



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 21, 2017.

1. Number of technical meetings held since last Board Meeting: 2

Committee Meetings 21.02 and 20.04.2017.

Venue: Moscow Region State University.

Agenda:

1. Discussion of future events – Display Week, ADLT Symposium in Belarus, Moscow Region events
2. 2017 plans
3. Information on SID voting
4. Information about display 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

- ❑ Optical Valley China Exhibition, 3-5 November 2016, Wuhan, China. Topics: Display Metrology, materials for LCD prepared by MRSU students as well as post-graduate students have been presented.



V. Belyaev presenting azo dye films with unique properties.

- ❑ Russian innovation business competition UMNİK (Smart Guy). One MRSU student (Irina Bobrova) presented a material that can be used as a composite material in the LCDs.

S-Petersburg Technological Institute (Technology University) is in progress of formation of a new Student Branch. Almost all docs are ready.

3. 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)
 - Composite systems, eg. Investigation of the effect of Yttrium oxide nanoparticles doped with cerium and neodymium, carbon nanofibers on electro-optics of liquid crystal polymer composites in Khristianovich Institute of Theoretical and Applied Mechanics of Siberian Branch of the Russian Academy of Sciences
- R&D expertise including projects on display technologies
 - Standards:
 - 2016 State Standard Methods
 - A) Measurement of LC refractive indices
 - B) Measurement of dielectric constant of A3B5 doped crystals on nanometer scale

5.Events

5.1. 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.

5.2. European Conference on Liquid Crystals 2017. Moscow State University. Co-Chair and Chair of LC Application Section Victor BELYAEV. 4 SID members in the Organizing Committee.

Web-site <http://eclc2017.msu.ru/programme.html>.

5.3. 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 January-May.

6. Important Publications

6.1. Two papers to Electronics: Science, Technology, Business magazine (Russia) have been published by V. Belyaev in 2016: a) [Display week 2016: nowadays and Future technologies. Part 1. Exhibition and scientific conference](#); b) [Display week 2016: nowadays and future technologies. Part 2. Innovation zone \(I-Zone\)](#).



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 2017.

Report submitted May 14 8, 2017 by Victor Belyaev, Chapter Director