

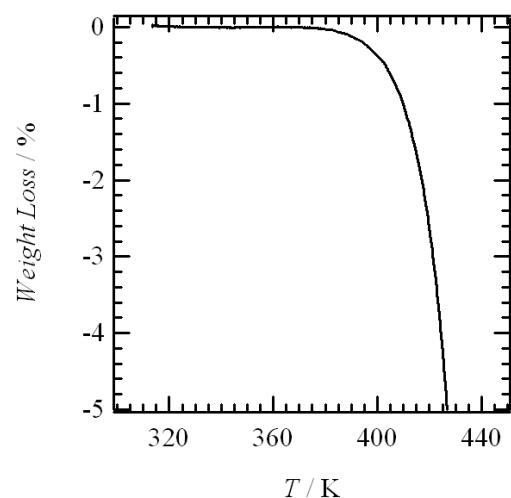
## Supporting Information

# Structural Phase Transition Induced by Molecular Motions within a (Anilinium)(*L*-Tartarate) Ionic Molecular Crystal

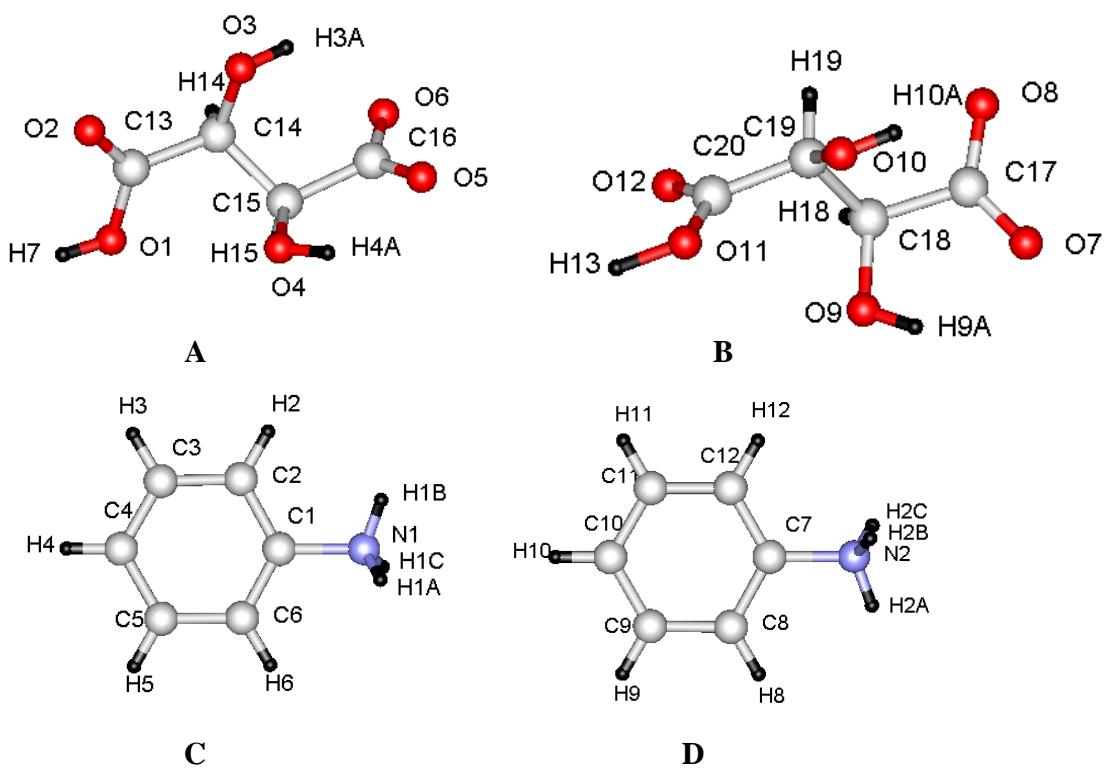
Yuuya Yoshii, Norihisa Hoshino, Takayoshi Nakamura, Tomoyuki Akutagawa

Full list of all authors in Ref. 19

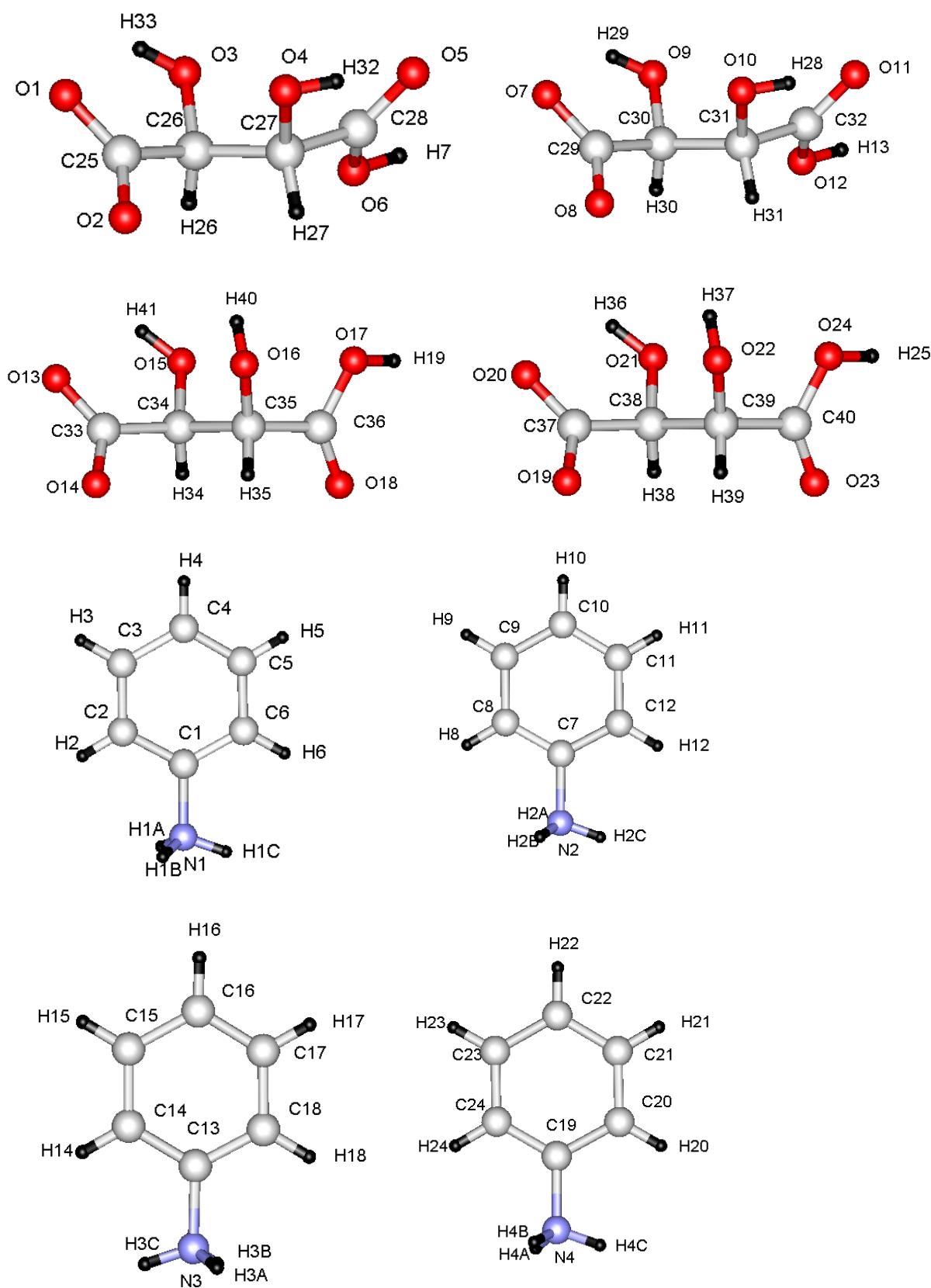
M. J. Frisch, G. W. Trucks, H. B. Schlegel, G. E. Scuseria, M. A. Robb, J. R. Cheeseman, J. A. Montgomery, Jr., T. Vreven, K. N. Kudin, J. C. Burant, J. M. Millam, S. S. Iyengar, J. Tomasi, V. Barone, B. Mennucci, M. Cossi, G. Scalmani, N. Rega, G. A. Petersson, H. Nakatsuji, M. Hada, M. Ehara, K. Toyota, R. Fukuda, J. Hasegawa, M. Ishida, T. Nakajima, Y. Honda, O. Kitao, H. Nakai, M. Klene, X. Li, J. E. Knox, H. P. Hratchian, J. B. Cross, V. Bakken, C. Adamo, J. Jaramillo, R. Gomperts, R. E. Stratmann, O. Yazyev, A. J. Austin, R. Cammi, C. Pomelli, J. W. Ochterski, P. Y. Ayala, K. Morokuma, G. A. Voth, P. Salvador, J. J. Dannenberg, V. G. Zakrzewski, S. Dapprich, A. D. Daniels, M. C. Strain, O. Farkas, D. K. Malick, A. D. Rabuck, K. Raghavachari, J. B. Foresman, J. V. Ortiz, Q. Cui, A. G. Baboul, S. Clifford, J. Cioslowski, B. B. Stefanov, G. Liu, A. Liashenko, P. Piskorz, I. Komaromi, R. L. Martin, D. J. Fox, T. Keith, M. A. Al-Laham, C. Y. Peng, A. Nanayakkara, M. Challacombe, P. M. W. Gill, B. Johnson, W. Chen, M. W. Wong, C. Gonzalez, and J. A. Pople, Gaussian, Inc., Wallingford CT, 2004.



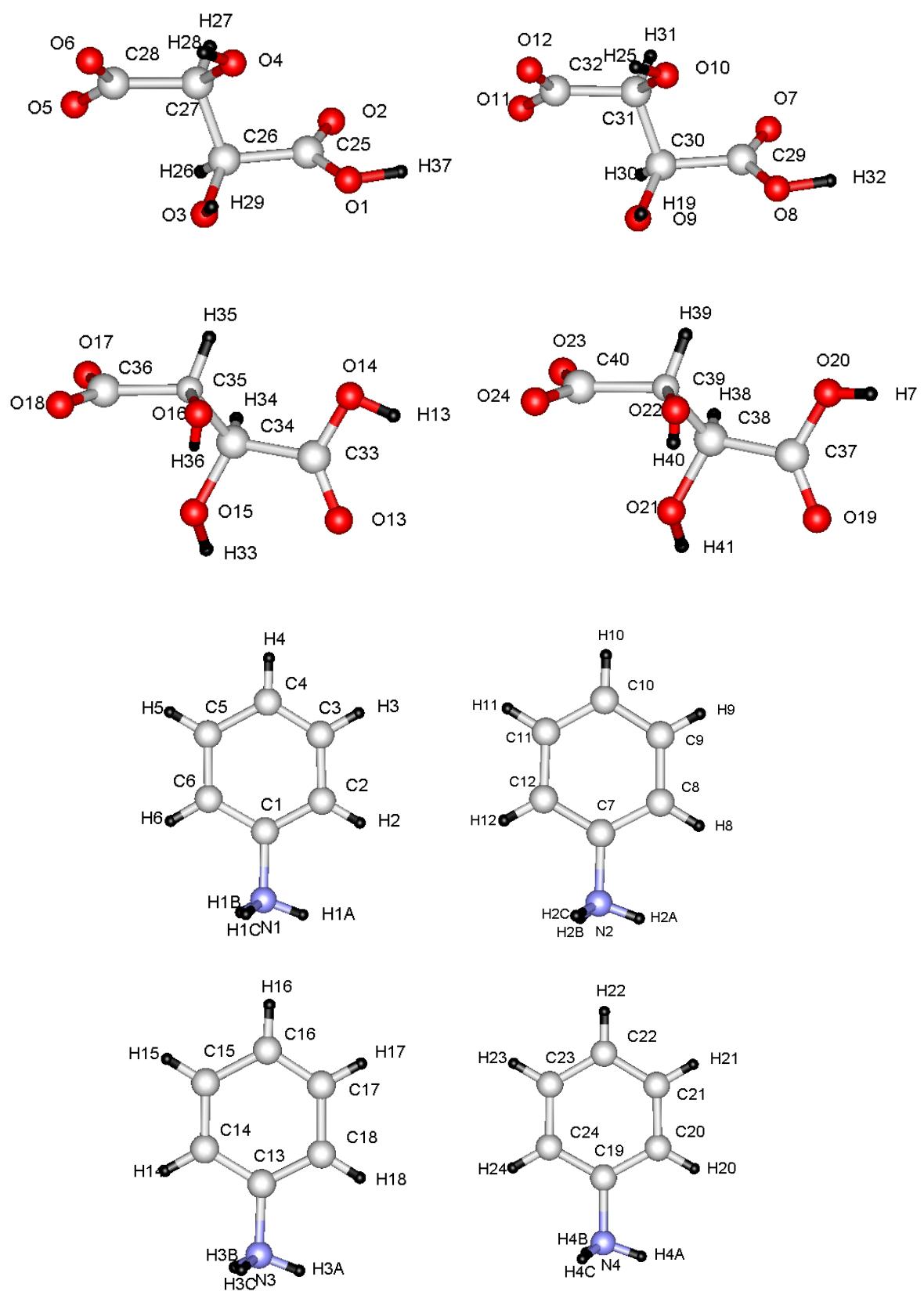
**Figure S1.** TG diagram of  $(\text{Ani}^+)(L\text{-HTart}^-)$  at the temperature range from 320 to 450 K.



**Figure S2.** Atomic numbering scheme of  $(\text{Ani}^+)(L\text{-HTart}^-)$  at 100 K.



**Figure S3.** Atomic numbering scheme of  $(\text{Ani}^+)(\text{L-HTart}^-)$  at 250 K.



**Figure S4.** Atomic numbering scheme of  $(\text{Ani}^+)(\text{L-HTart}^-)$  at 300 K.