

## 平成22年度 研究業績

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### 1. 発表論文等（査読付き論文、著書、総説等の発表状況）

- (1) Near-infrared BODIPY dyes modulated with spirofluorene moieties  
Kowada, T.; Yamaguchi, S.; Fujinaga, H.; Ohe, K.\* *Tetrahedron*, in press.
- (2) Rhodium-Catalyzed Carbene-Transfer Reactions via Thienylcarbene Complexes Generated from Thiocarbamoyl-ene-yne Compounds  
Tsuneishi, A.; Okamoto, K.; Ikeda, Y.; Murai, M.; Miki, K.; Ohe, K.\* *Synlett* **2011**, 655-658.
- (3) Gallium (III)-catalysed bromocyanation of alkynes: regio- and stereoselective synthesis of  $\beta$ -bromo- $\alpha,\beta$ -unsaturated nitriles  
Murai, M.; Hatano, R.; Kitabata, S.; Ohe, K.\* *Chem. Commun.* **2011**, 47, 2375–2377.
- (4) Synthesis of Strained Pyridine-Containing Cyclyne via Reductive Aromatization  
Miki, K.; Fujita, M.; Inoue, Y.; Senda, Y.; Kowada, T.; Ohe, K.\* *J. Org. Chem.* **2010**, 75, 3537-3540.
- (5) Atom-efficient Synthesis of  $\alpha$ -Alkylidene-*N*-furylimines via Catalytic Vinylcarbene-transfer Reactions to Carbonyl-ene-nitrile Compounds  
Murai, M.; Yoshida, S.; Miki, K.; Ohe, K.\* *Chem. Commun.* **2010**, 46, 3366-3368.
- (6) Synthesis, Structures, and Optical Properties of Heteroarene-Fused Dispiro Compounds  
Kowada, T.; Kuwabara, T.; Ohe, K.\* *J. Org. Chem.* **2010**, 75, 906-913.
- (7) Highly Fluorescent BODIPY Dyes Modulated with Spirofluorene Moieties  
Kowada, T.; Yamaguchi, S.; Ohe, K.\* *Org. Lett.* **2010**, 12, 296-299.
- (8) Synthesis and Characterization of Highly Fluorescent and Thermally Stable  $\pi$ -Conjugates involving Spiro[fluorene-9,4'-[4H]indeno[1,2-*b*]furan]  
Kowada T.; Ohe, K.\* *Bull. Korean Chem. Soc.* **2010**, 31, 577-581.
- (9) Ring-Opening Metathesis Polymerization-based Synthesis of Polymeric Nanoparticles for Enhanced Tumor Imaging in Vivo: Synergistic Effect of Folate-Receptor Targeting and PEGylation  
Miki, K.; Oride, K.; Inoue, S.; Kuramochi, Y.; Nayak, R. R.; Matsuoka, H.; Harada, H.; Hiraoka, M.; Ohe, K.\* *Biomaterials* **2010**, 31, 934-942.
- (10) アルキンからのカルベン錯体発生法と触媒反応  
大江浩一\*, *Organometallic News* **2010**, 12-17.

(11) カルベン活性種を経由する環化異性化反応他 2 編, 大江浩一, 使える! 有機合成反応実践ガイド, 丸岡啓二, 野崎京子, 石井康敬, 大寺純蔵, 富岡 清 編, 化学同人, **2010**, pp 82-83, 84-85, 382-383.

## 2. 学会発表等（国内外の招待講演および国際会議での発表状況）

- (1) New Approach to Bis-heterocycles via Coupling and Double Cyclization Cascade  
Ohe, K.; Murata, T.; Okamoto K.; Miki, K. The 2010 International Chemical Congress of Pacific Basin Societies (Pacificchem 2010), Honolulu, Hawaii, USA, 2010.12.15-20 (口頭発表).
- (2) Gold-catalyzed Reactions of Pyridine N-Oxides having Alkyne Moieties leading to N-Heterocycles  
Kitabata, S.; Murai, M.; Okamoto, K.; Ohe, K. The 2010 International Chemical Congress of Pacific Basin Societies (Pacificchem 2010), Honolulu, Hawaii, USA, 2010.12.15-20 (ポスター発表).
- (3) High-Contrast Fluorescence Tumor Imaging in Vivo Utilizing Self-Assemblies of ROMP-Based Copolymers  
Ohe, K.; Miki, K. The 5th International Conference on Cutting-Edge Organic Chemistry in Asia, Hsinchu, Taiwan, 2010.11.7-11 (口頭発表).
- (4) Atom-efficient Synthesis of  $\alpha$ -Alkylidene-N-furylimines via Catalytic Vinylcarbene-transfer Reactions to Carbonyl-ene-nitrile Compounds  
Ohe, K. Japan-Korea Symposium on Organometallic Chemistry, Nara, Japan, 2010.10.1-3 (口頭発表).
- (5) A New Route to Bis-heterocycles via Coupling and Cyclization Cascade  
Ohe, K. China-Japan Symposium on Catalytic Organic Synthesis, Tianjin, China, 2010. 9.24-26 (口頭発表).

## 3. 特許

該当無し

## 4. 学会・シンポジウム等の開催状況

該当無し

## 5. 受賞等

- (1) 大江浩一 (A01 班, 公募班員)

Asian Core Program Lectureship Award, The 5th International Conference on Cutting-Edge Organic Chemistry in Asia, 2010, 11.10

## 6. 新聞報道等

- (1) **Selected by Synfacts** (*Synfacts* **2010**, 888.)

Synthesis of Strained Pyridine-Containing Cyclyne via Reductive Aromatization

Miki, K.; Fujita, M.; Inoue, Y.; Senda, Y.; Kowada, T.; Ohe, K.\* *J. Org. Chem.* **2010**, *75*, 3537-3540.

## 7. 領域内の共同研究の準備・実施状況とその成果

該当無し

## 8. その他特記事項

該当無し