



Journal Article

Line-Broadening in Low-Temperature Solid-State NMR Spectra of Fibrils

Author(s):

Bauer, Thomas; Dotta, Claudio; Balacescu, Livia; Gath, Julia; Hunkeler, Andreas; Böckmann, Anja; Meier, Beat H.

Publication Date:

2017-01

Permanent Link:

<https://doi.org/10.3929/ethz-b-000128542> →

Originally published in:

Journal of Biomolecular NMR 67(1), <http://doi.org/10.1007/s10858-016-0083-4> →

Rights / License:

[In Copyright - Non-Commercial Use Permitted](#) →

This page was generated automatically upon download from the [ETH Zurich Research Collection](#). For more information please consult the [Terms of use](#).

SUPPLEMENTARY MATERIAL FOR:

Line-Broadening in Low-Temperature Solid-State NMR Spectra of Fibrils

Thomas Bauer^a, Claudio Dotta^a, Livia Balacescu^a, Julia Gath^a, Andreas Hunkeler^a, Anja Böckmann^{b*},
Beat H. Meier^{a*}

^a ETH Zurich, Physical Chemistry, Vladimir-Prelog-Weg 2, CH-8093 Zurich, Switzerland

^b Institut de Biologie et Chimie des Protéines, UMR 5086 CNRS, Université de Lyon 1, 7 passage du
Vercors, 69367 Lyon, France

Correspondence to: a.boeckmann@ibcp.fr (AB), beme@ethz.ch (BHM)

Table S1: Overview about experimental parameters used for NMR spectra

Experiment	¹ H spectra (Figure 2a)	¹ H spectra (Figure 2b)	DREAM
MAS frequency/ kHz	40.0	40.0	40.0
Field/ T	14.1	14.1	14.1
Transfer I		HC-CP	HC-CP
¹ H field/ kHz		100	100
X field/ kHz		60	60
Shape		Tangent ¹ H $\Delta_{rf} = 40$ kHz	Tangent ¹ H $\Delta_{rf} = 40$ kHz
Time/ ms		0.5	4
Transfer II			DREAM
¹ H field/ kHz			170 (XiX)
¹³ C field/ kHz			20
Shape			Tangent, $\Delta_{rf} =$ 16 kHz
1			100
Time/ ms			4
t1 increments			2048
Sweep width (t1)/ kHz			100
Acquisition time (t1)/ ms		20.48	10.24
t2 increments	64k	2048	3072
Sweep width (t2)/ kHz	250	150	100
Acquisition time (t2)/ ms	131	20.48	15.26
¹ H XiX decoupling power/ kHz		100	100
Interscan delay/ s		3	3
Number of scans	1	1024	16
Measurement time/ h		0.8	27
Zero-fill to	-	4096	t ₁ : 4k t ₂ : 8k
Window Function	EM (100 Hz)	EM (10 Hz)	t ₁ : QSINE 2.2 t ₂ : QSINE 2.2