

This article was downloaded by: [176.114.240.18]

On: 05 October 2014, At: 00:13

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.tandfonline.com/loi/tlcy20>

Report on the XXI Czech-Polish seminar

Ingo Dierking^a

^a School of Physics and Astronomy, University of Manchester, Oxford Road, Manchester M139PL, UK

Published online: 09 Sep 2014.

To cite this article: Ingo Dierking (2014): Report on the XXI Czech-Polish seminar, Liquid Crystals Today, DOI:

[10.1080/1358314X.2014.945246](https://doi.org/10.1080/1358314X.2014.945246)

To link to this article: <http://dx.doi.org/10.1080/1358314X.2014.945246>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

REPORT

Report on the XXI Czech–Polish seminar

The bilateral Czech–Polish seminar, Structural and Ferroelectric Phase Transitions, has a long tradition, going back to 1979. This year's meeting was held from 19 to 23 May 2014 in Sezimovo Ústí in the Czech Republic, some 100 kilometres south of Prague. The seminar does not only cover liquid crystals, but especially also dielectric materials like solid state and thin film ferroelectrics, antiferroelectrics, multiferroics, etc. The conference in 2014 saw 108 participants from 13 countries. The largest group of participants came obviously from the Czech Republic and from Poland, but also a range of researchers from other nations, for example Russia, Germany, France, the United Kingdom, the USA, Austria and Switzerland, were present, just to name some of them (Figure 1).

The seminar was started with an interesting talk by Wolf Widdra on ultrathin BaTiO₃ films with ferroelectric and quasicrystalline structures. In general, it was interesting to receive an overview of solid state ferroelectrics, as compared to liquid crystals, also in relation to nano-composites with polymers, isotropic liquids and porous materials, for example, discussing

phase transitions under confinement conditions, as it is also done in liquid crystal research. Some further non-liquid crystal talks that I personally found stimulating and interesting were by B. Andrzejewski (Poznań) on nano-composites of magnetite and organic acids, a presentation on nano-composites with porous matrices by A. Naberezhnov (St. Petersburg) and a discussion of symmetry considerations in ferro and antiferroelectrics by J. Hlinka (Prague) on the example of PbZrO₃.

The scientific programme was divided into invited talks, student talks and poster sessions. The liquid crystal session was opened with a talk on nano- and micro-particles in liquid crystalline phases, by I. Dierking (Manchester). N. Podoliak (Prague) reported on chiral four-ring laterally substituted smectogens with ferroelectric SmC* phases, while W. Piecek (Warsaw) discussed chiral liquid crystal phases for advanced applications (Figure 2(a)). New materials undergoing cis-trans isomerisation were shown by Z. Galewski, the results of a collaboration between the Polish groups in Wrocław and Warsaw.



Figure 1. Conference venue at the Hotel Mas in Sezimovo Ústí with XXI Czech–Polish seminar participants.



Figure 2. Liquid crystal presentations by (a) W. Piecek and (b) V. Novotná.

M. Tykarska attributed the helical pitch inversion in the antiferroelectric phase of mixtures to the formation of different conformers, individually leading to left- or right-handed helical superstructures. V. Novotná introduced multiferroic hybrid systems of ferroelectric liquid crystals and magnetic nano-particles and their properties, a collaboration between Prague and Warsaw (Figure 2(b)). Finally, novel

bent-core molecules and their mesogenic properties were shown by K. Fodor–Csorba, as a result of a collaboration between the Hungarian Academy of Sciences, the University of Belgrade, Serbia, and Kent State University, USA. The scientific programme was rounded up by two poster sessions with approximately 60 contributions (Figure 3).



Figure 3. One of the meeting's poster sessions.



Figure 5. Conference excursion to the old castle of Červená Lhota.



Figure 4. Discussions over lunch, bringing together not only Czech and Polish researchers, but also participants with a broader background in soft and solid state physics and chemistry.

Participants of the seminar were very well taken care of in a nice resort hotel, including good accommodation and meals (Figures 4(a) and 4(b)) at a very reasonable price, and evening relaxation with bowling competitions, singing songs and similar activities. The conference excursion led us to the beautiful Červená Lhota castle (Figure 5), and the

conference dinner stimulated dance and further discussions.

Ingo Dierking
*School of Physics and Astronomy,
University of Manchester, Oxford Road,
Manchester M139PL, UK*