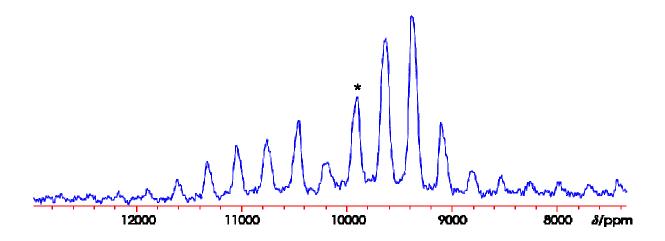
## **ELECTRONIC SUPPLEMENTARY INFORMATION**

## Combining Oximes with Azides to Create a Novel 1-D [NaCo<sup>III</sup><sub>2</sub>] System: Synthesis, Structure and Solid-State NMR

Thushan Pathmalingam, <sup>a</sup> Fatemah Habib, <sup>a</sup> Cory M. Widdifield, <sup>a</sup> Francis Loiseau, <sup>a</sup> Tara J. Burchell, <sup>a</sup> Serge I. Gorelsky, <sup>b</sup> André M. Beauchemin, <sup>a,b</sup> David L. Bryce, \*<sup>a,b</sup> Muralee Murugesu\*<sup>a,b</sup>



**Figure S1.** <sup>59</sup>Co MAS SSNMR spectrum of **1**, acquired at 21.1 T and  $v_{MAS} = 60$  kHz. The centreband is denoted with an asterisk. The experimental position of centre of gravity of the centreband is located at the position ( $\delta_{cg} = 9912(5)$  ppm) that would be expected using the  $C_Q(^{59}\text{Co})$ ,  $\eta_Q$ , and  $\delta_{iso}$  values quoted in the manuscript, after adjusting for the known second-order quadrupolar shift,  $\delta_Q$ , which is equal to  $-(1/392)(C_Q/v_0)^2(1+(\eta_Q)^2/3) = -60$  ppm. (i.e., the centre of gravity of the centreband,  $\delta_{cg}$ , is calculated to be located at  $\delta_{iso} + \delta_Q = 9975 - 60 = 9915$  ppm, in excellent agreement with observations).

<sup>&</sup>lt;sup>a</sup>Department of Chemistry, University of Ottawa, 10 Marie-Curie, Ottawa, ON, K1N6N5, Canada. <sup>b</sup>Centre for Catalysis Research and Innovation, 30 Marie-Curie, Ottawa, ON, K1N6N5, Canada. E-mail: m.murugesu@uottawa.ca; dbryce@uottawa.ca; Tel: +1 613 562 5800-2733.