

Home Page

The screenshot shows the Organic Chemistry Portal homepage. At the top, there are social media links for Facebook, LinkedIn, and Google+. Below this is a search bar and a navigation menu. The main content area is divided into several sections: 'Organic Chemistry Portal' with a description, 'Product of the Month' featuring 'Preparation of Alkylated Stereogenic Centers: The Takayama Synthesis of Kopsiyunnanin K', and 'Interesting Upcoming Events' including 'ISy SyCat' and 'International Symposium on Synthesis and Catalysis'. A right-hand sidebar contains a 'Job Market' section with various positions like 'PhD scholarship' and 'Research Scientist'.

Logo



URL

<http://www.organic-chemistry.org/>

Subject

Chemistry - Directories

Accessibility

Free

Language

English

Publisher

Organic Chemistry Portal

Brief History

Subject to research

Scope and Coverage

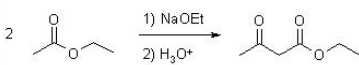
Organic Chemistry Highlights is a free online journal which publishes short reviews of organic, bioorganic, organo-metallic and microwave chemistry, total synthesis of natural products and multi component reactions. The Protecting Groups list contains stability data for the most important groups like amino, carbonyl, carboxyl, hydroxyl (1,2-; 1,3-diols) etc. The Chemexper Chemical Directory database (CCD) lists currently more than 1 441 210 chemicals from an international range of suppliers.

Kind of Information

It provides information on different types of organic reactions like name reactions, protecting group, total synthesis, organic synthesis and so on. Each of the name reactions is described with its formula, procedure, related reactions, related literature etc. An example is as follows:

Related Reactions
Dieckmann Condensation
Synthesis of β -ketoesters

Acetoacetic-Ester Condensation
Claisen Condensation



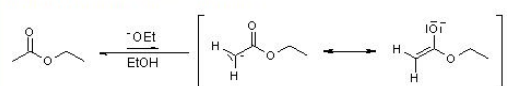
The Claisen Condensation between esters containing α -hydrogens, promoted by a base such as sodium ethoxide, affords β -ketoesters. The driving force is the formation of the stabilized anion of the β -keto ester. If two different esters are used, an essentially statistical mixture of all four products is generally obtained, and the preparation does not have high synthetic utility.

However, if one of the ester partners has enolizable α -hydrogens and the other does not (e.g., aromatic esters or carbonates), the mixed reaction (or crossed Claisen) can be synthetically useful. If ketones or nitriles are used as the donor in this condensation reaction, a β -diketone or a β -ketonitrile is obtained, respectively.

The use of stronger bases, e.g. sodium amide or sodium hydride instead of sodium ethoxide, often increases the yield.

The intramolecular version is known as **Dieckmann Condensation**.

Mechanism of the Claisen Condensation



Science of Synthesis
Applications of Domino Transformations in Organic Synthesis 2
Scott A. Snyder

Organic synthesis search includes a graphical index which is given below.

	B	C	N	O	Si	P	S
H / :		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
B		<input type="checkbox"/>		<input type="checkbox"/>			
C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
N		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
O	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Si		<input type="checkbox"/>		<input type="checkbox"/>			
P		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>
S		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
F		<input type="checkbox"/>					
Cl		<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>
Br		<input type="checkbox"/>					
I		<input type="checkbox"/>		<input type="checkbox"/>			
Sn		<input type="checkbox"/>					
Het			Heterocycles	Heterocycles			Heterocycles

After selecting any box, relevant bond formation can be seen and the resultant

compounds can be seen also. Such as, selection of C and B shows the following result:

C-B Bond Formation	
Synthesis of	
Boranes	$R-\frac{3}{\text{B}}-BR_2$
Boronic acids and boronates	$R-\frac{3}{\text{B}}-B(OR)_2$
Potassium trifluoroborates	$R-\frac{3}{\text{B}}-BF_3K$

Abstracts of articles in the field of organic synthesis, published in the most highly regarded organic chemistry journals can be seen here. It provides information on a chemistry tool, named The OSIRIS Property Explorer, which helps to draw chemical structures and calculates on-the-fly various drug-relevant properties whenever a structure is valid. Prediction results are valued and color coded.

Some important chemistry books are mentioned here including cover photos, brief description, editorial reviews, bibliographical information etc.

Resources are also given which include chemical education, chemical literature search, chemicals, chemistry books, conferences, directories, journals, news etc. Suppliers include the list of websites and hyperlinks of databases (chemical databases, chromatography databases, reaction databases, spectroscopic databases, safety databases), laboratory equipment / apparatus, labware, scientific publishers, service providers, software and so on.

Special Features

- Advance and basic search can be done.
- Hyperlink of 'BIOSYNTH' (for chemistry and biology) is attached herewith.
- In case of job vacancies, job details are given in PDF format which can be downloaded.
- RSS feed option can be seen.

Arrangement Pattern

In name reactions, names of reactions are arranged alphabetically as shown below:

a b c d e f g h i j k l m n o p q r s t u v w x y z

^ a

Acetoacetic Ester Condensation

Acetoacetic Ester Synthesis

Acyloin Condensation

Alder-Ene Reaction

Names of chemicals are also arranged alphabetically.
Archives are arranged in descending chronological order and content of every year then further arranged month-wise as shown below:

Archive: 2017 , 2016 , 2015 , 2014 , 2013 , 2012 , 2011 , 2010 , 2009 , 2008 , More		
↓		
January		
02	The Siegel Synthesis of Eupalinilide E	Douglass F. Taber
09	Carbon-Carbon Bond Formation: The Rhagavan Synthesis of Nupharamine	Douglass F. Taber
16	C-H Bond Functionalization: The Vanderwal/Alexanian Synthesis of Chlorolissoclimide	Douglass F. Taber
23	Flow Methods in Organic Synthesis	Douglass F. Taber
30	Organic Functional Group Interchange: The Wang/Tian/Li Synthesis of Ubiquitin	Douglass F. Taber
February		
06	The Overman Synthesis of (-)-Chromodorolide B	Douglass F. Taber
13	Enantioselective Synthesis of Alcohols and Amines: The Yakura Synthesis of (+)-Tanikolide	Douglass F. Taber

Advertisements are arranged in descending chronological order like:

Advertise here
2016 / 2017
July Interesting Conferences
June Syrris: Orb Pilot Reactor
May JM: Phosphine π -allyl Pd Catalysts

Remarks The Organic Chemistry Portal offers an overview of recent topics, interesting reactions, and information on important chemicals for organic chemists.

Comparable Tools

- Chemistry Portal (<http://www.chemistryportal.net/>)
- ChemNet (www.chemnet.com)

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