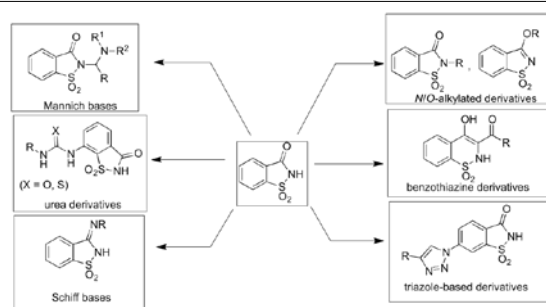


REVIEW

1389 Update on the Reactivity of Saccharin: An Excellent Precursor for the Synthesis of Biologically Important Molecules

Rabia Akhtar, Ameer Fawad Zahoor,* Sajjad Ahmad, Syed Ali Raza Naqvi, Samreen Gul Khan, and Muhammad Suleman

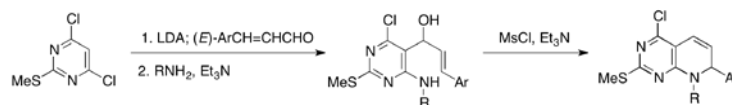


Saccharin Benzothiazine Heterocycle Antimicrobial Activity Anticancer Activity

PAPERS

1427 Synthesis of 7,8-Dihydropyrido[2,3-d]pyrimidine Derivatives from 4,6-Dichloro-2-(methylsulfanyl)pyrimidine

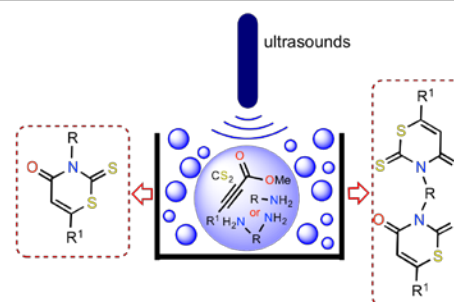
Kazuhiro Kobayashi,* Ippei Nozawa, Takuma Ueyama, Hiroaki Utsumi, Hidetaka Hiyoshi, and Kazuto Umezu



7,8-Dihydropyrido[2,3-d]pyrimidine 4,6-Dichloro-2-(methylsulfanyl)pyrimidine (DCSMP) Lithiation Methanesulfonyl Chloride S_N2' Reaction

1439 Ultrasound-Mediated Three-Component Reaction "On-Water" Protocol for the Synthesis of Novel Mono- and Bis-1,3-thiazin-4-one Derivatives

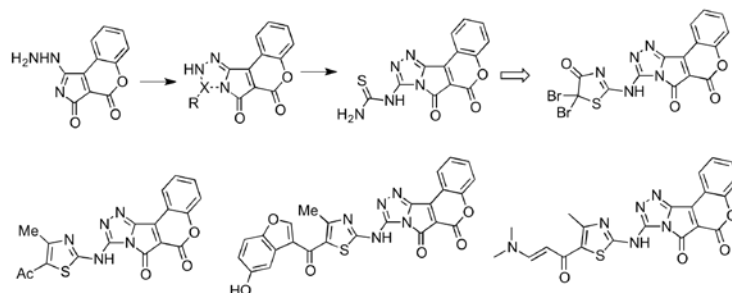
Wael A. A. Arafa,* Ashraf M. Mohamed, and Ahmed F. Abdel-Magied



1,3-Thiazin-4-one Ultrasound-Mediated Synthesis Green Chemistry One-Pot Reaction

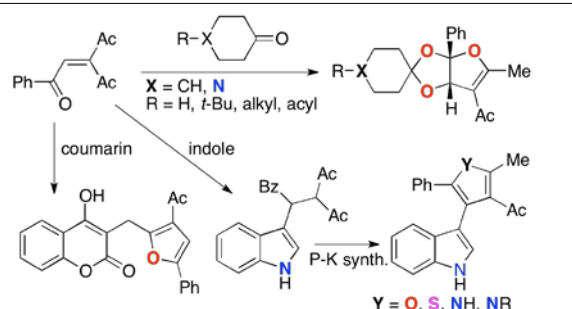
1456 Synthesis of New Azole and Azine Systems Based on Chromeno[3,4-c]pyrrole-3,4-dione and Investigation of Their Cytotoxic Activity

Islam H. El Azab,* Mohamed R. E. Aly, and Adil A. Gobouri



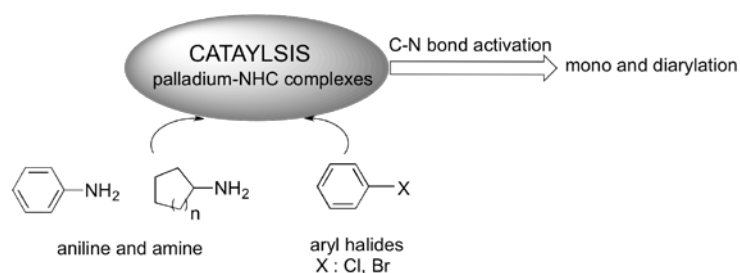
Azole Azine Chromeno[3,4-c]pyrrole Cytotoxic Activity Chromene

- 1479 **Reaction of Electron-Deficient 3-Acetyl-1-arylpent-2-ene-1,4-diones as a Building Block of Heterocycles**
Shun Kawabata, Akihiro Oishi, and Hiroshi Nishino*



3-Acetyl-1-phenylpent-2-ene-1,4-dione Electron-Deficient Alkene 3a,6a-Dihydrospirofuro[2,3-d][1,3]dioxole 3-Furfuryl-4-hydroxychromenone

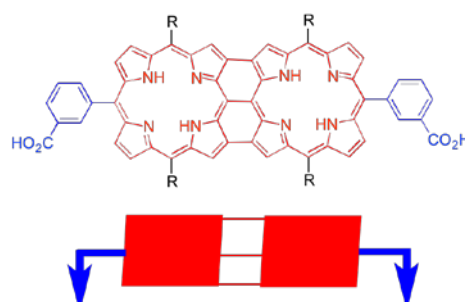
- 1506 **Arylation of Aniline and Amines by Pd-(N-Heterocyclic Carbene) Complexes**
Neslihan Şahin, Serpil Demir Düşünceli, and İsmail Özdemir*



N-Heterocyclic Carbene Palladium Catalysis Amination Reaction Amine C-N Bond Formation

- 1518 **Synthesis of Long-Wavelength Absorbing Porphyrin *m*-Benzoic Acids as Molecular Tectons for Surface Studies**

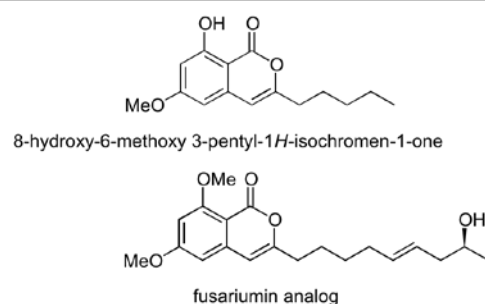
Alina Meindl, Aoife A. Ryan, Keith J. Flanagan, and Mathias O. Senge*



Porphyrin Organometallic Chemistry Molecular Tecton Dye

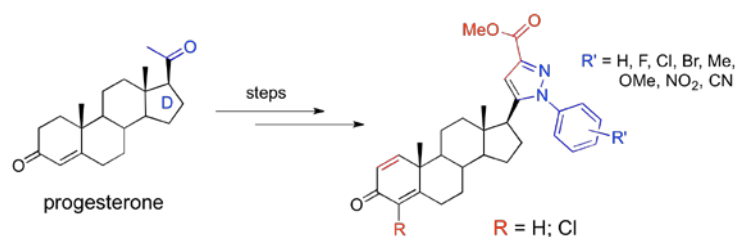
- 1542 **Synthesis of Isocoumarin Compounds, 8-Hydroxy-6-methoxy-3-pentyl-1*H*-isochromen-1-one and Fusariumin Analog Using Palladium-Catalyzed Carbonylation Trapping with *O*-Enolate**

Masaki Asai, Yasunao Hattori, and Hidefumi Makabe*



Isocoumarin Palladium-Catalyzed Carbonylation Reaction

- 1554 **Synthesis of 17β-*N*-Phenylpyrazolyl Steroidal Derivatives and Their Inhibitory Effect on Cell Proliferation**
Ning-Juan Fan,* Yuan-Feng Li, Qiu-Rui He, Shuang Liang, and Jiang-Jiang Tang*

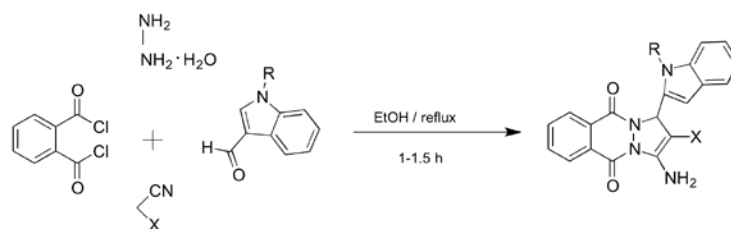


Steroid Progesterone Claisen Condensation Reaction Antiproliferative Activity Heterocycle

■ SHORT PAPERS

- 1567 **One-Pot Four Component Reaction for the Synthesis of 1-(1*H*-Indol-2-yl)-1*H*-pyrazolo[1,2-*b*]phthalazine-5,10-dione Derivatives by Self-Catalysis**

Faruq Mohammad* and Hamad A. Al-Lohedan



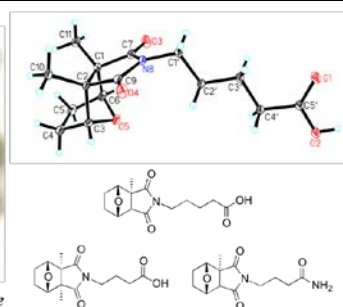
Phthaloyl Dichloride Indole-3-carboxaldehyde Domino Reaction Green Synthesis Self-Catalysis

- 1573 **Four New Cantharidin Derivatives from the Chinese Blister Beetles, *Mylabris phalerata***

Yuan-Yuan Deng, Wei Zhang, Xue-Ping Lei, Dong-Mei Zhang, Jun He, Lei Wang,* and Wen-Cai Ye*



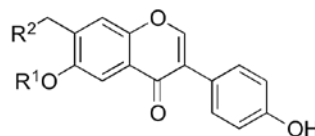
The whole bodies of *Mylabris phalerata*



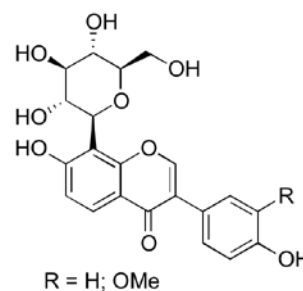
Cantharidin Derivative *Mylabris phalerata* Chinese Blister Beetle

- 1582 **Three New Isoflavones from the Root of *Pueraria lobata* and Their Bioactivities**

Feng-Mei Zhang, Jing Li, Qi-Li Mi, Shi-Yun Tang, Ye-Kun Yang, Jian-Hua Chen, Chun-Bo Liu, Qin-Peng Shen, Zhi-Hua Liu, Guang-Yu Yang, Qiu-Fen Hu, Zhong-Tao Ding,* and Xue-Mei Li*



R¹ = Me; R² = H
R¹ = Me; R² = OH
R¹ = H; R² = H



R = H; OMe

Isoflavone *Pueraria lobata* Anti-Tobacco Mosaic Virus Activity Cytotoxicity Activity

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 1589 Polyketides
1591 Aromatics
1594 Terpenes
1596 Alkaloids
1602 Miscellaneous

■ BRUSH UP YOUR HETEROCYCLES

1603 Brush Up Your Heterocycles

■ ADDITIONS AND CORRECTIONS

1623 Correction to "Regioselective Introduction of Substituents to The *Meso*-Position of Pyrromethenone Derivative – Application to the Synthesis of Sterically Fixed Phytochrome Chromophore Anchored to the C15 *Meso*-Position": *Heterocycles*, 2015, 90, 883: DOI: 10.3987/COM-14-S(K)97

Yudai Tanaka, Ryoji Iwamoto, Ryo Sakata, Takahiro Soeta, Kohei Endo, Shuhei Fujinami, Katsuhiko Inomata, and Yutaka Ukaji*

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To This Issue**

- 1439 Abdel-Magied, Ahmed F.
1389 Ahmad, Sajjad
1389 Akhtar, Rabia
1567 Al-Lohedan, Hamad A.
1456 Aly, Mohamed R. E.
1439 Arafa, Wael A. A.
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1573 Deng, Yuan-Yuan
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1623 Fujinami, Shuhei
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