

This article was downloaded by: [Tomsk State University of Control Systems and Radio]

On: 19 February 2013, At: 13:17

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



Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/gmcl17>

Welcome Address

Milko Borissov^a

^a Director of the Center of Physics of the Bulgarian Academy of Sciences and Director of the Georgi Nad jakov Institute of Solid State Physics

Version of record first published: 17 Oct 2011.

To cite this article: Milko Borissov (1987): Welcome Address, Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics, 151:1, ix-xi

To link to this article: <http://dx.doi.org/10.1080/00268948708075317>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.tandfonline.com/page/terms-and-conditions>

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.

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.

W E L C O M E A D D R E S S

by

Academician MILKO BORISSOV
Director of the Center of Physics
of the Bulgarian Academy of Sciences and
Director of the Georgi Nadjakov Institute
of Solid State Physics

Dear colleagues!

It is a great pleasure and high honour for our country, for the Bulgarian Academy of Sciences and for the Institute of Solid State Physics to be a host of the Fifth European Winter Liquid Crystal Conference. It may be useful to inform briefly our respectable guests about our Academy, the Centre of Physics and the Institute of Solid State Physics belonging to it.

The Bulgarian Scientific Society was first created in Braila, Romania, in 1869, i.e. about nine years before our liberation from the Osman domination. The statutes of this Society were very similar to that of many foreign Academies at that time. In 1912 the Society was renamed as Bulgarian Academy of Sciences. Until 1945 the Academy did not have any institutes of its own. Its activity was expressed only in editing the scientific works of various scientists and giving them some grants and awards from its limited funds. The main place for scientific activity in the field of physical and mathematical sciences until 1945 was the Faculty of Physics and Mathematics at the Sofia University (founded in 1888). It was only after 1945 when the Academy started to develop its own Institutes and Laboratories.

At present the Bulgarian Academy of Sciences is the biggest and most complex scientific organization in our country, dealing with natural, technical and sociological sciences. It includes 13 000 research associates in 11 scientific centers. Our Center of Physics unites 5 Institutes, namely, the Institutes of: Nuclear Research and Nuclear Energy, Solid State Physics, Electronics, Applied Physics, Space Research and 3 Central Laboratories, namely, the Laboratories of: Optical Storage and Information Processing, Solar Energy and New Energetic Sources, Automation and Scientific Instrument Design.

The Institute of Solid State Physics has now 250 co-workers, 1/3 of them being research associates. Its basic field of research is Condensed Matter Physics developed in the Departments on Physical Problems of Semiconductor and Integrated Electronics, Acoustoelectronics and Acustooptics, Magnetism and Low Temperature Physics, Structural Studies, Liquid Crystals and Molecular Electronics. This Institute includes also 3 separate research groups, namely, Groups on: Molecular Epitaxy, Cryogenic Processes and Apparatuses with Liquid Gases Production Unit, and Solid State Theory.

The second field of research carried out by the Institute is Optics and Spectroscopy with a corresponding Department and two separate groups on Atomic Spectroscopy and Metal Vapour Lasers.

Our Institute has broad relations and indulges in scientific cooperation with many similar Institutes abroad. As an example of our international cooperation I would like to mention the International School on Modern Problems in Condensed Matter Physics held every two years in our country.

The scientific interests in liquid crystals in Bulgaria have an old tradition going back to the first Chairman of the Chair on Experimental Physics in Sofia University, Porfirii Ivanovitch Bachmetiev. He is the founder of cryobiology in Bulgaria and the discoverer of the anabiosis phenomenon in living organisms at low temperatures. Bachmetiev has personally been acquainted with Otto Lehmann and has visited his lab in Karlsruhe in 1904. After that he became an enthusiastic popularizer of Lehmann's Liquid Crystals. He has particularly been attracted by Lehmann's ideas in the book "Liquid Crystals and Theories of Life". In 1906 Bachmetiev's article "Biological Analogies with Crystals" has been published in the Russian journal "Natural Science and Geography". In this article Bachmetiev has noted and discussed the analogy between some phenomena in thermotropic and lyotropic liquid crystals and some fundamental phenomena in living cells: fission and fusion, digestion, regeneration and motility.

Like everywhere else in the world the interest in liquid crystals in Bulgaria became stronger during the sixties years of the present century. The investigations started in the Department of Optics and Spectroscopy. Later on a separate Liquid Crystal Research Group was created in order to study electrooptics, dielectric and flexoelectric properties of liquid crystals. Still later this group started to investigate liquid crystal properties of model and biological membranes. This group evolved recently in a Department of Liquid Crystals and Molecular Electronics. Our

Institute will support and develop further the scientific activity of the Liquid Crystal Department. We are very glad of the good international resonance of its activity, demonstration of which is also the present Fifth European Winter Liquid Crystal Conference taking place in our country.

Allow me on behalf of the Presidium of the Bulgarian Academy of Sciences, the Centre of Physics and the Institute of Solid State Physics to welcome you, to wish very fruitful work at your interesting Conference and a pleasant stay in Borovets and in our country to all our guests.

Thank you!

Borovets, 25 March 1987