



## Tetrahedron Vol. 67, Issue 38, 2011

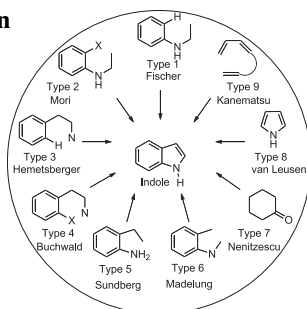
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## REPORT

**Indole synthesis: a review and proposed classification**

Douglass F. Taber\*, Pavan K. Tirunahari

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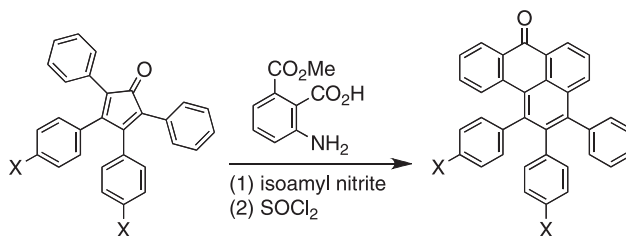
The indole alkaloids, ranging from lysergic acid to vincristine, have long inspired organic synthesis chemists. Interest in developing new methods for indole synthesis has burgeoned over the past few years. These new methods have been fragmented across the literature of organic chemistry. In this review, we present a framework for the classification of all indole syntheses.

## ARTICLES

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Joshua P. Kurtz, Tod Grusenmeyer, Ling Tong, Gilbert Kosgei, Russell H. Schmehl, Joel T. Mague, Robert A. Pascal, Jr.\*

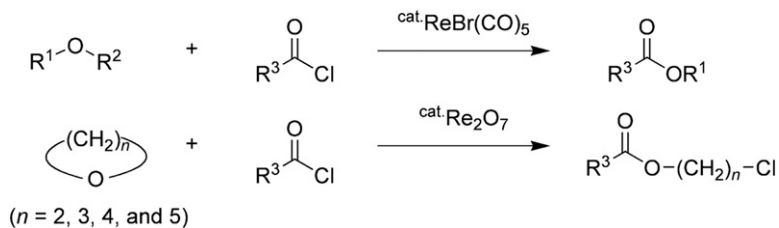
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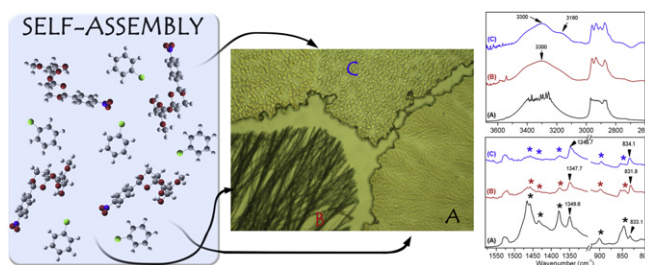
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**Influence of solvent on the thermal stability and organization of self-assembling fibrillar networks in methyl-4,6-O-(p-nitrobenzylidene)-α-D-glucopyranoside gels**

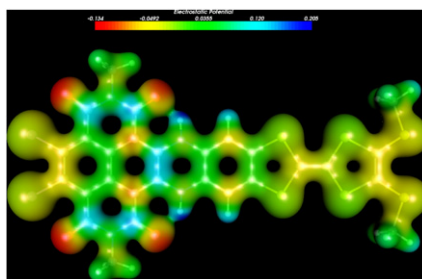
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M. Bielejewski, A. Łapiński, R. Luboradzki, J. Tritt-Goc\*

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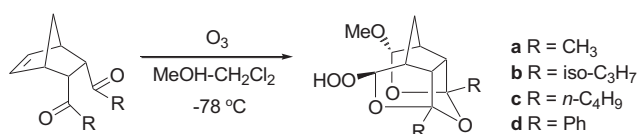
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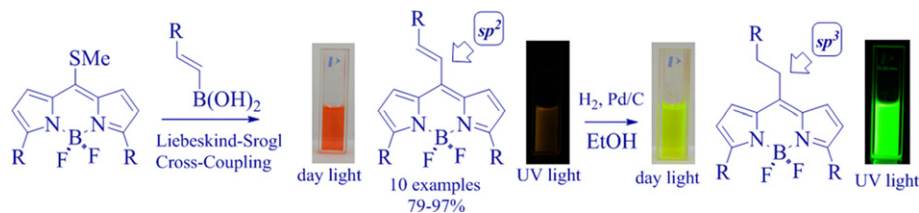
Hui-Chang Lin, Chu-Chung Lin, Hsien-Jen Wu\*



**8-Alkenylborondipyrromethene dyes. General synthesis, optical properties, and preliminary study of their reactivity**

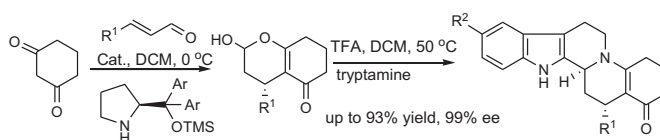
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Ismael J. Arroyo, Rongrong Hu, Ben Zhong Tang\*, Fabiola I. López, Eduardo Peña-Cabrera\*

**Diastereoselective cascade reactions toward substituted diazaindeno[2,1- $\alpha$ ]phenanthrenes**

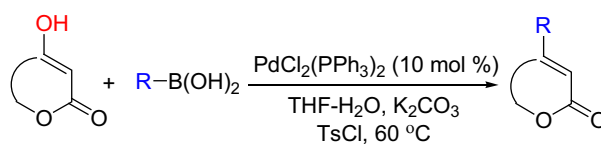
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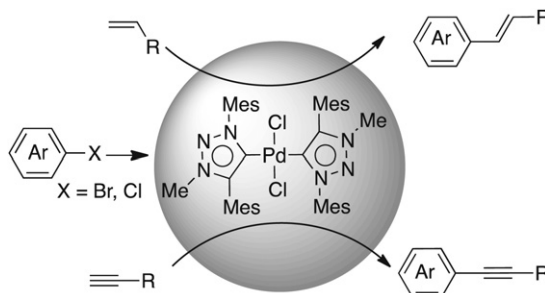
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Yi Hu, Qijuping Ding, Shengqing Ye, Yiyuan Peng\*, Jie Wu\*

**1,2,3-Triazol-5-ylidene–palladium complex catalyzed Mizoroki–Heck and Sonogashira coupling reactions**

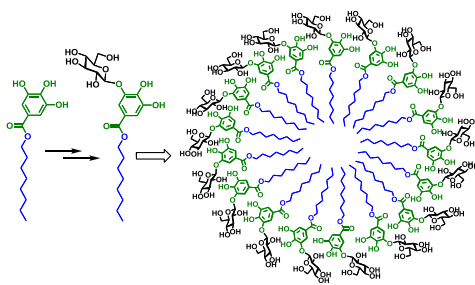
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Sayuri Inomata, Hidekatsu Hiroki, Takahiro Terashima, Kenichi Ogata, Shin-ichi Fukuzawa\*



## Synthesis and characterization of phenolic antioxidants with surfactant properties: glucosyl- and glucuronosyl alkyl gallates

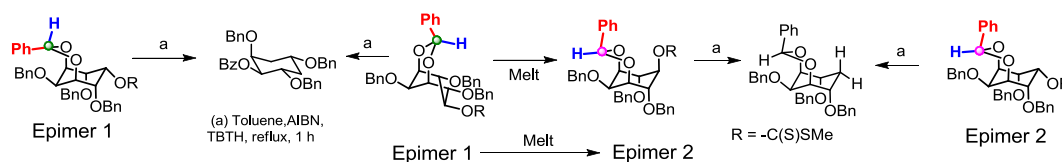
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Olivia S. Maldonado, Ricardo Lucas, Francesc Comelles, M<sup>a</sup> Jesús González, Jose Luis Parra, Isabel Medina, Juan Carlos Morales\*

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Bharat P. Gurale, Shobhana Krishnaswamy, Kumar Vanka, Mysore S. Shashidhar\*



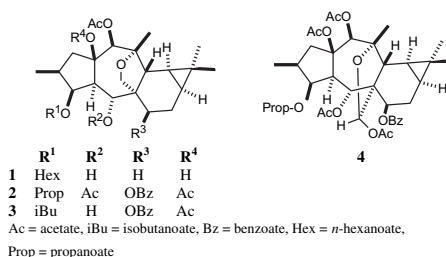
Certain 1,3-benzylidene acetals of inositols undergo epimerization at the acetal carbon when melted. This epimerization does not occur in the solid state or in solution. These results suggest that in the molten state aggregated molecules achieve the fine balance between the rigidity of the matrix, and the molecular motion needed for their reaction.



## New premysinane-type diterpene polyesters from *Euphorbia falcata*

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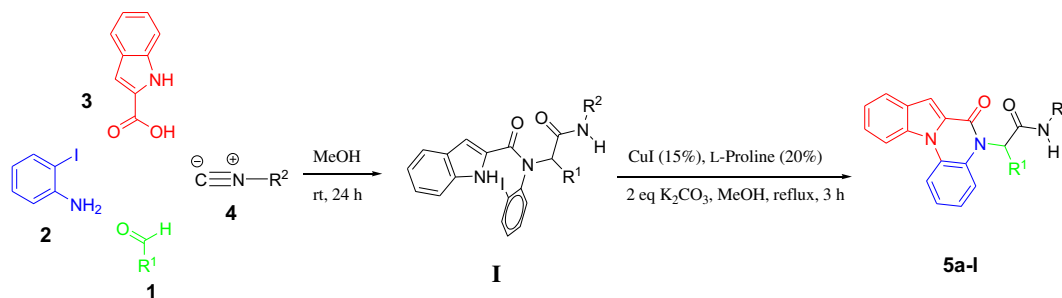
Edvárd Sulyok, Andrea Vasas, Dóra Rédei, Peter Forgo, Zoltán Kele, Gyula Pinke, Judit Hohmann\*



## Designing a sequential Ugi/Ullmann type reaction for the synthesis of indolo[1,2-*a*]quinoxalinones catalyzed by CuI/L-proline

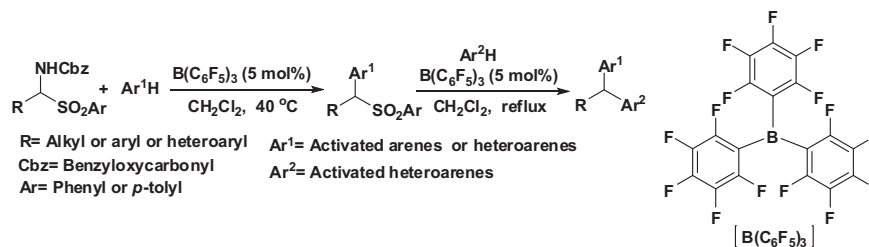
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Saeed Balalaie\*, Morteza Bararjanian, Saeedeh Hosseinzadeh, Frank Rominger, Hamid Reza Bijanzadeh, Eckardt Wolf



**Tris(pentafluorophenyl)borane [B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub>]-catalyzed Friedel–Crafts reactions of activated arenes and heteroarenes with  $\alpha$ -amidosulfones: the synthesis of unsymmetrical triarylmethanes** pp 7301–7310

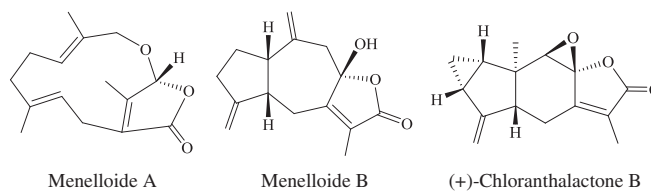
Ponnaboina Thirupathi\*, Lok Nath Neupane, Keun-Hyeung Lee\*



**Discovery of novel sesquiterpenoids from a gorgonian *Menella* sp.**

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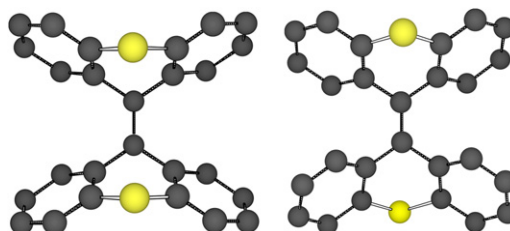
Shih-Yao Kao, Jui-Hsin Su, Tsong-Long Hwang, Jyh-Horng Sheu, Yin-Di Su, Chan-Shing Lin, Yu-Chia Chang, Wei-Hsien Wang, Lee-Shing Fang, Ping-Jyun Sung\*



**Isomerization barriers in bis(4*H*-thiopyran) and in bithioxanthenes**

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Goar Sánchez-Sanz\*, Ibon Alkorta\*, José Elguero



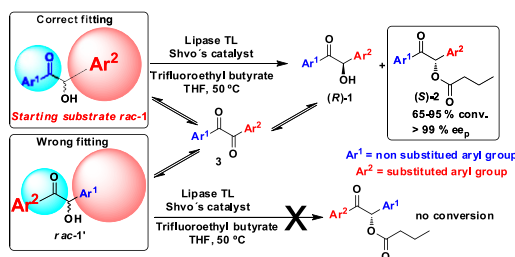
Bithioxanthenes exist in two conformations, up/up (both S atoms on the same side) and up/down (S atoms on opposite sides). Their interconversion can occur by two mechanisms, inversion and rotation that have been calculated theoretically.



**Chemoenzymatic synthesis of chiral unsymmetrical benzoin esters**

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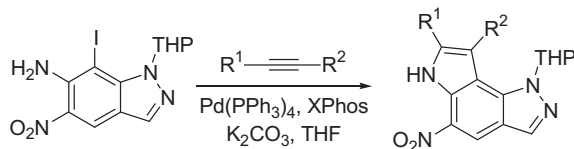
Pilar Hoyos, Vittorio Pace, José V. Sinisterra, Andrés R. Alcántara\*



**Synthesis of 1,6-dihydropyrrolo[2,3-g]indazoles using Larock indole annulation**

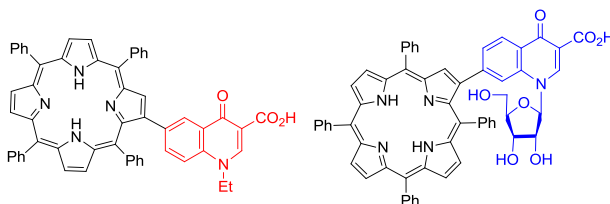
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Laurent Gavara, Fabrice Anizon\*, Pascale Moreau

**Synthesis and characterization of new porphyrin/4-quinolone conjugates**

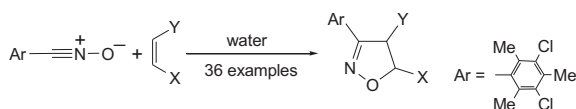
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Ana T.P.C. Gomes, Anna C. Cunha, Maria do Rosário M. Domingues, Maria G.P.M.S. Neves\*, Augusto C. Tomé, Artur M.S. Silva, Fernanda da C. Santos, Maria C.B.V. Souza, Vitor F. Ferreira, José A.S. Cavaleiro\*

**Stable nitrile oxide dipolar cycloadditions in pure water**

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Giorgio Molteni\*, Paola Del Buttero

**A rapid responsive and highly selective probe for cyanide in the aqueous environment**

pp 7348–7353

Hongda Li, Bao Li, Long-Yi Jin, Yuhe Kan\*, Bingzhu Yin\*



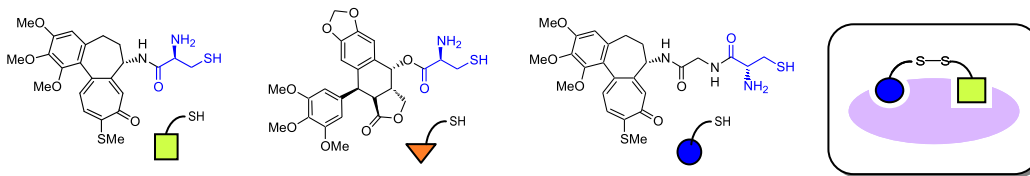
A colorimetric and fluorescent cyanide probe based on 7-(trifluoroacetamino)coumarin has been prepared. This structurally simple probe displays rapid response and high selectivity for cyanide over other common anions in the aqueous solution.



**Tubulin-guided dynamic combinatorial library of thiocolchicine–podophyllotoxin conjugates**

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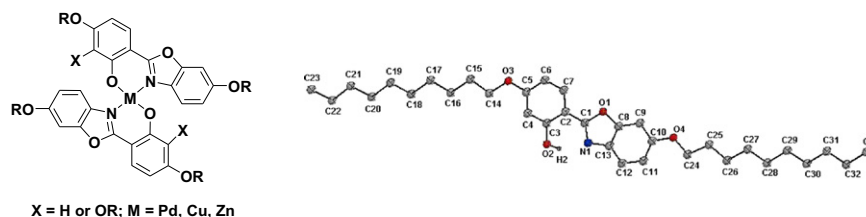
Graziella Cappelletti, Daniele Cartelli, Bruno Peretto, Micol Ventura, Marco Riccioli, Francesco Colombo, John S. Snaith, Stella Borrelli, Daniele Passarella\*



**Columnar/smectic metallomesogens derived from heterocyclic benzoxazoles**

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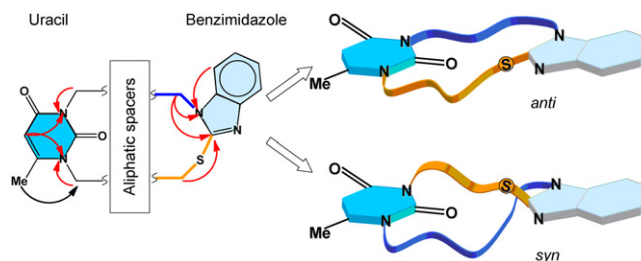
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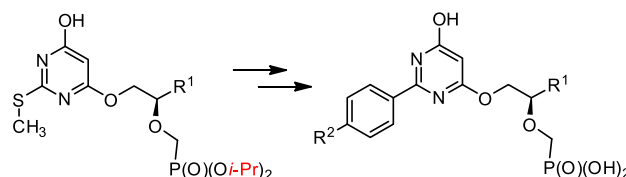
Vyacheslav E. Semenov\*, Evgeniya S. Krylova, Irina V. Galyametdinova, Alla V. Chernova, Sergey V. Kharlamov, Shamil K. Latypov, Vladimir S. Reznik



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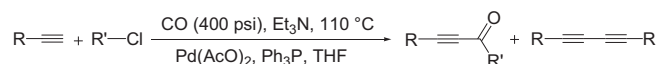
Petra Břehová, Michal Česnek, Martin Dračinský, Antonín Holý, Zlatko Janeba\*



**Palladium-catalyzed acylation and/or homo-coupling of aryl- and alkyl-acetylenes**

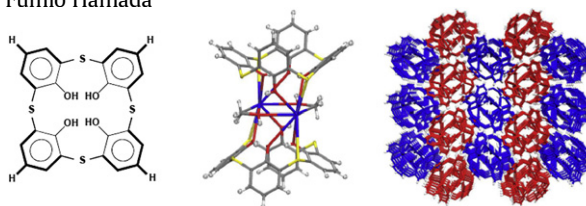
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Serena Perrone, Fabio Bona, Luigino Troisi\*

**Thiacalix[4]arene–alkali metal assemblies: crystal structures and guest-binding capabilities of supramolecular architectures supported by metal coordination and cation– $\pi$  interactions**

pp 7392–7399

Manabu Yamada, Yoshifumi Shimakawa, Fumio Hamada\*

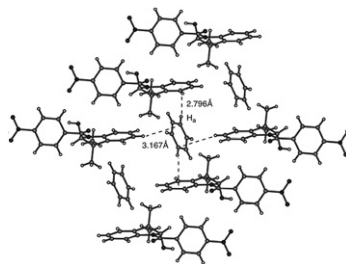


Single-crystal X-ray diffraction study of *p*-H-thiacalix[4]arene as a cesium complex demonstrated that a supramolecular architecture is constructed by intra- and inter-molecular interactions, such as metal coordination, aromatic-H $\cdots$ S hydrogen bonding, and alkali metal cation– $\pi$  interaction. On the guest-binding behaviors of two complexes toward three alcohol molecules, the complexes exhibited a high adsorption capability toward ethanol molecule.

**Role of edge-to-face interaction between aromatic rings in clathrate formation of 1-benzoyl-2-hydroxyindoline derivatives with benzene. X-ray crystal and PM6 analyses of the interaction**

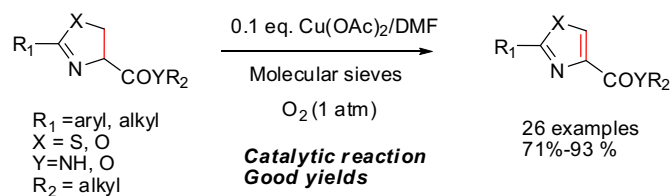
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Masashi Eto\*, Koki Yamaguchi, Itaru Shinohara, Fumikazu Ito, Yasuyuki Yoshitake, Kazunobu Harano

**Copper(II)-catalyzed oxidation of 4-carboxythiazolines and 4-carboxyoxazolines to 4-carboxythiazoles and 4-carboxyoxazoles**

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Yiyun Wang, Ziyuan Li, Yue Huang, Changhua Tang, Xiaoming Wu, Jinyi Xu\*, Hequan Yao\*

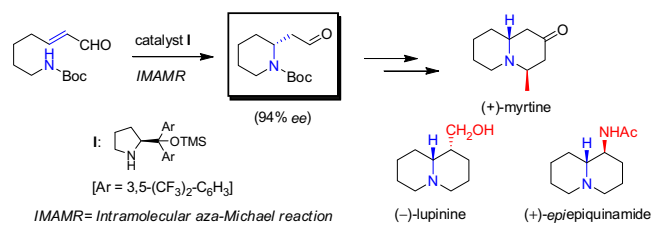




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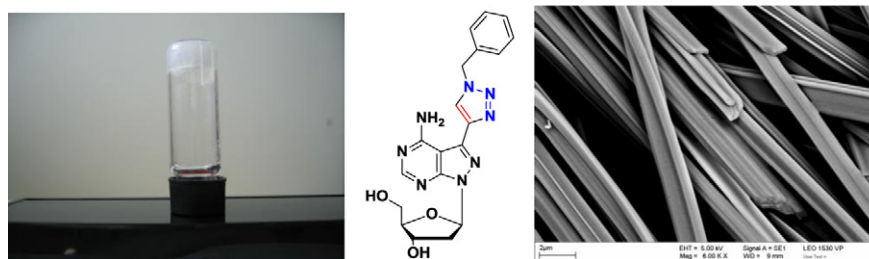
Santos Fustero\*, Javier Moscardó, María Sánchez-Roselló, Sonia Flores, Marta Guerola, Carlos del Pozo\*



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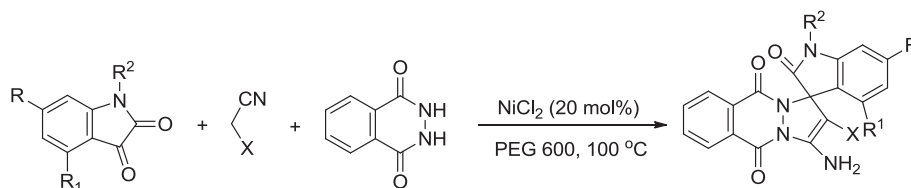
Frank Seela\*, Suresh S. Pujari, Andreas H. Schäfer



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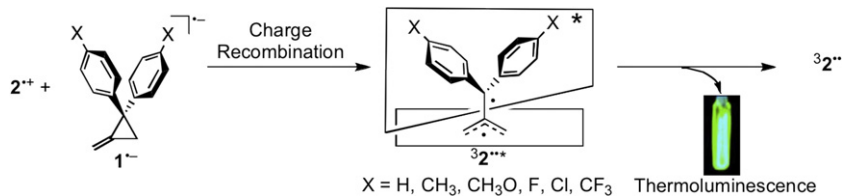
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Xiao-Nan Zhang, Yong-Xiao Li, Zhan-Hui Zhang\*



**Twisted molecular geometry and localized electronic structure of the triplet excited *gem*-diphenyltrimethylenemethane biradical: substituent effects on thermoluminescence and related theoretical calculations** pp 7431–7439

Yasunori Matsui, Hayato Namai, Ikuko Akimoto\*, Ken-ichi Kan'no, Kazuhiko Mizuno, Hiroshi Ikeda\*



\*Corresponding author

Supplementary data available via ScienceDirect



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