

## A Sample Document for electronic Liquid Crystal Communications (e-LC)

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*The aim of e-LC is to provide the scientific community with rapid access to the most recent research results in the area of liquid crystals and related soft condensed matter. To achieve this goal, a new procedure for the review and selection of documents will be employed which will result in publications within one week of submissions. E-LC will be also a forum that allows members of the scientific community to respond by posting comments and questions and by appraising the documents.*

### I. Introduction

Today, essentially all leading journals use a peer review system to evaluate and select contributions. Manuscripts are typically reviewed by one or more external referees, believed to be experts in their fields, and also by members of the editorial staff.

The peer review system has been frequently criticized, and flaws in the system have been demonstrated.<sup>1</sup> Studies indicate that frequently cited manuscripts have often been severely criticized by reviewers<sup>2</sup>; the most cited scientific paper in history by O. H. Lowry et al.<sup>3</sup> (cited more than 187000 times) was returned to the author for drastic shortening. The traditional system has been accused of delaying publications<sup>4</sup>, and even of impeding the publication of innovative ideas.<sup>5</sup> Although the traditional system has many positive aspects, the peer review system used by most scientific journals today entails long delays, often of many months, between the submission and publication of a manuscript. In addition, the increasing number of manuscripts and the decreasing available time of referees often make the traditional refereeing process imperfect.

The aim of *e-LC* is to provide the liquid crystal community with rapid access to the most recent research results in the area of liquid crystals and related soft condensed matter.

### II. The Experiment

We propose to employ a new procedure for the review and selection of documents which will result in publication within one week of submission.

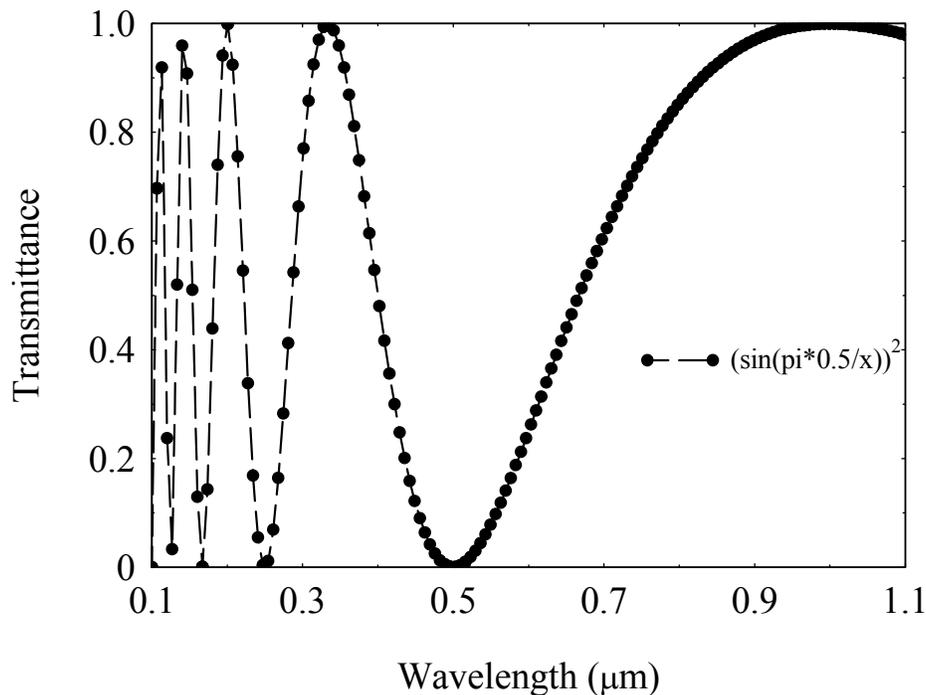
We also plan to establish a forum that allows members of the scientific community to respond by posting comments and questions and by appraising the documents. In this way, we

hope to expand the current practice of peer review, and to introduce the category of ‘peer appraised document’ in addition to the existing ‘refereed’ and ‘non-refereed’ papers.

To ensure the high quality of the communications appearing in *e-LC*, conditions of acceptance are that the document should report significant new results of interest to the community, and all aspects of the document (content, language and presentation) should be of high quality.

Description of the experiments should be sufficiently detailed to enable readers to repeat the work. The source and purity of relevant materials used should be given. Methods of sample preparations should be described.

Each Table and Figure must be numbered and captioned. Units need to be specified. Example:



**Figure 1: Transmittance of a nematic liquid crystalline film. Figure captions should contain 10pt size bold Times New Roman fonts.**

Equations must be presented clearly and unambiguously (Math-Type or Latex formats are encouraged). Symbols should be in italics. Inline equations e.g.  $E = mc^2$  should not be numbered. Displayed equations - both mathematical and chemical - should be numbered consecutively in parentheses, right justified.

Example:

$$\sqrt{E^2} = \frac{m^2 c^3}{mc} \quad (1)$$

To enable rapid publication, a document submitted to *e-LC* will be either accepted without change, or it will be rejected. Documents for posting in *e-LC* can be submitted only

electronically in form of a single file with PDF format. Guidelines for the preparation and submission of documents are provided online.

The PDF format has the following advantages:

- It is platform independent and readily accessible,
- It may contain links to other documents on the web, including multimedia (PowerPoint presentations, animations, online experiments, sound or movie files, etc.),
- Sound files can be embedded in the documents directly,
- QuickTime compatible movie files and animations can be directly played by Acrobat Reader without the need for additional applications (such as RealPlayer or Media Player).

Examples:

[web site](#)

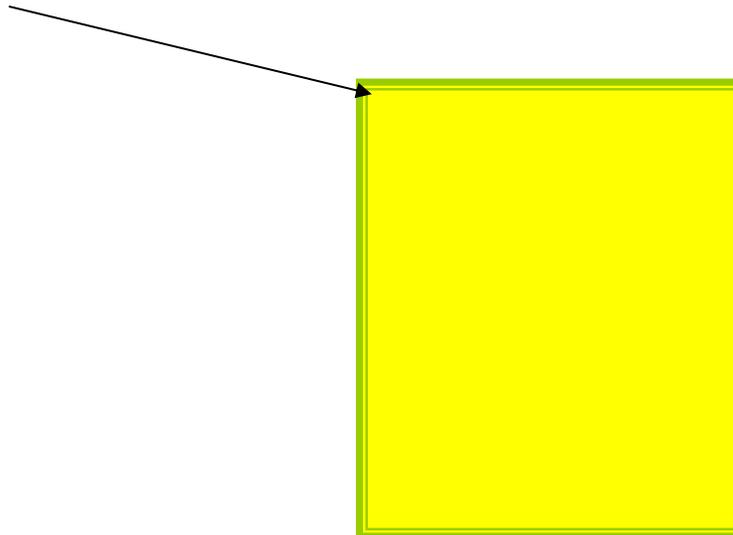
[linked document](#)

[movie file](#)

To hear how embedded sound files work, double click here.



To see a movie file linked to a URL maintained by the authors and played by Adobe Acrobat 5.0 double click here.



The lengths of the PDF files are determined by amount of text, graphics and other embedded information; the size limit on documents to appear in *e-LC* is 2Mb.

### III. Discussion

A key feature of *e-LC* is that it allows readers to appraise documents, to post comments and to assign a rating to documents appearing in *e-LC*. Comments can be made on the original document, and on other comments, forming threads. The average rating, as well as the number of reviewers, will be displayed together with the title and abstract. The corresponding author will receive notice, via e-mail, of new comments posted on his/her document.

Submitted documents are forwarded to the two Editors, who then forward the document to the appropriate Associate Editor(s). The Associate Editors of *e-LC* decide if the submitted document is to be accepted or rejected. There will be no detailed correspondence regarding the decision; the authors will be informed within one week that either their submission has been accepted as submitted, or that it has been rejected. Contributions accepted for *e-LC* will be posted on the *e-LC* server at [www.e-lc.org](http://www.e-lc.org) at the time of acceptance. Each page of accepted documents will be stamped with the *e-LC* logo, the date of acceptance and the URL of the document.

Although *e-LC* will not hold copyright on the posted documents, the submitting author must attest that the submitted work is new and has not been published elsewhere. The submitting author must also grant permission to *e-LC* to post the document in electronic format without term. The authors thus retain copyright, and may publish the document in print elsewhere if the policy of the journal where publication is considered so permits. In the 1<sup>st</sup> editorial board meeting held during the 18<sup>th</sup> ILCC in Edinburgh, there was considerable concern regarding this point. Since *e-LC* is a new entity, with similarities to both preprint servers and electronic journals, it is not clear how journals will regard work appearing in it. Most likely this will vary among journals, and may also change with time. We note here, however, that **e-LC differs from a refereed journal in that e-LC posts documents (but does not publish papers) and documents are screened for appropriateness for posting (but submitted documents are not refereed)**, and so we expect that many journals will *not* regard posting in *e-LC* as prior publication. We also anticipate the possibility, however, that *e-LC* will become sufficiently prestigious in the near future that having a document posted in *e-LC* and favorably appraised by the scientific community will be seen as a praiseworthy achievement, comparable to publishing a paper in a respected journal. We therefore strongly encourage authors to submit documents reporting new results to *e-LC*. Authors may also wish to pursue subsequent publication in a journal of a perhaps more detailed paper into which changes resulting from comments on the original document have been incorporated. If a document posted on *e-LC* is subsequently published in a Journal, the Journal may require that *e-LC* indicate this, and maintain a link to the Journal. *e-LC* will provide this service, however, it is the responsibility of the corresponding author of the document to notify the editors of *e-LC* of such publication, and to provide the required information (name of the Journal, volume and page numbers, year of publication, and URL of the paper).

The document server *e-LC* requested the International Liquid Crystal Society at ILCC 2002 to consider recognition of *e-LC* as an official organ of ILCS. At that time, the ILCS executive urged the editors to launch *e-LC* as soon as possible, so as to be able to assess its effectiveness within the following year.

*e-LC* will be managed by the Senior Editor and Editor, acting on the advice of the Editorial Board, and working with the Associate Editors in reviewing submitted documents.

The server for *e-LC* is located at the Liquid Crystal Institute at Kent State University. The e-lc.org website runs the latest version (currently 1.3.26) of the Apache web server. It makes extensive use of an open source web scripting language called PHP to generate and create web documents on demand.

*e-LC* will be free with unrestricted access. Posted documents can be organized through either article title or author name. The search engine also allows search of documents either by author name or by the content of the title and abstract.

The current staff of *e-LC* is show below:

Senior Editor: P. Palffy-Muhoray  
Editor: A. Jakli

Editorial Board: L.M. Blinov, A. Buka, N.A. Clark, A. Fukuda, J. Goodby, G. Heppke, R. Kamien, M. Kleman, T. Lubensky, N.V. Madhusudhana, R.B. Meyer, M. Schadt, Zhang-Can Ou Yang

Associate Editors: R. Barberi, H. Brand, D. Broer, M. Copic, A.Figueiredo Neto, M. Glogarova, E. Gorecka, H. Finkelmann, C.C. Huang, I. Janossy, O. Lavrentovich, L. Marrucci, J. McLennan, R. Petschek, K. Singer, H. Takezoe, B. Taheri, M. Warner, D. Walba, V. Vill, W. Weissflog, C. Zannoni

Systems analyst: L. Holmberg

## References:

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2. Campanario, "Consolation for the scientist: Sometimes it is hard to publish papers that are later highly cited", *Social Studies of Science (SAGE, London, Newbury Park and New Delhi)*, **23**, 342-362 (1993)
3. O.H. Lowry, N.J. Rosenbrough, A.L. Farr, R.J. Randall, "Protein measurement with the folin phenol reagent", *Journal of Biological Chemistry*, **193**, 265-275 (1951)
4. E. Garfield, "The 100 most cited papers and how we select citation classics", *Current Contents*, **31**, 3-9 (1986)
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