Organic Syntheses Just a Mouse Click Away

The annual volumes of Organic Syntheses and their Collective Volumes are probably among the most valuable treasures of any chemistry library. The art and science of preparative organic chemistry is most reliably documented in this collection of checked synthesis procedures. All relevant details are given: purification of starting materials, subtleties of setup and manipulation, as well as safety and waste disposal to guarantee a maximum of reliability and reproducibility. Generations of chemists have appreciated the printed volumes of Organic Syntheses from their undergraduate days on—not just as a cookbook but also as a source of inspiration to plan and execute syntheses.

The increasing number and variety of transformations and methods described in Organic Syntheses has made searches ever more complicated despite the publication of a Cumulative Index in 1976. It is therefore fortunate that a complete electronic version is available on the internet. It was produced in collaboration with Wiley, DataTrace, and CambridgeSoft, and includes all 79 annual volumes and the Collective Volumes 1–9. All you need is a Netscape 4.7 browser and the latest (free) ChemDraw plugin.

Once the technical requirements are fulfilled and the browser opened the site without an error message, it is a pleasure to work with the electronic Organic Syntheses. Search options make a rapid access to information possible: "Simple Query" allows users to perform first and easy searches for reaction types, reagents, or compound keywords such as "kinetic resolution". Operators such as "and", "or", and "near" may be included. Clicking the "New Query" button leads users to a combined query form which allows them to search for titles, authors, formulae, names, volume and page numbers, but most importantly for structures or substructures.

Having generated a structure or reaction with the usual ChemDraw interface (Figure 1) and clicked on "Search", one will be pleased to see the list of articles (and even reaction schemes if selected) almost immediately. A click on one of them will produce the full article with all figures, which may also be printed. The extensive linking allows users to quickly find related articles. For example, reagents are linked so you can immediately find all articles in which this reagent is used. This is very hard to achieve with the print version, and the electronic version even allows for research otherwise completely impossible. Browsing reactions based on a list of reaction types is also very interesting.

Red-colored safety recommendations are very useful, however not always present, especially in older articles. For example in the procedure for the synthesis of MONOCHLOROMETHYL ETHER (*Coll. Vol. 1*, 377), the exceptional toxicity and carcinogenicity of this compound are not mentioned. In the more recent article on (*S,E*)-1-(METHOXYMETHOXY)-1-TRIBUTYLSTANNYL-2-BUTENE (*Vol. 77*, 98), there is a warning about tin compounds but not about the mentioned reagent.

Suggest a web site or submit a review:
angewandte@wiley-vch.de

The electronic version of Organic Syntheses is a very valuable online tool, which can be recommended to anyone including students. However, since this site intensively uses Java and does not seem to be completely error-free, the browser sometimes reaches its limits so nothing seems to work any more and only a restart with a smile will cure the problem: a very valuable tool is available free of charge. The question remains: How much longer?

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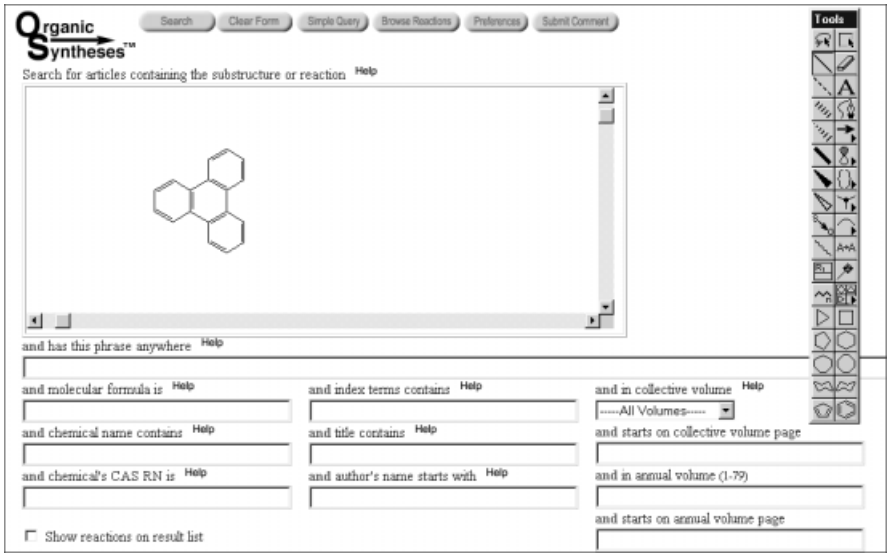

Fugure 1. Search interface in Organic Syntheses online.

For further information visit:
http://www.orgsyn.org/

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