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第168回 ISIT有機光エレクトロニクス研究特別室セミナー

第235回 未来化学創造センターセミナー



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**Spiro-functionalized photochromic diarylethene:
A photoresponsive molecular system for the future organic electronics**

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Fluorescent photochromic compounds have attracted much attention due to its excellent fluorescent switching capability. Among the various photochromic compounds, diarylethene derivatives are one of the most promising candidates due to their remarkable fatigue resistance and thermal stability. Until now, two main mechanisms of their fluorescence switching have been introduced. One is the turn-off fluorescence switching based on the energy transfer or electron transfer from an excited fluorescent moiety to the closed-ring isomer. The other is the turn-on fluorescence switching that is generally observed in the diarylethene derivatives having sulfone moiety. Although the turn-off and turn-on fluorescence switching have been widely studied, the diarylethene derivatives that show fluorescence in both open- and closed-ring isomers with fluorescence modulation capability is still rare. In this seminar, a diarylethene derivative having a spiro ring structure with multi-color fluorescence modulation capability will be discussed.

主催:九州大学 最先端有機光エレクトロニクス研究センター

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