

## Supplementary Data for “A Neutron Reflectivity Study of the Interfacial and Thermal Behavior of Surface-Attached Hairpin DNA”

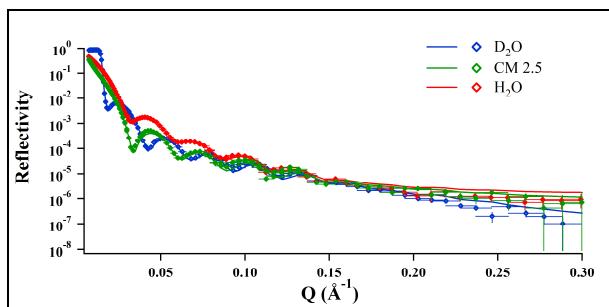
Tanja H. M. Kjällman<sup>1</sup>, Andrew J. Nelson<sup>2</sup>, Michael James<sup>2</sup>, Joseph A. Dura<sup>3</sup>, Jadranka Travas-Sejdic<sup>1,4\*</sup>, Duncan J. McGillivray<sup>5</sup>

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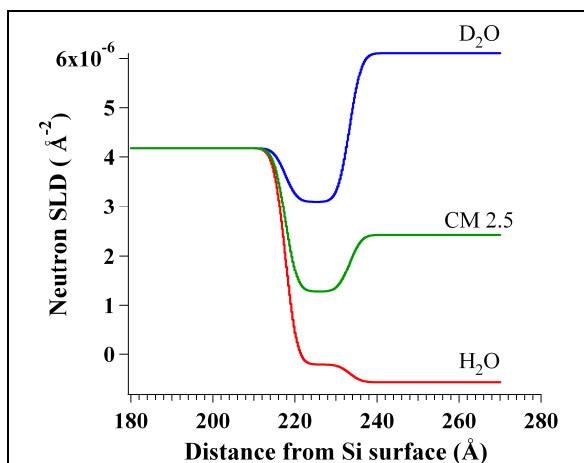
First published on the web Xth XXXXXXXXX 200X

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### Results

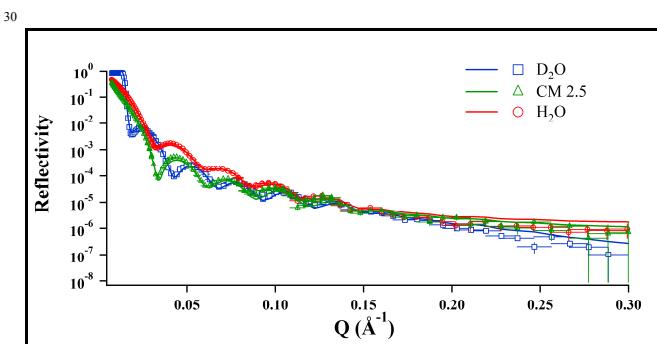


10 Figure S1. The reflectivity profiles for a monolayer of PEG, immobilised at room temperature for 1 h. The diamonds represent the experimental data and the solid lines are the fitted data for three different contrasts,  $\text{D}_2\text{O}$  (blue line/points), CM 2.5 (green line/points) and  $\text{H}_2\text{O}$  (red line/points).



20 Figure S2. The neutron scattering length density (SLD) profile for a monolayer of PEG at room temperature for 1 h. The profiles shown were derived from data measured in 10 mM PBS buffer made up in three different solvents  $\text{D}_2\text{O}$ .

(blue square), CM 2.5 (green triangle) and  $\text{H}_2\text{O}$  (red dot).



30 Figure S3. The reflectivity profiles for the PEG:HPP 10:1 mSAM, immobilised for 1 h at room temperature. The diamonds represent the experimental data and the solid lines are the fitted data. The data shown were measured in 10 mM PBS buffer made up in three different solvents  $\text{D}_2\text{O}$  (blue square), CM 2.5 (green triangle) and  $\text{H}_2\text{O}$  (red dot).

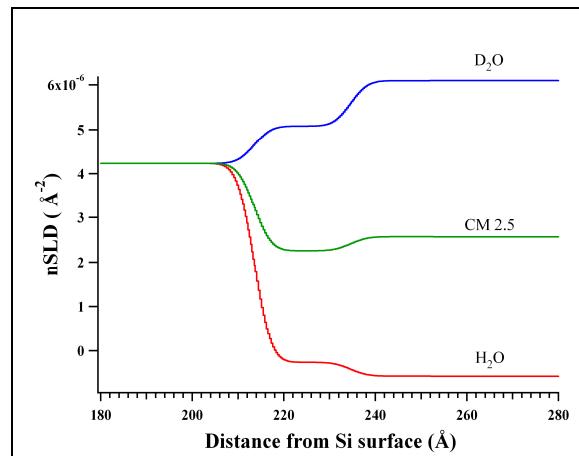


Figure S4. The neutron SLD profile for the PEG:HPP 10:1 mSAM after immobilisation for 1 h at room temperature. The profiles shown were derived from data measured in 10 mM PBS buffer made up in three different solvents: D<sub>2</sub>O (blue lines), CM 2.5 (green line) and H<sub>2</sub>O (red lines).

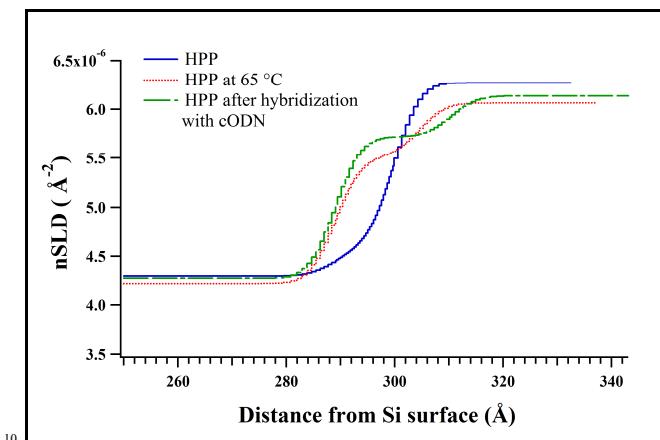


Figure S5. The magnetic SLD profile for a HPP-SAM at 22 °C (blue solid line), at 65 °C (red dotted line) and after hybridisation (for 1 h at 35 °C) with complementary target ODN (green solid-dotted line) at 22 °C. The profiles shown were derived from data measured in 10 mM PBS buffer made up in D<sub>2</sub>O for up-spin neutrons.

## Notes and references

- 1 Polymer Electronic Research Centre, The University of Auckland, Private Bag 92019, Auckland, New Zealand, Email: tanja.kjallman@gmail.com
  - 2 Bragg Institute, Building 87, Australian Nuclear Science and Technology Organisation, 1 PBM, Menai, NSW 2234, Australia
  - 3 NIST Center for Neutron Research, National Institute of Standards and Technology, 100 Bureau Drive, Gaithersburg, MD 20899, USA
  - 4 The MacDiarmid Institute for Advanced Materials and Nanotechnology, New Zealand
  - 5 Department of Chemistry, The University of Auckland, Private Bag 92019, Auckland, New Zealand
- \* Corresponding author, E-mail address: j.travas-sejdic@auckland.ac.nz, Tel: 64 9 373 7599; Fax: +64 9 373 7499