That the furnaces were rebuilt and renovated on a number of occasions is revealed by the presence, at various levels in the archaeological deposits, of many brick fragments with thick deposits of raw glass on their faces. It is believed that the bricks formed the base of the melting furnaces and that during the glassmaking process, molten glass from the crucibles was spilled onto them. During rebuilding, these bricks were discarded as useless.

The glassmaking workshops on Trokšņu Street stood for a long time as evidenced by a concentration of the finds in a ca. 1.5-m-thick layer in the cultural deposit. The recovered artifacts and their stratigraphic contexts indicate that the glassworks were in operation during the late 13th and 14th centuries.

Chemical analysis revealed that the glass produced at the glassworks was primarily composed of lead oxide (PbO) - 59.2%-74.7%, silicon dioxide (SiO_2) - 14.4%-33.87%, and tin dioxide (SnO_2) - 1.04%-8.28%. Because of the high lead content, the majority of the glass objects were yellow in color. Glass of greenish tones was occasionally produced by the addition of up to 1.4% of cuprous oxide (CuO). The glass produced in Riga was, thus, made from an easily melted composition of quartz sand and lead without an alkali additive. Its composition distinguishes it from the typical potash-lime glass of Western Europe. Non-alkali lead glass of similar composition had a broad distribution in Poland during the early Middle Ages, as well as in contemporary Old Russia.

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43. ISCC-NBS CENTROID COLOR CHART UPDATE, by Karlis Karklins (1992, 20:6)

Bead researchers looking for an accessible and inexpensive chart for accurately determining bead colors have been dealt a low blow by the U.S. National Bureau of Standards which has discontinued the ISCC-NBS Centroid Color Chart discussed in *Bead Forum* No. 14. Following up on a note from Jeff Mitchem, a phone call to the NBS confirmed that this useful reference item has been discontinued. When asked if there was an alternative, they referred me to the Munsell Color Company. Readers knowing of another suitable color chart are asked to contact the editor.

44. A VENETIAN LANDMARK CLOSES, by Karlis Karklins (1993, 22:20-21)

It is sad to note the closing of the famous Società Veneziana Conterie at Fondamenta Giustinian 1 on Murano in the lagoon of Venice. The concern was founded in 1898 when 17 competing bead producers merged for their mutual benefit. It was initially known as the Società Veneziana per la industria delle Conterie. It later became the Società Veneziana Conterie e Cristallerie and then simply the Società Veneziana Conterie.

The company principally made drawn embroidery beads (*conterie*) in a rainbow of colors. It is truly mind boggling to contemplate how many thousands of tons of beads were sent abroad in the ninety-odd years that the Società was in operation. In the last few years the company experienced serious financial difficulties. A major problem was competition from countries such as Japan which could sell beads for what it cost the Società to produce them (Dr. C. Chiappetta, president 1987: pers. comm.). To expand its market, the company began to produce small glass pellets for use in atomic reactors.

The demise of the Società Veneziana Conterie marks the end of *conterie* manufacture on Murano. Bead production there is now limited to wound beads in various plain, mosaic, and millefiori forms, as well as chevron beads made from canes supplied by Vetrerie Moretti which is located a short distance from the Società complex.

It is not known what will become of the Società machinery or stock of canes and beads. It would be wonderful if someone could photograph the machinery and get detailed descriptions of it before it disappears. This is something I could not accomplish despite two visits to the factory in the 1980s. In some cases it was because the machinery was in operation; in others I was asked not to photograph certain operations because they were still considered trade secrets. It would also be beneficial if examples of the various sample cards and books that still exist in the Società's warehouses could be salvaged for distribution to researchers and research facilities around the world.

45. PHOTOGRAPHING PATINATED GLASS BEADS, by Karlis Karklins (1994, 25:13)

Good color photographs are an essential complement to written descriptions of beads. An excellent article by Robert K. Liu on how to photograph beads and objects formed of beads appears in the summer 1994 issue of *Ornament* magazine. Short but packed with useful information, this article will greatly help researchers to improve their