



CHAPTER REPORT

Name of Chapter: Russia Chapter

Chapter Officers: **Victor Belyaev – Director**
Igor Kompanets – Director Ex Officio
Maxim Sychov – Chair
Sofiya Torgova – Secretary
Denis Chausov – Treasurer

Chapter Report for the Board of Directors' Meeting: May 22, 2016.

Number of technical meetings held since last Board Meeting: 3

1. General Chapter Meeting 14.04.2016.

Venue: Moscow Region State University.

Attendance: 15 SID Russia Chapter members including 5 Committee members.

Agenda:

1. Report by Chapter Director V. Belyaev
2. Report MRSU Student Branch (A. Kurilov)
3. Report by Chapter Treasurer D. Chausov
4. Discussion of the Chapter work in 2015-2016 and its assessment
5. 2016 plans
6. Information on SID voting
7. Information about display events and publications

2. Student Branches activities

1. Current membership – 40 full time graduate and post-graduate (PhD) students from MRSU, Povolzhsky State Technical University, People's Friendship University of Russia, Higher School of Economics (University).
2. Renewal of SB members list. Some members graduated from the universities, some entered the SB from younger groups.

Students' R&D

- Russian Exhibitions "Young Researchers Activity for Science and Technology", 2015, 2016. MRSU students. Topics: Display Metrology, LC materials

- ❑ International Conference “Nanotechnologies & Nanomaterials”, Saint-Petersburg Technology University, 2015
- ❑ International Science and Technology Conference “Basic problems of radio & electronics engineering”, Moscow Technology University of Radio, Electronics & Automation, 2015
- ❑ Results of Students of Saint-Petersburg Technology University
 - V. Malygin – oral presentation
 - N. Podsypanina, P. Matveychikova – Diplomas of 1st and 2nd Grade
 - Conference “New Materials”, Saint-Petersburg, 2015
 - International Conference “InterAcademia”, Hamamatsu, Japan, 2015

3. Awards.

1. K.A. Ogurtsov, Technology University, Saint-Petersburg. Winner of Saint-Petersburg City Government Competition in area of Science and Education for handbook “Displays Metrology”. 2016
2. Golden Medal of Russian Academy of Sciences (RAS) for R&D works in area of Device Engineering to Student of Moscow Region State University Alexander KURILOV. February 2016



Left - Alexander KURILOV with his RAS medal and diploma. Center – Vice-President of RAS Valerii KOZLOV. Right – Victor BELYAEV as Supervisor of the student’s R&D

3. Golden Medal of Competition “Best Innovation Project and Best Science & Technology Development of the Year”, Saint-Petersburg Technology Fair, 2015

4. R&D activity of Russian SID members

10+ R&D projects funded by Russian Foundation for Basic Researches, Russian Science Foundation, Russian Ministry of Education and Science.

Topics:

➤ Materials

- LC – nematic, cholesteric, ferroelectric et al.,
- OLED, EL,
- For LC alignment: organosilicon, perfluorinated
- For photoalignment and optical films
- et al.

➤ Displays

- LCD, OLED, ELD
- Optical films

➤ Backlight

➤ Transparent Electrodes (alternative to ITO)

R&D expertise including projects on display technologies

Standards:

- 2015-2016 State Standard Methods
- A) Measurement of LC refractive indices
- B) Measurement of LC azimuthal anchoring energy

5.Events

5.1. Conference “To-date problems of physics of condensed matter” in Moscow Region State University

April 14 and 21 (student session), 2016. Participants: 50 persons from different Russian regions including 10 SID members and 10 student members.



5.2. Regular Display Seminars in House of Scientists, S-Petersburg.

Monthly. Attendance 10-20 SID members/ 10-20 non SID members / Total 20-35.
Chair – Dr. M. Sychov.

Two seminars in February – May:

- a) L.D. Lozhkin, Povolzhsky State University, Yoshkar-Ola. “Isocontrast color space for video display terminals”
- b) K.A. Ogurtsov, Technology University, Saint-Petersburg.

5.3. European Conference on Liquid Crystals 2017. Moscow State University. Co-Chair Victor BELYAEV. 4 SID members in the Organizing Committee.

5.4. Regular Seminars of Liquid Crystal Society “Commonwealth” on Liquid Crystal R&D, Moscow.

Monthly. Attendance 5-10 SID members/ 10-15 non SID members / Total 15-25.
Chair – Dr., Prof. A. Kaznacheev.
Three seminars in February – May.

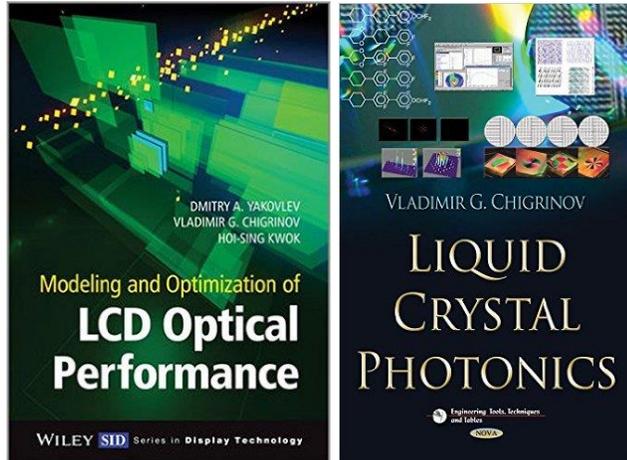
6. Important Publications

6.1. Four papers to Electronics: Science, Technology, Business magazine (Russia) have been published by V. Belyaev in 2015: a) Smart House; b) LCD Conference in Dublin; c,d) on to-date LCD technologies.



6.2. Books

- Dmitry A. Yakovlev and Vladimir G. Chigrinov, Modeling and Optimization of LCD Optical Performance (Wiley Series in Display Technology). 20 Mar 2015
- Vladimir G Chigrinov, Liquid Crystal Photonics (Engineering Tools, Techniques and Tables). 1 Dec 2014



- Victor V. Belyaev, Gram S. Chilaya, Liquid Crystals in the start of the XX1st Century. April 2015
- Maxim M. Sychev, A Review on Electrophosphor, in a Book “Nanoscale-Arranged Systems for Nanotechnology”, NY: Nova Publishers, 2015 Ed.: Kirill L. Levine

7. Russia Chapter on web sites

The Chapter site is updated <http://www.sid.org/Chapters/Europe/Russia2.aspx>
At present it comprises Chapter information from 2002 to 2016.

Report submitted May 18, 2016 by Victor Belyaev, Chapter Director