

## APPENDIX

The following are archival photographs, some just released from Russian files, showing many of the principals during their careers and afterwards.



Figure 2-1: Irina V. Tsukerman, Vladimir A. Al'tshuler and his grandson, Boris L. Al'tshuler. In later years, Lev Al'tshuler joked that his son Boris was pointing the way to the "New Russia". Boris Al'tshuler was an activist in support of human and children's rights.



Figure 2-2: Lev Al'tshuler(youngest), sister Olga, and brother Sergei with governess, and grandfather Alexander Al'tshuler in Maikop, October 1916. Later on, Ilya Al'tshuler (son of Boris) visited Maikop and found individuals who remembered the family.



Figure 2-3: Sergei Al'tshuler, sister Irina and Lev Al'tshuler, Maikop, Russia ~ 1917

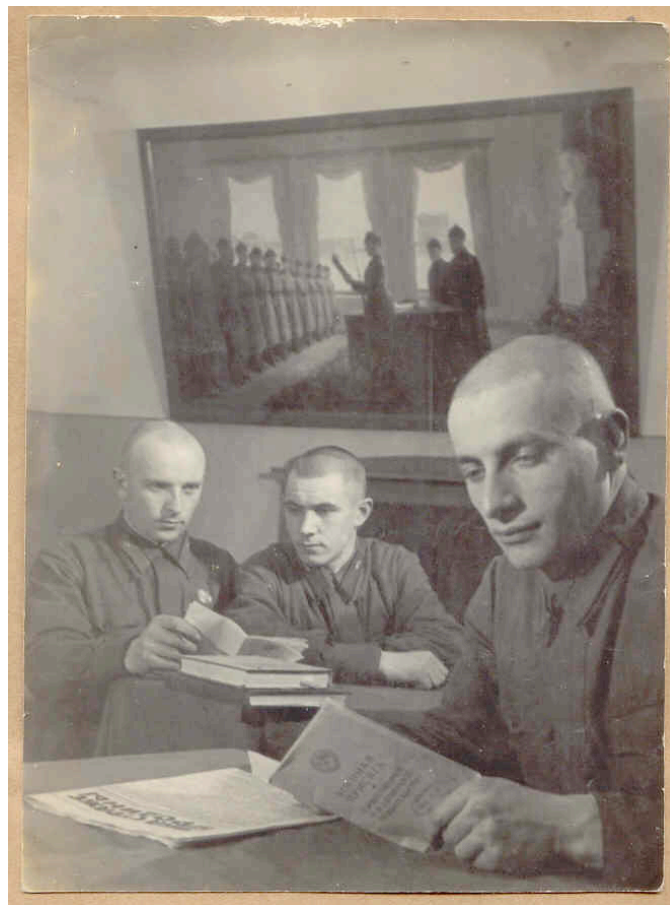


Figure 2-4: Lev Al'tshuler after being inducted into the Red Army, 1941



Figure 2-5: Lev Al'tshuler peeling potatoes, army, early 1942



Figure 2-6: Lev Al'tshuler at the front, early 1942

L. V. Al'tshuler, and High Energy Density Research - R. Norris Keeler and Carl H. Gibson.



Figure 2-7: Zinaida Arzakh, V. Tsukerman, Lev Al'tshuler, Alexander Avdeenko, Maria Speranskaya, on 23 September, 1943, last day at Kazan', returning to Moscow after the Germans had been driven far back from Moscow. Avdeenko was the mechanical genius who constructed most of the shots.



Figure 2-8: Konstantin K. Krupnikov attaches explosive charges. Sarov, 1949.



Figure 2-9: After detonation of explosive charge, Sarov, 1949

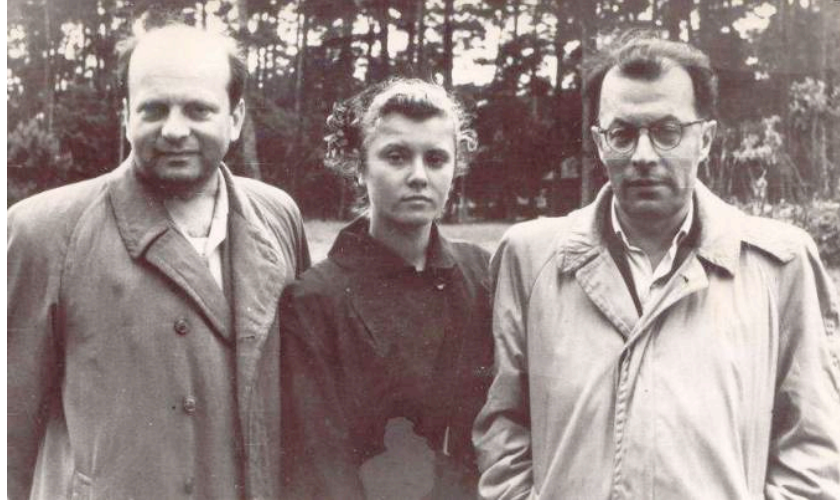


Figure 2-10: Veniamin Tsukerman, daughter Irina and Izrael Galynker, Moscow, 1956. Galynker had been sent to the Gulag in 1948 for unauthorized contacts with the West, helping to obtain antibiotics to cure Irina's tubercular meningitis.



Figure 2-11: Veniamin Tsukerman, Izrael' Galynker and Lev Al'tshuler, Baltic Sea, 1958. Galynker had been released from the camps only two years before.



Figure 2-12: Tsukerman, Lev Al'tshuler, Yuli Khariton. Sarov, 1960



Figure 2-13: Lev Al'tshuler with his beloved dog Sharik, Moscow, May 25, 1985



Figure 2-14: Boris Al'tshuler, Andrei Sakharov, and Elena Bonner in the Sakharov kitchen, Moscow, 1987



L. V. Al'tshuler, and High Energy Density Research - R. Norris Keeler and Carl H. Gibson.



Figure 2-15: Lev Al'tshuler receives the 1991 Shock Wave Award



Figure 2-16: Back row, L. V. Al'tshuler, V. Rumer and V. Tsukerman; Front row, Maria (Speranskaya) Al'tshuler, Anna Bakanova and Zinaida Arzakh. Sarov, 1960



Files of Academician L. F. Vereshchagin

Figure 2-17: June, 1975 AIRAPT Conference, Moscow State University, Moscow, USSR. Second row, Minomura, Keeler, Ruoff; third row, A. S. Kusubov; fifth row, Lev Al'tshuler.



Files of Academician L.F. Vereshchagin

Figure 2-18: June, 1975 AIRAPT Conference, Moscow State University, Moscow, USSR. First row, Osugi, Pugh; second row, Ruoff, S. B. Kormer; third row, U. Franck (partly hidden); Elsbeth Franck; far right, sixth row, A. I. Pavlovskiy

L. V. Al'tshuler, and High Energy Density Research - R. Norris Keeler and Carl H. Gibson.



Figure 2-19: V. E. Fortov, L. V. Al'tshuler and G. M. Gandelman, Moscow, June 1975



Figure 2-20: R. N. Keeler and S. B. Kormer, Moscow, June 1975



Figure 2-21: Moscow, 1993, R. N. Keeler, Robert Harter, Lev Al'tshuler and Patrick Renehan



Figure 2-22: Otto Diehl and L. V. Al'tshuler. Paderborn. 1989



Figure 2-23: V. A. Novikov, B. K. Vodolaga, L. V. Al'tshuler and R. N. Keeler, Kiev, 1987



Figure 2-24: L. V. Al'tshuler, R. N. Keeler and J. W. Shaner, Los Alamos, Kiev, 1987



Figure 2-25: Honor Guard for funeral of Yuli Khariton, 23 December 1996



2-26: Funeral procession for Yuli Khariton





Figure 2-27: At the casket of Yuli Khariton



Figure 2-28: Yuli Khariton at the viewing



Figure 2-29: VIP Assembly at Khariton funeral



Figure 2-30: A. I. Pavlovskii, who with Andrei Sakharov, developed the systems used by Hawke in his metallic hydrogen experiments.