



第180回 OPERA研究交流セミナー

第171回 ISIT有機光エレクトロニクス研究特別室セミナー

第238回 未来化学創造センターセミナー



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## $\pi$ -System figurations at molecular scale, mesoscale, and beyond

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$\pi$ -Electronic molecules that display electronic, optical, and magnetic properties have played critical roles not only in fundamental chemistry but also in diverse research areas from materials to life sciences. Our recent researches focus on pursuing fundamental science of  $\pi$ -electronic systems based on a concept " $\pi$ -system figuration" (<http://pi-figuration.jp/en/>). This concept originates from our recognition that historically innovative molecules always have simple and beautiful structures. In this presentation, two topics regarding  $\pi$ -system figuration will be mainly described. In the first topic, a new method to synthesize highly extended  $\pi$ -conjugated molecules with a curved geometry will be shown, which represents  $\pi$ -figuration at the molecular scale. Secondly, as an example of  $\pi$ -figuration at a macroscopic length scale, a space-filling design of highly oriented organic films with structural integrity will be highlighted. In addition, our recent works related to these topics will be described.

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共催:九州大学 未来化学創造センター