

LMS Durham Symposium on Mathematical Models of Liquid Crystals and Related Polymeric Systems

Monday 10th July - Thursday 20th July 1995

	Morning			
	9-10	10-10.30	11-11.30	11.40-12.10
Tues 11	M Doi	D G Baird	P L Maffettone	G Luckhurst
Wed 12	W Pesch	A Krekhov	M Treiber	S J Hogan
Thur 13	G G Fuller	G C Berry	M C Calderer	S Romano
Fri 14	G Marrucci	G Mitchell	A J M Spencer	D Gonin
Sat 15				
Sun 16				
Mon 17	T J Sluckin		E C Gartland	
Tues 18	L Longa	I W Hamley	K Geiger	G Jackson
Wed 19	T Carlsson	R J Atkin	G McKay	M Nakagawa

Afternoon				
2-3	3-3.30	4-4.30	4.40-5.10	
E G Virga	S Zumer	V M Pergamenschchik	M H Wagner	
R Larson	R Lindsay	N J Mottram		
W R Burghardt	A Windle	J Hobdell	A Strigazzi	
T Mullin	J Mewis	P Moldenaers		
P Schiller	G Blake	P J Kedney	F Abdullaev	Conference Dinner
J C Jones	M Towler	S Elston		

L.M.S. Durham Symposium on:

Mathematical Models of Liquid Crystals and Related Polymeric Systems

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This is a list of talks arranged so far. Other titles will be notified at the Symposium

- H Assender (*Cambridge*) : "Domain structures in magnetically orientated liquid crystalline polymers" (*Poster*)
- R J Atkin (*Sheffield*) : "Freedericksz transitions in *SmC* liquid crystals"
- D G Baird (*Virginia Tech*) : "Transient shear response of a lyotropic system in the isotropic and anisotropic states"
- G Blake (*Strathclyde*) : "Some flow effects in smectic *C* liquid crystals"
- W R Burghardt (*Northwestern*) : "Experimental tests of microstructural models for liquid crystalline polymer rheology"
- T Carlsson (*Goteborg*) : "Macroscopic flow behaviour of smectic *C* and smectic *C** liquid crystals"
- F Di Pasquale (*Univ. Coll. London*) : "Finite element analysis of nematic liquid crystal devices in 2D" (*Poster*)
- M Doi (*Nagoya*) : "Mathematical modelling of swelling and deformation of gels - on the phenomena of volume transition"
- G G Fuller (*Stanford*) : "Structure and dynamics of Langmuir films subject to flow"
- E C Gartland (*Kent State*) : "Structures and structural phase transitions in confined liquid crystal systems"
- K Geiger (*Stuttgart*) : "Disclination loops at rest and under shear and elongation influence"
- V Golo (*Moscow*) : "Relaxation dynamics of fluid dynamics"
- D Gonin (*Cambridge*) : "Lattice modelling of nematic/isotropic phase transition"
- I W Hamley (*Durham*) : "Strain-induced instabilities in hexagonal columnar phases"
- P Higgs (*Sheffield*) : "Modelling the kinetics of ordering in nematics" (*Poster*)
- J Hobdell (*Cambridge*) : "Prediction of microstructure in liquid crystalline polymers"
- S J Hogan (*Bristol*) : "Instabilities in liquid crystals"
- J C Jones (*DRA*) : "The effect of the elastic constants on the alignment and electric field behaviour of *SmC* and ferroelectric liquid crystals"
- P J Kedney (*Strathclyde*) : "Chaotic instabilities in a wedge of smectic *C* liquid crystal"

- A Krekhov (*Bayreuth*) : “Flow-alignment instability in oscillatory flow of nematic liquid crystals”
- R Larson (*AT&T Bell*) : “On the relative magnitudes of viscous, elastic and texture stresses in liquid crystalline PGB solutions”
- M S Lavine (*Cambridge*) : Seminar
- L G Leal (*Santa Barbara*) : “Theoretical studies of the Doi model for nematic liquid crystal polymers”
- R Lindsay (*Bristol*) : “The dynamic instabilities of nematic liquid crystal subjected to oscillatory shear”
- L Longa (*Krackow*) : “Liquid crystalline states of broken chiral symmetry - a mathematical model”
- P L Maffettone (*Naples*) : “Bifurcation analysis of a molecular model for nematic polymers”
- G Marrucci (*Naples*) : Title to be announced
- J Mewis (*Leuven*) : “The use of dynamic stress paths for assessing rheological models of LCPs”
- G Mitchell (*Reading*) : “Coupling and consequences in side chain liquid crystal polymers and elastomers”
+ “x-ray rheology of liquid crystals and liquid crystal polymers”
(*Poster*)
- P Moldenaers (*Leuven*) : “Structure kinetics in lyotropic LCPs in the tumbling regime”
- N J Mottram (*Bristol*) : “Instabilities and defects of nematic liquid crystal cells with non-planar boundaries”
- M Nakagawa (*Nagaoka*) : “A hydrodynamic theory of compressible SmC^* liquid crystals”
- L M Nicholson (*Cambridge*) : “Dynamic simulation of microstructural development in polymer films” (*Poster*)
- V M Pergamonshchik (*Kent State*) : “Inclusion of the divergence K_{13} and K_{24} terms in the elastic theory of liquid crystals”
- W Pesch (*Bayreuth*) : “On convection instabilities in homeotropically aligned nematic liquid crystals”

- P Schiller (*Halle*) : “Stochastic models for the spinning motion of molecules in biaxial smectic phases”
- + “Bifurcation analysis for the Freedericksz-transition in a hexatic liquid crystal film” (*Poster*)
- T J Sluckin (*Southampton*) : “Kinetics of nematic liquid crystal formation in the metastable regime”
- A J M Spencer (*Nottingham*) : “Fibre streamline flows of fibre-reinforced viscous fluids”
- H R Trebin (*Stuttgart*) : “Switching of SSFLC cells by motion of defects” (*Poster*)
- M Treiber (*Bayreuth*) : “The oscillatory instability in electroconvection of nematics”
- E G Virga (*Pisa*) : “Surface energies for nematics”
- M H Wagner (*Stuttgart*) : “The role of the orientation tensor in the rheology of flexible polymers”
- J Wattis (*Nottingham*) : “Micelles and metastability”
- A Windle (*Cambridge*) : “Modelling of disclinations in fields”
- S Zumer (*Ljubiyana*) : “Microconfined liquid crystals: nematic and twisted nematic structures”

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(Nagoya) Gels—on the phenomena of volume transition"
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- M H Wagner : "The Role of the Orientation Tensor in the Rheology of
(Stuttgart) Flexible Polymers"
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(Naples) Polymers"
- V M Pergamonshchik : "Inclusion of the divergence K_{13} and K_{24} terms in the
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- G G Fuller : "Structure and Dynamics of Langmuir Films subject to Flow"
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(Ljubiyana) structures"
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(Stuttgart)
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(Virginia Tech) and anisotropic states"
- P Moldenaers : "Structure kinetics in lyotropic LCPs in the tumbling regime"
(Leuven)

- P Higgs : "Modelling the Kinetics of Ordering in Nematics" (Poster)
(Sheffield)
- F Di Pasquale : "Finite element analysis of nematic liquid crystal devices
(Univ College in 2D" (Poster)
London)
- D W Bruce : "The possibilities offered by the inclusion of metals in liquid
(Sheffield) crystals"
- R J Atkin : "Freedericksz transitions in *Sm C* liquid crystals"
(Sheffield)
- R Lindsay : "The dynamic instabilities of nematic liquid crystals subjected
(Bristol) to oscillatory shear"
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