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**Electrical Supporting Information** 

## A novel approach to characterization of a relatively unstable intercalation compound under ambient conditions: revisiting a kaolinite-acetone intercalation compound

Shingo Machida<sup>a,b</sup>, Régis Guégan<sup>c</sup> and Yoshiyuki Sugahara<sup>b,d\*</sup>

 <sup>a</sup>Department of Material Science and Technology, Faculty of Industrial Science and Technology, Tokyo University of Science, 6-3-1 Niijuku, Katsushika-ku, Tokyo 125-8585, Japan
<sup>b</sup>Kagami Memorial Institute for Materials Science and Technology, Waseda University, 2-8-26 Nishiwaseda, Shinjuku-ku, Tokyo 169-0051, Japan

<sup>c</sup>Global Center for Science and Engineering, Waseda University, 3-4-1 Okubo, Shinjuku-ku, Tokyo 169-8555, Japan <sup>d</sup>Department of Applied Chemistry, School of Advanced Science and Engineering, Waseda University, 3-4-1 Okubo, Shinjuku-ku, Tokyo 169-8555, Japan **Figures S** 



Figure S1. FTIR spectra in the 3800-2800 cm<sup>-1</sup> range of (a) Acetone/Kaol-NMF\_paste\_to\_dried, (b) Acetone/Kaol-NMF\_paste and (c) acetone.



Figure S2. The <sup>13</sup>C NMR spectra of (a) acetone in CDCl<sub>3</sub> and (b) Acetone\_ext\_CDCl<sub>3</sub>.