This article was downloaded by:

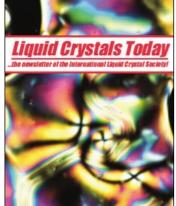
On: 16 January 2011

Access details: Access Details: Free Access

Publisher Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-

41 Mortimer Street, London W1T 3JH, UK



### Liquid Crystals Today

Publication details, including instructions for authors and subscription information: http://www.informaworld.com/smpp/title~content=t713681230

#### **Demonstrates Liquid Crystals**

To cite this Article (1996) 'Demonstrates Liquid Crystals', Liquid Crystals Today, 6: 1, 9 - 10

To link to this Article: DOI: 10.1080/13583149608047633 URL: http://dx.doi.org/10.1080/13583149608047633

### PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

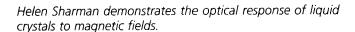
The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

## **Liquid Crystals in Education**

# Astronaut Demonstrates **Liquid Crystals**

elen Sharman, the UK's first astronaut, now turns her talents to promoting science to general audiences of the public and school children. A recent lecture focused on magnetism, and Helen wanted to demonstrate magnetic field effects on liquid crystals. Thanks to Peter Palffy-Muhoray and Tamas Kosa from the Liquid Crystal Institute, Kent State University, a simple but spectacular demonstration of magnetic influences on liquid crystals was devised. This is described in detail in the previous article. Helen Sharman is a chemistry graduate from Sheffield

University and became Britain's first astronaut as part of the Anglo/Soviet Juno Mission to the Mir space station in May 1991. She now acts as an ambassador for science, and in 1995 was appointed as a Visiting Fellow at the Royal Institution of Great Britain.



Inset: Astronaut Helen, member of the Juno Space Mission 1991.



### **Assistant Professor in Liquid Crystals**

Applications are invited to fill a tenure-track position in the Department of Chemistry to begin August 1996. The preferred candidate will be expected to establish a vigorous and funded research programme in the area of liquid crystals. Candidates with research interests which complement existing liquid crystal research programmes in the Chemistry Department and the Liquid Crystal Institute are preferred. Research specialties in polymeric liquid crystal, liquid crystal-polymer interactions, liquid crystal alignment or lyotropic liquid crystals are particularly desirable. The successful candidate will have the opportunity to collaborate with members of the Liquid Crystal Institute and to participate in the NSF Science Technology Center for Advanced Liquid Crystalline Optical Materials (ALCOM). Candidates

should have a PhD degree and postdoctoral experience. Applicants should send a curriculum vitae, undergraduate and graduate transcripts, description of research plans and a one page description of teaching interests along with three letters of recommendation to:

Dr Julia Fulghum, Chair of Search Committee, Department of Chemistry, Kent State University, PO Box 5190, Kent, OH 44242-0001, USA, fax: (216) 672 3816.

Applications should be received by 18 March, 1996 to receive full consideration. Kent State University is an Equal opportunity, Affirmative Action Employer.

# Automated Liquid Crystal Analysis

- Nematic and Ferroelectric Analysis
- Measures 10 Key Liquid Crystal Parameters
- Real Time, On Screen Display of All Variables
- Automated, Fast, Precise and Accurate
- Ready to Fill Test Cells Included
- Quick and Easy to Operate

Now, for the first time, the Displaytech APT II system brings advanced liquid crystal analysis and evaluation capabilities into every lab. The APT II combines high performance, high speed 12 bit hardware, and real time software into a sophisticated characterization and analysis tool for liquid crystal chemists and researchers. The APT II rapidly and accurately measures threshold voltage, parallel dielectric, perpendicular dielectric, dielectric anisotropy and the splay elastic constant of nematic liquid crystal materials. It also measures spontaneous polarization, rotational viscosity, electric rise time, specific resistivity and dielectric constant of ferroelectric liquid crystal materials.



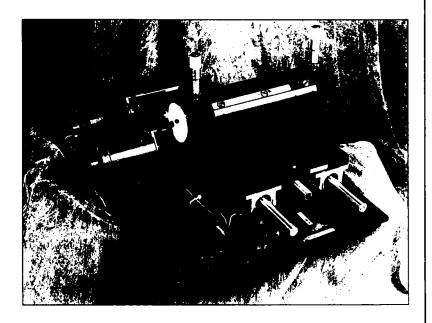
Please call for more information

2200 Central Avenue Boulder, Colorado 80301 49-8933, Fax 303-449-8934 DISPLAYTECH

APPLICATIONS IN: IMAGING • MEDICAL • INDUSTRY • COMMERCIAL • R & D

## **Liquid Crystal Buffing Machine**

Our liquid crystal buffing machine is designed to uniformly buff alignment layers thereby improving yield and repeatability in liquid crystal device manufacturing. The machine has a four-inch square translating substrateholder with a vacuum chuck and a rotating wiper. The wiper-to-stage distance can be controlled with micrometers. Both the translating substrate-holder and the rotating wiper have adjustable speed controls. The wiper cloth can be easily replaced as necessary. The base unit comes with a electronics control box and a miniature vacuum pump (not shown). More advanced models will be available soon.



Optron Systems, Inc., 3 Preston Court, Bedford, MA 01730, USA Tel: 617-275-3100 Fax: 617-275-3106 e-mail: optron@tiac.net