

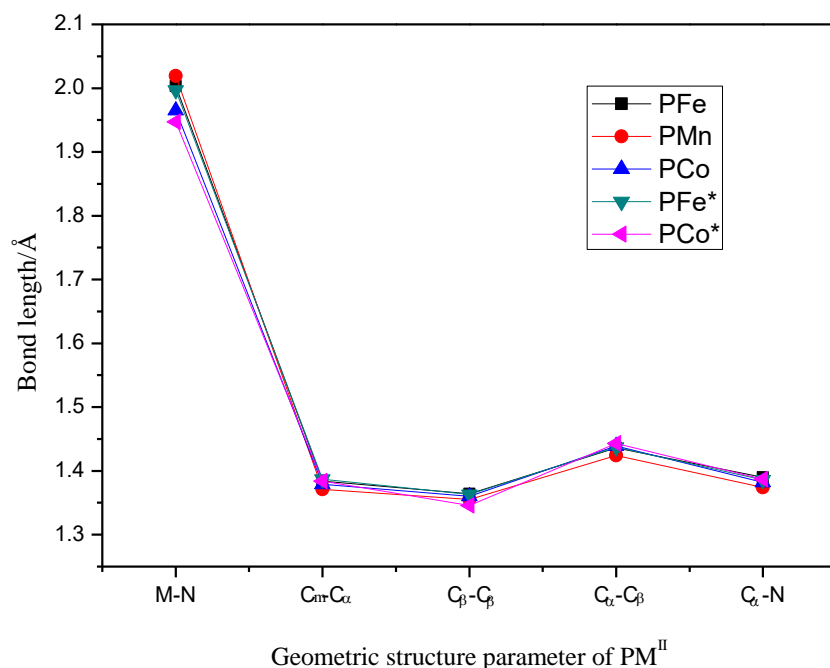
# Supporting Information

## Theoretical Study on Electronic Structural Properties of Catalytically Reactive Metalloporphyrin Intermediates

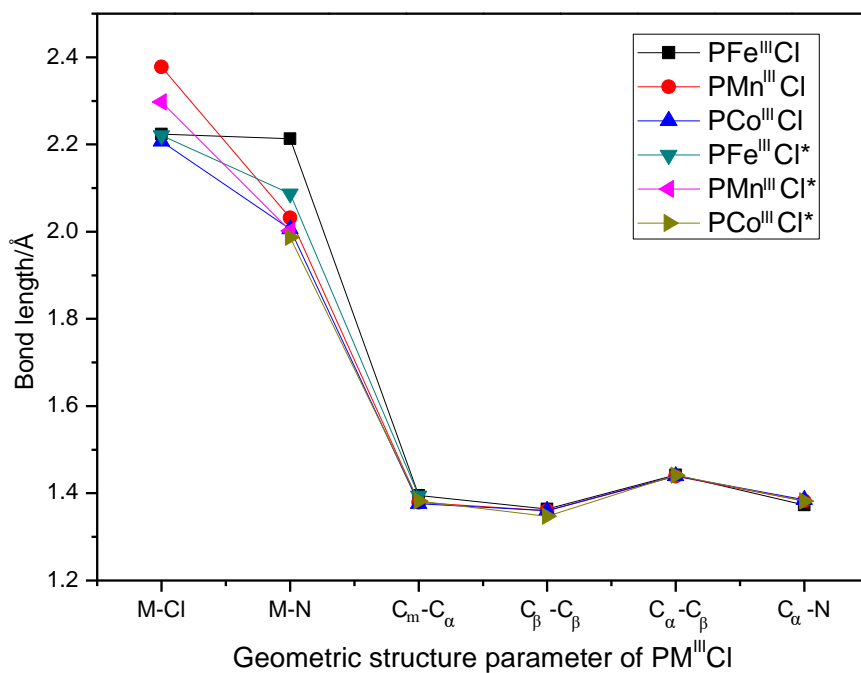
Meijuan Cao<sup>1</sup>, Aijing Gao<sup>1</sup>, Yuanyuan Liu<sup>2</sup>, Yang Zhou<sup>2\*</sup>, Zhicheng Sun<sup>1\*</sup>, Yaling Li,<sup>1</sup> Furui He<sup>2</sup>, Luhai Li<sup>1\*</sup>, Lixin Mo<sup>1</sup>, Ruping Liu<sup>1</sup>, Yumeng Han<sup>1</sup> and Yonggang Yang<sup>1</sup>

<sup>1</sup> Beijing Engineering Research Center of Printed Electronics, Beijing Institute of Graphic Communication, Beijing 102600, China. Email: sunzhicheng@bigc.edu.cn and liluhai@bigc.edu.cn

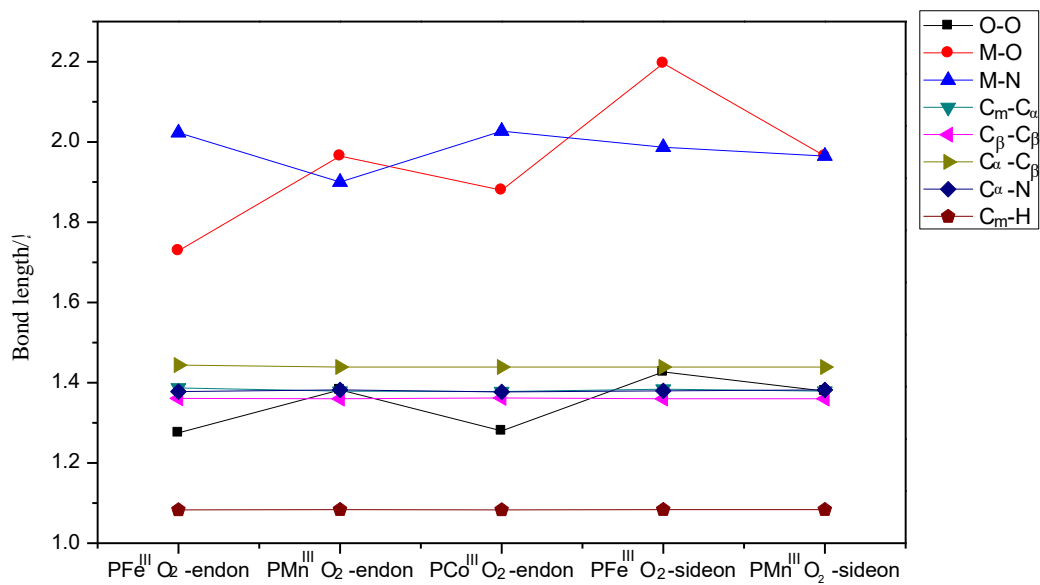
<sup>2</sup> School of Chemical Engineering and Technology and Key Laboratory of Advanced Materials of Tropical Island Resources of Ministry of Education, Hainan University, Haikou, Hainan 570228, China. Email: yzhou@hainanu.edu.cn



**Figure S1.** Geometric parameters of the ground state for PM<sup>II</sup> (\* presents the experimental value).



**Figure S2.** Geometric parameters of the ground state for PM<sup>III</sup>Cl (\* presents the experimental value).



**Figure S3.** Geometric parameters of side-on and end-on PM<sup>II</sup>-O<sub>2</sub> intermediates.