

# Instructions for Authors

## 1. General Information

The *Journal of Flow Chemistry* was founded by the Flow Chemistry Society (FCS) in 2010 and is published by Akadémiai Kiadó in Budapest, an affiliate of Wolters Kluwer N.V., one of the leading global information services and publishing companies. From 2012 onwards the journal will publish four issues annually (quarterly), both in printed and electronic format. The primary objective of the *Journal of Flow Chemistry* is to stimulate the development and advancement of flow chemistry for the benefit and progress of the chemistry community. The Journal aims to provide a high-level scientific forum for the rapid publication of the latest results on flow chemistry and to additionally alert the fast growing flow chemistry community on relevant publications dealing with flow chemistry in other journals (Literature Highlights), upcoming conferences, novel products, etc.

## 2. Editorial Scope and Policy

The main focus of the *Journal of Flow Chemistry* will be the application of flow chemistry in synthetic organic, inorganic, analytical and process chemistry, in both academic research as well as in applied research and development in the pharmaceutical, agrochemical, fine-chemical, petro-chemical, and fragrance industries. In addition, the Journal will publish relevant articles describing flow chemistry aspects in material science, catalysis, green chemistry, nanotechnology, biotechnology, as well as manuscripts on flow instrumentation (engineering, automation), and theoretical and IT related topics. Manuscripts dealing with mainly (bio)analytical applications (Lab-on-a-Chip), or which report flow processes (i.e. separation technologies) that are not linked to genuine chemical transformations are normally not considered.

## 3. Types of Contributions

### 3.1. Reviews, Minireviews and Perspectives

Reviews, Minireviews and Perspective Articles deal with topics of current interest in flow chemistry. Rather than a compilation of detailed information with a full literature survey, a critically selected treatment of the material is desired.

Reviews and Minireviews should be divided into numbered sections. Cross-references in the text refer to these section numbers. The review starts with an Abstract (ca. 1000–

characters). This text should not be a mere summary but rather should stimulate the readers' interest. The Introduction should above all introduce the non-specialist to the subject as clearly as possible. A Review or Minireview should conclude with a Summary and Outlook section, in which the achievements and new challenges for the subject are presented in a concise fashion. In addition, a biographical sketch (500–700 characters) and a portrait-quality black-and-white photograph of the corresponding author, as well as a graphical abstract for the table of contents, and keywords should be submitted. A Review should consist of a maximum of 50000 characters of main text, references, tables, and legends. A Minireview should present current topics in a more concise review style and consist of a maximum of 15000-20000 characters of main text, references, tables, and legends.

*Perspectives* are short review-style articles emphasizing the general ideas that have guided important developments in a specific area in flow chemistry and their implications for future research. The reference section should only include the key publications that have contributed to conceptual advances in the field under review, rather than being fully comprehensive. Perspectives should include a very short Abstract (400 characters) that briefly describes the concepts under discussion. A graphical abstract for the table of contents and keywords should also be provided. Perspective articles should consist of around 10 single-spaced pages of text (including references, tables, and legends). The liberal use of schemes and figures is encouraged.

Although Reviews, Minireviews, and Perspective articles are generally written upon invitation by the editors of the Journal, unsolicited manuscripts are also welcome. The Journal will also publish a News and Industrial Focus Section, Letters to the Editor, Interviews, Tutorials, Conference and Book Reviews and a Literature Highlights Section. These types of contributions are generally by invitation from the editors.

### **3.2. Full Papers and Communications**

Full Papers and Communications present results of experimental studies of importance to the field of flow chemistry. The essential findings presented in a Communication or Full Paper may not already have appeared in print or in electronic online systems. Only articles that have already been published in a scientific journal should be cited. The citation should be fair and informative but not excessive. Inclusive of all references and tables, a Communication should be no longer than approximately 10000 characters. Chemical formulae, figures, and schemes may also be added. Communications should not be divided into sections. However, experimental details can be summarized separately under the heading Experimental Section or

placed in a footnote/reference. The first paragraph of a Communication should give an introduction to enable readers not familiar with the subject to become acquainted with the importance of the results presented. In the final paragraph the results should be summarized in a concise fashion, and one sentence should be devoted to their significance and to remaining challenges.

Full Papers, which must contain an Experimental Section have no length restrictions. However, the Editors requests that space be used thoughtfully and economically, and that material that is not essential is placed in the Supporting Information). Full Papers contain an Abstract, which should be brief (600–1000 characters) and not too technical, and an Introduction that includes relevant references. The presentation of Results and Discussion may be combined or kept separate. These sections may be further divided by subheadings.

## **4. Manuscript Submission**

### **4.1. Journal Policy**

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, without the written consent of the copyright holder. Authors accept full responsibility for the factual accuracy of the data presented and should obtain any authorization necessary for publication. As such the contents of the papers are the sole responsibility of the authors and publication shall not imply the concurrence of the editors or copyright holder.

All papers are submitted to referees who advise the editors on the matter of acceptance in accordance with the high standards required, on the understanding that the subject matter has not been previously published and is not under consideration elsewhere. Referees will be asked to distinguish contributions meeting the above requirements and having an element of novelty, timeliness, and urgency that merits publication in the journal. Referee names are not disclosed, but their views are forwarded by the corresponding associate editor to the authors for consideration. Authors are encouraged to suggest names of several experts in the field when papers are first submitted online.

## 4. 2. Submission Procedure

Submission to the *Journal of Flow Chemistry* proceeds totally online via the web using an electronic submission and refereeing system (Editorial Manager system, <http://www.editorialmanager.com/jfc/>). New authors will need to register online prior to submission. In general, the Editor-in-Chief will appoint a specific Associate Editor for handling the refereeing of the submitted manuscript. All correspondence regarding the submitted manuscript should be executed with the appointed Associate Editor of the journal.

Upon submission, authors will be guided stepwise through the creation and uploading of the required manuscript files. The system automatically converts source files to a single PDF file of the article, which is used in the peer-review process. Please note that even though manuscript source files are converted to PDF files at submission for the review process, these source files (Word document and high resolution graphic files) are needed for further processing and need to be uploaded upon original submission of the manuscript. All correspondence, including notification of the editor's decision and requests for revision, takes place by e-mail removing the need for a paper trail.

The following items should be submitted via the online submission page:

- *Manuscript (Word .doc file)*. For ease of refereeing, it is advisable to insert graphics and tables with appropriate legends/captions at the appropriate place within the body of the text. However, please note that separate graphic files will additionally be required at the stage of submission. Graphics should be uploaded as separate, highresolution artwork files (.tiff, .eps). These will be automatically incorporated into the single PDF that the system creates for review.
- *Graphical abstract* for the contents list (submitted as a separate document).
- *Cover letter*: highlighting the novelty and significance of the submitted work, and providing details of other relevant information, e.g., submitted or manuscripts in press that have a bearing on the current submission.
- *List of potential referees (information to be added online)*.

### 4. 3. Preparation of Manuscripts

#### 4.3.1. General

The corresponding author's full mailing address, including mail codes, phone number, fax number, and e-mail address should be included. The manuscript should be compiled in the following order: Graphical Abstract, Title, Authors, Affiliations, Abstract, Keywords, Introduction, Results and Discussion, Conclusion, Experimental, Acknowledgments, References and Notes. Tables, Figures, and Schemes with their appropriate Captions/Legends should be included at the appropriate position in the text.

Text should be subdivided in the simplest possible way consistent with clarity. Headings should reflect the relative importance of the sections. Ensure that all tables, figures, and schemes are cited in the text in numerical order. All measurements and data should be given in SI units where possible, or in other internationally accepted units. Abbreviations should be used consistently throughout the text, and all non-standard abbreviations should be defined on first usage. Authors are requested to draw attention to hazardous materials or procedures by adding the word **CAUTION** followed by a brief descriptive phrase and literature references if appropriate.

#### 4.3.2. Title Page (see sample page below)

- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name, and the e-mail address of each corresponding author.
- **Corresponding author.** Clearly indicate by an asterisk who will handle correspondence at all stages of refereeing and publication, also post-publication. Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. More than one author may be asterisked.
- **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a "Present address" (or "Permanent address") may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address.

#### 4.3.3. Abstracts

The abstract should briefly state the problem or purpose of the research, indicate the theoretical or experimental plan used, summarize the principal findings, and point out major conclusions. The optimal length is 600–1000 characters for full papers. For communications, the abstract should be significantly shorter. The abstract should not contain any undefined abbreviations or unspecified references. References and compound numbers should not be mentioned in the abstract.

#### 4.3.4. Graphical Abstract

A graphical abstract is mandatory for this journal. It should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership online. Authors should provide images that clearly represent the work described in the article. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. Preferred file types: .tiff or .eps

#### 4.3.5. Keywords

Authors are asked to provide 4-6 keywords, which will be used for indexing purposes.

#### 4.3.6. Headings

Please use no more than three levels of displayed headings and follow the style that is used in these guidelines.

#### 4.3.7. Abbreviations

Abbreviations and acronyms should be used sparingly and consistently. Where they first appear in the text, they should—apart from the most common ones be defined. Standard ACS abbreviations should be used throughout the manuscript and are employed without periods. The preferred forms for some of the more commonly used abbreviations are mp, bp, °C, K, min, h, mL,  $\mu$ L, g, mg,  $\mu$ g, cm, mm, nm, mol, mmol,  $\mu$ mol, M, mM,  $\mu$ M, ppm, HPLC, TLC, GC,  $^1\text{H}$  NMR, GC-MS, HRMS, FABHRMS, UV, IR, EPR, ESR,  $k$ ,  $t_{1/2}$ . All non-standard abbreviations should be defined following the first use of the abbreviation. For a detailed listing of standard abbreviations, see *The ACS Style Guide*; American Chemical Society: Washington, DC, 1997.

#### *4.3.8. Figures and Schemes*

All figures must be mentioned in the text in consecutive order and must be numbered with Arabic numerals (i.e., Figure 2). A caption giving the figure number and a brief description, preferably only one or two sentences, must be included. The caption should be understandable without reference to the text. If a figure has several parts, the individual parts should be labeled (a), (b), etc., and each part identified in the caption. Ensure that any symbols and abbreviations used in the text agree with those in the artwork. Identify previously published material by giving the original source in the form of a reference citation at the end of the figure caption.

Sequences of reactions are called schemes. Schemes may have brief titles describing their contents and footnotes, if needed, for further detail. Schemes should be numbered with Arabic numerals in consecutive order.

Please ensure that all illustrations within a paper are consistent in type, quality, and size. For best results, submit illustrations in the actual size at which they should appear in the Journal. Original illustrations that do not need to be reduced to fit a single or double column will yield the best quality. Legends should not be included as part of the graphic.

#### *4.3.9. Tables*

Tables should be created using a word-processor's table format feature. Ensure that each data entry is in its own table cell. Tables should be numbered consecutively with Arabic numerals and placed in the text near the point of first mention. Each table must have a brief (one phrase or sentence) title that describes the contents. The title should be understandable without reference to the text. Details should be put in footnotes, not in the title. Tables should be used when the data cannot be presented clearly as narrative, when many numbers must be presented, or when more meaningful interrelationships can be conveyed by the tabular format. Footnotes in tables should be given letter designations and be cited in the table by italic superscript letters. Identify any previously published material by giving the original source in the form of a reference at the end of the table caption.

#### *4.3.10. Footnotes*

Footnotes in the main text should be used only to designate corresponding authors or to indicate the "present address"/"permanent address" of authors at the bottom of page 1 and be indicated by the following symbols: asterisk, dagger, double dagger, section sign, paragraph,

parallels. More general Footnotes should be included as Notes in the “References and Notes” section. Footnotes may also be used in tables and schemes (see 4.3.8 and 4.3.9).

#### 4.3.11. Acknowledgements

An acknowledgement section may be included. It should be placed after the manuscript text and before the “References and Notes” section and may include reference to individual persons, agencies, grants, etc.

#### 4.3.12. Nomenclature

Nomenclature should conform with British or American usage. Insofar as is practical, authors should use a systematic name, from either *Chemical Abstracts* or IUPAC, for each title compound in the Experimental Section. It is generally good practice to identify all structures with a bold-faced Arabic numeral, unless the structure is not discussed in the text or listed in the Experimental Section. It is also acceptable to use “semi-systematic names” for certain specialized classes of compounds. In such a case, the name should conform to the generally accepted nomenclature conventions for the compound class. If the structures of the compounds in a manuscript are sufficiently complex that determination of their systematic names is impractical or the names are unduly long, compounds should be referred to in some unambiguous manner, such as “aldehyde **17**” or “amino acid **14a**”. The latter usage is also particularly convenient in the narrative. Letter suffixes (e.g. **3a**, **3b**, **3c**) may be used to identify series of compounds that differ in only one moiety. Maintain consistency in the use of names and use one convention throughout.

Please use the standard mathematical notation for formulae, symbols etc.:

- Italic for single letters that denote mathematical constants, variables, and unknown quantities
- Roman/upright for numerals, operators, and punctuation, and commonly defined functions or abbreviations, e.g., cos, det, e or exp, lim, log, max, min, sin, tan, d (for derivative)
- Bold for vectors, tensors, and matrices.

#### 4.3.13. References

Unnecessarily long lists of references should be avoided, and excessive self-citation is strongly discouraged. However, authors must reference all previous publications in which portions of the present work have appeared. Literature references and explanatory footnotes

must be numbered with arabic numerals in the order of their first citation in the text and the corresponding numbers placed at the appropriate locations in the text as superscripted numerals without parentheses or brackets. Multiple references can be grouped into one single reference. Journal titles should be abbreviated according to the Chemical Abstracts Service Source Index (CASSI). Please follow the American Chemical Society style when citing references (<http://pubs.acs.org/userimages/ContentEditor/1246030496632/chapter14.pdf>).

#### **4. 4. Experimental Section**

A General Experimental Methods paragraph may be provided to document procedures (such as purification methods, solvent removal, and spectroscopic and chromatographic analyses) that are common to most of the individual procedures. It should be placed at the beginning of the Experimental Section, not in the Supporting Information. Alternatively, a reference to the General Experimental Methods paragraph in an earlier publication may be provided.

Sources of stationary phases for chromatography may be identified. Sources of reactants, reagents, and solvents should *not* be identified except for (1) starting compounds that are unusual or not widely available; (2) materials for which the author has evidence that the source is critical to the outcome of an experiment; and (3) catalysts. Manufacturers and model names or numbers of spectrometers, chromatographs, polarimeters, X-ray diffractometers, and other standard laboratory instruments should not be identified. *However, the manufacturer and model of commercially available flow instrumentation devices must be specified. In case a custom-built flow apparatus has been used, it is highly desirable to include a schematic diagram on the experimental set-up in the manuscript or the supporting information, and to provide appropriate details on pumps, micromixers, coil materials etc. for other authors to be able to reproduce the experimental conditions given.*

Synthesis procedures for new compounds should be accompanied by listings of the most important product characterization data ( $^1\text{H}$  and  $^{13}\text{C}$  NMR, IR, MS, mp., etc.). When known compounds have been prepared, procedures that were reported in the Experimental Section or Supporting Information of a previous publication should be cited but not reported in detail unless they have been modified. For both Full Papers and Communications, only the most relevant experimental procedures and listings of compound characterization data should be included in the manuscript file's Experimental Section. Material not critically relevant to the understanding of the article should be placed in the Supporting Information, which may also contain copies of spectra, chromatograms, graphs, tables, crystallographic and computational data.

All new compounds should be fully characterized with relevant spectroscopic data. Microanalyses should be included whenever possible. Under appropriate circumstances, high-resolution mass spectra may serve in lieu of microanalysis, if accompanied by suitable NMR criteria for sample homogeneity. These data should be given in the Supporting Information in the event that they exceed the scope of the Experimental Section. In general, the editors will follow the standards of *The Journal of Organic Chemistry* (ACS) and related synthetic chemistry journals when judging the appropriateness of compound characterization and purity determination. Please also follow the conventions of this Journal describing experimental protocols in your manuscript.

Concerning conventions of submitting experimental results from material science, nanotechnology, chemometrics and other information technology related sciences, the authors are requested to follow the conventions and practice of the leading journals of the particular field, first of all of the journals published by the ACS.

#### **4.5. Artwork**

For the best quality final product, please submit all of your artwork – photographs, line drawings, etc. – in an electronic format. Your art will then be produced to the highest standards with the greatest accuracy to detail. The published work will directly reflect the quality of the artwork provided. For vector graphics, the preferred format is .eps; for halftones, please use .tiff format. Vector graphics containing fonts must have the fonts embedded in the files. Name your figure files with "Figure" and the figure number, e.g., Figure 2a.eps.

Color art is free of charge for the printed (during 2011) and online publication. Color illustrations should be submitted as RGB (8 bits per channel).

The Journal would like to achieve as much uniformity as possible in the printed chemical structures. Therefore, the bond length, line thickness, and bold bond thickness of camera-ready structures should be *0.508 cm*, *0.021 cm*, and *0.071 cm*, respectively, and *10-pt Helvetica* font should be used. All atom labels and text should be in the "plain" style (lightface) with the exception of compound numbers, which should be boldface. No matter which style is established, it must be used uniformly throughout the manuscript. Varying the style between schemes is unattractive and distracts from the content. Chemical structures should be produced with the use of a drawing program such as ChemDraw. Please use the drawing preferences preset in the ACS Stylesheet in ChemDraw, or settings close to these if

other packages are used. For uploading, all chemical structures need to be provided as .cdx files, or converted into .tiff or .eps format.

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#### **4.7. Supporting Information**

The publisher (Akadémiai Kiadó) accepts electronic multimedia files (animations, movies, audio, etc.) and further experimental details (PDF version) or other supplementary files to be published online along with your article. This feature can add dimension to the author's article, as certain information cannot be printed or is more convenient in electronic form. In many instances it will be appropriate to upload a single pdf file containing additional experimental data, spectra, graphics etc. In this case all supplementary text and graphics (including spectra) should be combined into a single PDF file. If submission as a single file is not possible, then all files of the same file type should be combined. The individual files should be given informative file names (for example, Additional\_data.doc and NMR\_spectra.pdf).

Text in the supporting information should be formatted in the same manner as the manuscript text. The graphics must meet the same standards as the graphics in the manuscript. Incorporating images created or saved at resolutions higher than 300 dpi will not substantially improve the appearance of graphics in the Web-based supporting information but will result in large file sizes that inconvenience reviewers, editors, and future readers with long download times. Tables, and graphics other than spectra and chromatograms, should be numbered as in the following examples: Table S2; Figure S3. Informative captions for figures

other than spectra should appear directly below the figures. There are no restrictions on the use of color in supporting information graphics.

All the pages of supporting information files containing text and graphics must be consecutively numbered (S1, S2, etc.). The first page must be a title page containing the title of the manuscript, the names of the authors, and a table of contents with the page numbers of the included data. If there is more than one file, each should have its own title page and table of contents.

A Supporting Information Available statement identifying the type of supplementary material being furnished must be inserted in the text of the manuscript immediately after the acknowledgments

## **5. After Acceptance**

Upon acceptance of your article you are requested to sign the Copyright Transfer Statement or the Optional Open Article License Agreement and indicate whether you wish to order offprints.

### **5.1. Optional Open Article**

Akadémiai Kiadó announced a new optional ‘open access’ publication model for authors from March 2007. The amendment of the traditional subscription-based business model called OOpenArt (Optional Open Article) is a chance for scientists to publish open access papers in the online edition of our journals. For further details see [www.oopenart.com](http://www.oopenart.com).

### **5.2. Copyright Transfer**

Authors will be asked to transfer copyright of the article to the Publisher (or grant the Publisher exclusive publication and dissemination rights). This will ensure the widest possible protection and dissemination of information under copyright laws.

### **5.3. Offprints**

Offprints can be ordered by the corresponding author. Publication of color illustrations is free of charge (electronic version). Authors ordering offprint copies of their papers containing color illustrations will be expected to make a contribution towards the extra costs.

#### **5.4. Proofs**

Proofs will be handled via the Editorial Manager System and should be returned with corrections as quickly as possible, normally within 48 hours of receipt. The Publisher now sends PDF proofs which can be annotated. Instructions on how to annotate PDF files will accompany the proofs. If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the Query Form) and return to the Publisher in an e-mail. Please list your corrections quoting line number. If, for any reason, this is not possible, then mark the corrections and any other comments (including replies to the Query Form) on a printout of your proof and return by fax, or scan the pages and e-mail. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all of your corrections are sent back to us in one communication: please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility. Note that the Publisher may proceed with the publication of your article if no response is received.

#### **5.5. Online Preview**

The article will be published online after receipt of the corrected proofs. This is the official first publication citable with the DOI. After release of the printed version, the paper can also be cited by issue and page numbers.

Sample Pages:

## An Investigation of Wall Effects in Microwave-Assisted Ring-Closing Metathesis and Cyclotrimerization Reactions

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<sup>b</sup> *Shanghai Key Laboratory of Chemical Biology, East China University of Science and Technology, 130 Meilong Road, Shanghai, 200237, China.*

### ABSTRACT

The thermodynamic properties and reaction mechanism of the Morita-Baylis-Hillman (MBH) reaction have been investigated through experimental and computational techniques. The impossibility to accelerate this synthetically valuable transformation by increasing the reaction temperature has been rationalized by variable temperature experiments and MP2 theoretical calculations of the reaction thermodynamics. An increase in temperature results in a switching of the equilibrium to the reactants occurring at even moderate temperature levels. The complex reaction mechanism for the MBH reaction has been investigated through an in depth analysis of the suggested alternative pathways using the M06-2X computational method.

*Keywords:* Arylation; 1,2-Addition; Boronic acid; Catalysis, Microwave assisted synthesis, Nickel

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# 1. Introduction

## 2. Results and Discussion

### 2.1. Heading 2

#### 2.1.1. Heading 3

## 3. Conclusion

## 4. Experimental

### 4.1. Heading 2

### 4.2. Heading 2

**Acknowledgement.** xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

**Supporting Information Available:** Supplementary data (xxxxxxxxxx description of data xxxxxxxxxxxx) associated with this article can be found in the online version at: doi:xxxxxxxxx.

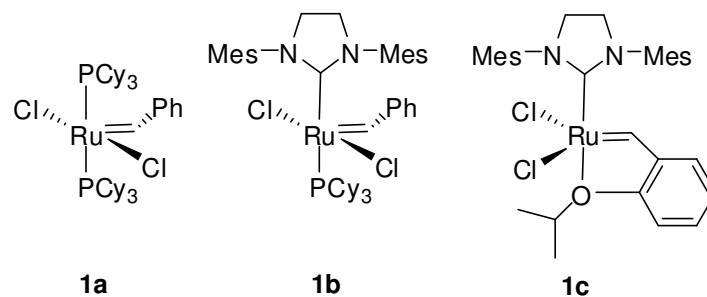
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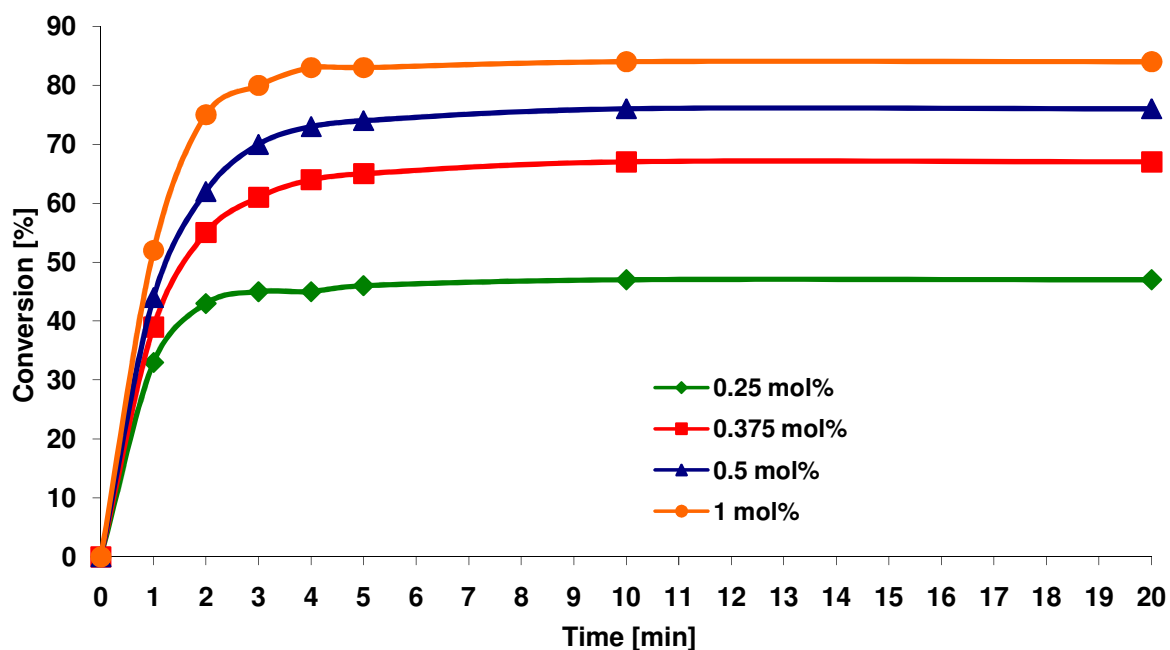
(1) For a recent review with more than 1000 references on the MBH reaction, see: Basavaiah, D.; Reddy, B. S.; Badsara, S. S. *Chem. Rev.* **2010**, *110*, 5447-5674.

(2) For selected other reviews, see: (a) Basavaiah, D.; Rao, K. V.; Reddy, R. J. *Chem. Soc. Rev.* **2007**, *36*, 1581-1588. (b) Masson, G.; Housseman, C.; Zhu, J. *Angew. Chem., Int. Ed.* **2007**, *46*, 4614-4628. (c) Basavaiah, D.; Rao, J. A.; Satyanarayana, T. *Chem. Rev.* **2003**, *103*, 811-891. (d) Langer, P. *Angew. Chem., Int. Ed.* **2000**, *39*, 3049-3052. (e) Ciganek, E. in *Organic Reactions*; Paquette, L. A., Ed.; Wiley: New York, 1997; Vol. 51, pp 201-350. (f) Basavaiah, D.; Rao, P. D.; Hyma, R. S. *Tetrahedron* **1996**, *52*, 8001-8062. (g) Drewes, S. E.; Roos, G. H. P. *Tetrahedron* **1988**, *44*, 4653-4670.

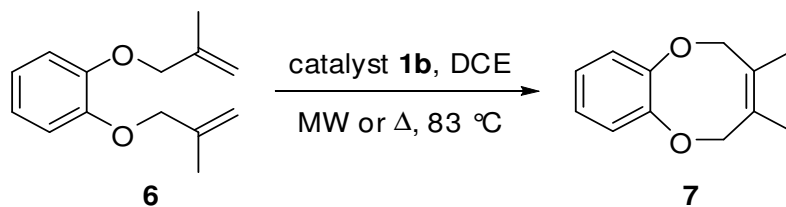
Examples Figure and Figure Captions:



**FIGURE 1.** Ru-based olefin metathesis catalysts. Cy = cyclohexyl; Mes = 2,4,6-phenyl.



**FIGURE 2.** Conversion over time for the ring-closing metathesis of 1,2-bis(allyloxy)benzene (2) to metathesis product 3 at different Ru catalyst 1a concentrations (Scheme 1). Conditions: DCE (0.02 M), open vessel microwave heating (150 W constant power), 83 °C reflux, Ar sparging. HPLC peak area percent (215 nm).

**SCHEME 2. Ring Closing Metathesis of 1,2-Bis(2-methylallyloxy)benzene (6)****TABLE 1. Effect of Catalyst Preheating on Conversion in the Ring-closing Metathesis of 1,2-Bis(allyloxy)benzene (2) (Scheme 1)<sup>a</sup>**

catalyst loading <b>1a</b> (mol %)	preheating time (min)	reaction time (min)	conv (%) <sup>b</sup>
0.25	0	5	46
0.25	5	5	20
0.25	10	5	11
0.25	15	5	7
0.5	0	5	74
0.5	5	5	62
0.5	10	5	58
0.5	15	5	47
1.0	0	5	83
1.0	5	5	83
1.0	10	5	82
1.0	15	5	80
1.5	10	5	85
1.5	15	5	85

<sup>a</sup> Conditions: DCE (0.02 M), open vessel microwave heating (150 W constant power), 83 °C reflux, Ar sparging. <sup>b</sup> HPLC-UV peak area percent (215 nm). Overall conversion to metathesis product **3**.