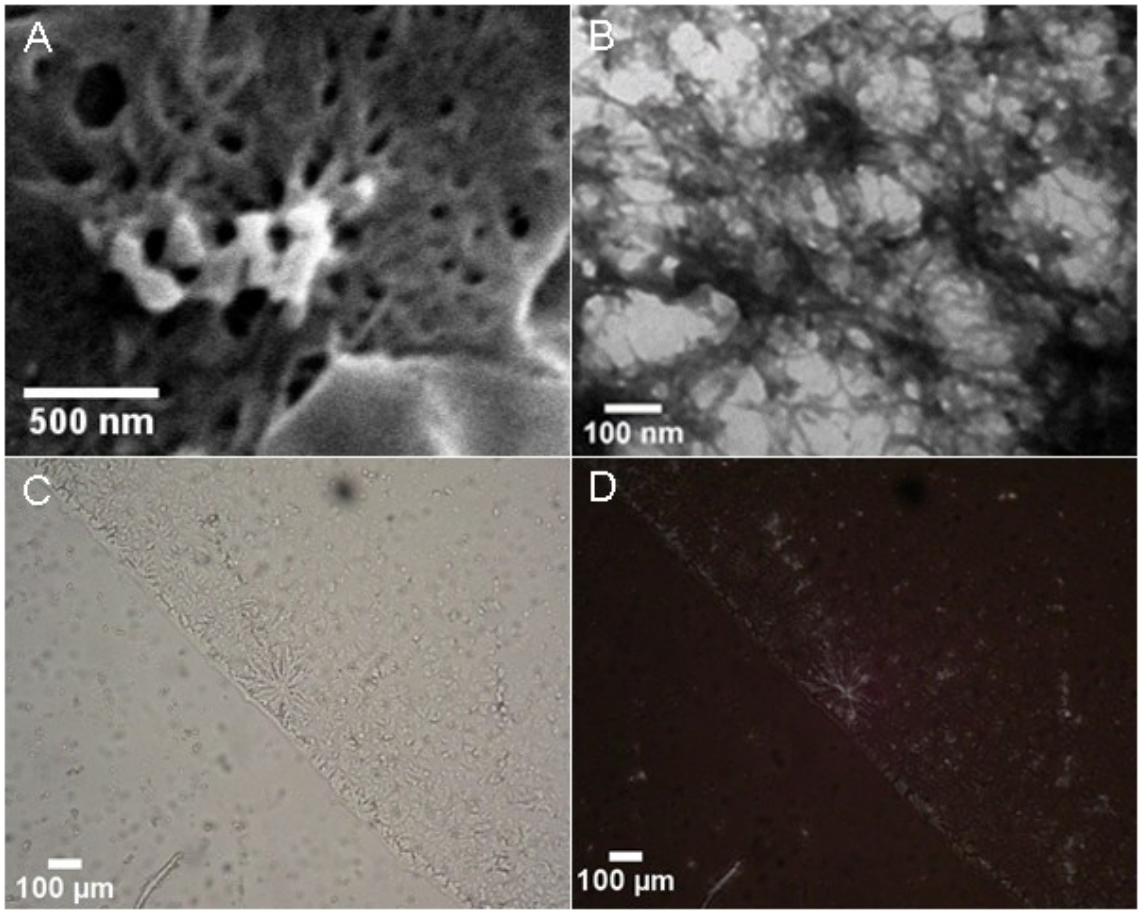



**Fig. S4** Images of Ac-FFC-$NH_2$ supramolecular organisation at a higher concentration (0.436 mM). A) SEM; B) TEM; C) Bright field optical microscopy and D) Polarized optical microscopy showing birrefringence between crossed polarizers, which demonstrates crystallinity along the fibrils' long axis.