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Correction: A narrow amide I vibrational band observed by sum frequency generation spectroscopy reveals highly ordered structures of a biofilm protein at the air/water interface

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Correction for 'A narrow amide I vibrational band observed by sum frequency generation spectroscopy reveals highly ordered structures of a biofilm protein at the air/water interface' by Zhuguang Wang *et al.*, *Chem. Commun.*, 2016, **52**, 2956–2959.

In follow-up studies by the authors, it was found that due to an inaccuracy in calibration of spectrometer, there should be a blue-shift of 7 cm^{-1} in the peak positions of the SFG spectra published in this article. The new peak positions allowed more straightforward spectral assignments of the reported SFG spectra based on the standard amide I frequencies of various protein secondary structures.^{1,2} The chiral SFG spectrum of BslA at pH = 7.4 (Fig. 1D) is now assigned to antiparallel β -sheet B_2 mode (1637 cm^{-1}) and β -turn (1663 cm^{-1}). The peak assignments in the achiral spectra (Fig. 1C and E) remain unchanged: β -turn (1676 cm^{-1}) and antiparallel β -sheet B_1 mode (1692 cm^{-1}). The recalibrated spectra (Fig. 1C–F) and fitting parameters are provided below. The conclusion of the studies reported in the article remains unaffected.

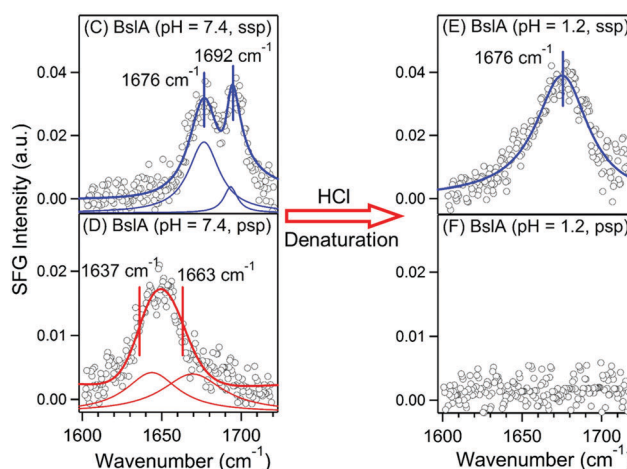


Fig. 1 (C) Achiral (ssp) and (D) chiral (psp) SFG spectra of BslA at the air/water interface at pH 7.4 with a concentration of $6\text{ }\mu\text{M}$. (E) Achiral (ssp) and (F) chiral (psp) SFG spectra of BslA at pH 1.2 with a bulk concentration of $6\text{ }\mu\text{M}$.

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Table 1 Fitting parameters of achiral and chiral SFG spectra for BslA

Parameters	Amide I (achiral-ssp) Fig. 1C (pH 7.4)		
	χ_{NR} (a.u.)		0.020 ± 0.005
ω (cm^{-1})	1675.5 ± 0.7		1692.3 ± 0.4
A (a.u.)	1.99 ± 0.24		0.53 ± 0.16
Γ (a.u.)	11.75 ± 1.29		5.25 ± 1.09
Parameters	Amide I (chiral-ssp) Fig. 1D (pH 7.4)		Amide I (achiral-ssp) Fig. 1E (pH 1.2)
	χ_{NR} (a.u.)	0.056 ± 0.004	
ω (cm^{-1})	1636.8 ± 2.8	1662.5 ± 3.9	1675.6 ± 0.8
A (a.u.)	1.71 ± 0.87	-1.97 ± 0.87	3.97 ± 0.10
Γ (a.u.)	19.92 ± 4.78	23.35 ± 4.79	20.15 ± 0.62

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

References

- 1 L. K. Tamm and S. A. Tatulian, Infrared Spectroscopy of Proteins and Peptides in Lipid Bilayers, *Q. Rev. Biophys.*, 1997, **30**, 365–429.
- 2 A. Barth and C. Zscherp, What Vibrations Tell Us About Proteins, *Q. Rev. Biophys.*, 2002, **35**, 369–430.

