SID RUSSIA CHAPTER REPORT

October 2004 – December 2004

1. October 18-20, 2004. The First International Seminar on Display Optics (DISPLAY OPTICS'04) took place in St.-Petersburg, Russia. The seminar was organized by Society for Information Display (SID), Russian SID Chapter, D.S. Rozhdestvensky Optical Society, D.I. Mendeleev Russian Chemical Society and S.I. Vavilov State Optical Institute (SOI) with the financial support from European SID chapter and Russian Ministry of Science and Education.

The DO'04 seminar co-running with the 6-th International Conference "Applied Optics" having been held since 1994, and the Sixth International Applied Optics Congress (OPTICS – XXI CENTURY) gave to the participants of the seminar unique opportunity to take part in discussions on most actual problems of modern applied optics. Our guests visited Applied Optics Plenary lectures devoted to new materials for the stimulated Raman emission lasers (*T.T. Basiev and V.M. Osiko from Prokhorov Institute of General Physics, Moscow*), Optical Fibers: Yesterday, Today and Tomorrow (*Yu.N. Kondratiev from Vavilov State Optical Institute, St.-Petersburg*) and Optical Spectroscopy of semiconductor nanostructures (*A.V. Fiodorov from Vavilov State Optical Institute*). Some of the problems discussed at the lectures have found their continuation at the sessions of DO'04 seminar.

The International DO'04 seminar took place at the centre of St.-Petersburg at the historical building of D.I. Mendeleev Russian Chemical Society, where great Russian Chemists read his lectures. Quite close the building of former Physical Institute is situated where V.K. Freedericksz first explained the nature of electro-optical effects in liquid crystals. During the opening ceremony the famous chemist Professor Roman Dabrowsky from Poland was awarded with V.K. Freedericksz Honorable Medal of Liquid Crystal Society SODRUZHESTVO (COMMONWEALTH).

The seminar gathered more than 50 participants from 6 European countries and different regions of Russia and Byelorussia. Among our guests there were scientists from Stavropol, Novosibirsk, Ulan-Ude, Ryazan, Kishenev, Saratov, Krasnoyarsk, etc. Four main topics were discussed during sessions: liquid crystal materials and LCDs, emissive displays and phosphors, display engineering and applications, 3D displays. The seminar program containing 36 oral and 18 poster papers and abstract book, distributed among the participant at the registration included main achievements of the authors. It was decided to prepare as a working document of the seminar a CD containing the author's presentations and to publish selected papers presented at the seminar in a special issue of the Journal of Optical Technology (Optichesky Zhurnal) № 7,

2005 (Russian-US journal published by Vavilov State Optical Institute, Russia and the American Physical Society).

For all the participants an excursion to memorial D.I. Mendeleev Museum was organized. The cultural program included also a concert of St.-Petersburg Philharmonic orchestra under the conduction of maestro V. Temirkhanov.



A group of participants of DO'04 seminar in front of D.I. Mendeleev Centre

- 2. October 21, 2004. A topical meeting on displays for special applications took place in St-Petersburg. It collected 45 persons from industry, science and education as well as consumers from military institutions. Victor Belyaev was moderator of the panel discussion.
- 3. October 21, 2004. Attendance of display certification center in St-Petersburg. Director Dr. Galina Zargaryants and Chief Specialists Prof. Oleg Mikhailov and Dr. Vladimir Shmulevich demonstrated facilities, methods to measure displays performances for the consumers. The center developed many Russian State standards in display ergonomics which have been approved by state authorities.
- 4. <u>November 2004</u>. A special volume of SPIE Proceedings devoted to 3D imaging has been issued. Guest Editor of the volume is Vladimir Petrov, Professor of Saratov State University. 13 papers have been collected.

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- 5. <u>November 2004</u>. A special display issue of Electronic Components issue has been edited and printed. The issue involves 12 papers on 66 pages on current market and technologies, addressing methods, standards, Russia Chapter activity, Igor Litvak obituary, Display Idea Contest, LED, flexible displays and e-paper, and other topics.
- 6. <u>September December, 2004</u>. Collecting and editing of papers of Russian members participated at 13th Symposium Advanced Display Technologies in Raubichi, Belorussia. Referee reviews of leading specialists from Russia, Belorussia, Ukraine, Poland, The Netherlands, Singapore, UK have been collected, and the papers were revised in accordance with their reviews.

Report constructed by Victor Belyaev, Chapter Director