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## Liquid Crystals Today

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## A review of: "Liquid Crystals in the Nineties and Beyond"

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large number of participants at the most recent 16th ILCC at Kent. A key to the success of these conferences is the choice of enthusiastic and efficient organizers as well as a sympathetic location; and the organizers need to be farsighted from a multi-disciplinary viewpoint, which is important for the advancement of research and knowledge in liquid crystals. The choice of location for the ILCC is normally made four years before the event by inviting detailed bids from those wishing to host the conference. The Board of Directors has decided under the guidance of the Chairman of the Conference Committee, Hans-Rainer Trebin, that the 17th ILCC in 1998 will be held in Strasbourg (France) and the 18th ILCC in 2000 will take place in Sendai (Japan). Both are exciting venues and we expect approaching 1000 liquid crystal scientists and engineers will surely enjoy the conferences.

The initial funding for the ILCS came from the former PSC for ILCCs. The Treasurer at that time, Bill Doane, had arranged tax-exempt status for the PSC, and a change of name to the ILCS enabled the Society to enjoy tax-exempt status as a non-profit making organization in USA. But now where does ILCS money come from, where does it go, and why do we need more? As you will have read in the Treasurer's Reports printed in *Liquid Crystals Today* (Vol. 1 (1991) No. 1, Vol. 2 (1992) No.3, Vol. 4 (1994) No.2) the main source of income is from members dues and the main expense has been the Newsletter (*Liquid Crystals Today*). This is quite natural, because one of the most important ILCS objectives is the publication of a journal, *Liquid Crystals Today*, as the founder President, S. Chandrasekhar, wrote in the first issue. It is intended to provide a forum for liquid crystal scientists and engineers worldwide, through which information and ideas can be exchanged. I earnestly hope that *Liquid Crystals Today* will be of the highest possible quality, attracting not only scientific but also industrial interest, and this could generate significant funding for the society. David Dunmur has agreed to continue as Editor of *Liquid Crystals Today*.

The ILCS has grown to about 800 paid-up members in more than 40 countries. It serves as an umbrella organization for regional societies, British, Canadian, Hungarian, Ibero-American, Indian,

Italian, Russian, and Ukrainian LCSs, which have been established so far. I hope that the various national or regional groups will affiliate to the ILCS. It is a policy of the Society to disseminate information and encourage research into liquid crystals especially in developing countries and regions so that scientists and engineers there will start new programmes and bring new ideas to liquid crystal science and technology. The Society is on the World-Wide Web (<http://alcom.kent.edu.ILCS>). Information available at present includes members' addresses, forthcoming meetings, and positions vacant; inquiries may be addressed to Peter Palffy-Muhoray, new Treasurer. The new Membership Secretary, Oleg Lavrentovich, will also provide information for individual members on request. Another important heritage from the PSC for the Society is a prize in honour of Professor Glenn Brown for outstanding PhD theses in the field of liquid crystal research. The research and its presentation at the 16th ILCC at Kent were of a high quality and confirm that the field of liquid crystals continues to attract talented and creative young scientists; and hopefully the Glenn Brown Awards encourage them. Pat Cladis has been appointed as the new chairperson of the Honours and Awards Committee. Due to the high cost of maintaining these activities for the liquid crystal community, the ILCS is unable to fund all of the desirable and worthy requests it receives. Consequently, in order to maintain and expand the Society's activities, it is important that we establish a broad membership base, and I urge those of you who have not yet joined the Society to do so now. I earnestly hope that a significant source of income will be through Sustaining Membership, and if you are in a company with liquid crystal interests perhaps you will propose it for Sustaining Membership. Last but not least, I would like to express my sincere gratitude to the retiring President and Vice-President, Geoffrey Luckhurst and Shunsuke Kobayashi, and Officers and Board Members for their valuable contributions to the ILCS, and call on all the new Officers and Board Members, particularly Vice-President John Goodby and Secretary Giancarlo Galli, for their sound advice and strong support.

## Book Review

### Liquid Crystals in the Nineties and Beyond

Editor: Satyen Kumar

Published by World Scientific, Singapore, 1995

Review by Jay S. Patel, Physics Department, Penn State University, USA

The book is written by experts in the field, intended for people with some familiarity with liquid crystals. It contains a collection of chapters, primarily in the area of fundamental physics of these materials.

The first third of the book is devoted to various aspects of phase behaviour in liquid crystals, which is an appropriate choice because of the unique variety of phase behaviour that these materials exhibit. The treatment ranges from numerical simulations of phase transitions and critical phenomenon, to experimental examination of these properties. The experimental techniques include calorimetric studies in bulk materials to confined geometries and free standing films.

Defects in liquid crystals is another area that has been treated in some detail, in at least three chapters, ranging from a review of defects in liquid crystals to the less familiar defects in thin films which arise from the competition between the bulk and the surface contributions arising from  $K_1$  and  $K_2$  divergence terms. These divergences are also examined in the case of liquid crystals confined to curved geometry, like those encountered in polymer dispersed liquid crystals, in another chapter.

The remaining portion of the book is devoted to other aspects of liquid crystals ranging from a chapter on theory of ferroelectric liquid crystals, optics of liquid crystals, rheology of polymer liquid crystals and a chapter on improving the viewing angle for display devices with grey scale.

The review nature of these chapters makes the book attractive for those interested in these areas outlined above, since it provides a handy overview with citation to the original research articles. In some cases the chapters end with possible future directions of research.

## Centre for Liquid Crystal Research

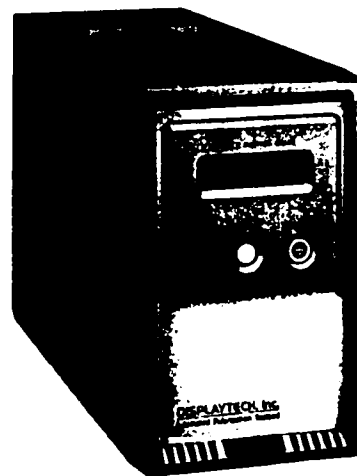
Delegates at the first Indo-US Liquid Crystal Symposium held at the Centre for Liquid Crystal Research, Bangalore, January 1996.



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