

A Message of Hope for a Missing Colleague

Vladimir Aleksandrov was among the first scientists to carry out global simulation studies of the "nuclear winter" effect. In his presentation at the 1983 conference in Washington, D.C., and later before the U.S. Congress and at numerous forums around the world, Vladimir, then head of the climate modeling section of the Computing Center of the USSR Academy of Sciences, convincingly described the severe climatic perturbations that could result from a major nuclear war. His work contributed significantly to the international scientific consensus that emerged as part of the SCOPE ENUWAR project.

On April 1, 1985, just as the ENUWAR consensus was solidifying, Vladimir mysteriously disappeared in Madrid, Spain, while returning home from an international conference on nuclear-free zones in Córdoba. Despite long and continuing inquiries as to his whereabouts, Vladimir Aleksandrov is still listed by the Soviet government as "missing without explanation."

Five days before the third anniversary of his disappearance, Moscow ENUWAR workshop participants Michael MacCracken and Alan Robock, together with Vladimir's colleague Georgi Stenchikov and his wife and daughter, had a poignant reunion with Vladimir's wife, Alia, and 18-year-old daughter, Olga. The visit brought both sorrow and joy. For Alia and Olga, the sudden, unexplained disappearance of Vladimir is still painful, leaving a "hole in the heart." But the evening also provided an opportunity to renew friendships and was reminiscent of earlier and happier times when Vladimir and Alia had hosted or visited with scientists from around the world.

As the evening concluded, Alia confided that she and Olga manage to go on by remembering an old Russian proverb, "Hope is the last thing to die." They asked that this final SCOPE ENUWAR report convey to Vladimir, wherever he may be, their continuing dream, and that of the ENUWAR project participants, that he may soon return.

—Michael C. MacCracken and
Alan D. Robock

Participants in the SCOPE ENUWAR Moscow Workshop, 21-25 March 1988

- Thomas P. Ackerman, *Pennsylvania State University, United States*
 Pramod K. Aggarwal, *Water Technology Center of Indian Agricultural Research Institute, India*
 R. M. Alexakhin, *All Union Institute of Agricultural Radiology, Soviet Union*
 A. V. Andronova, *Physico-Chemical Institute, USSR Academy of Sciences (hereafter referred to as A.S.), Soviet Union*
 Linda J. Appleby, *University of Essex SCOPE Unit, United Kingdom*
 Helen M. ApSimon, *Imperial College, United Kingdom*
 N. Belatalov, *Computing Center, A.S., Soviet Union*
 Taye Bezuneh, *Semi-Arid Food Grain Research and Development Program, Organization of African Unity, Burkina-Faso*
 John Birks, *University of Colorado, United States*
 Lawrence C. Bliss, *University of Washington, United States*
 E. P. Borisenkov, *Main Geophysical Observatory, A.S., Soviet Union*
 Peter Carl, *Central Institute for Electron Physics, GDR Academy of Sciences, German Democratic Republic*
 Wendell P. Cropper, Jr., *University of Florida, United States*
 A. A. Dorodnitsyn, *Computing Center, A.S., Soviet Union*
 Ann C. Freeman, *Cornell University ENUWAR Unit, United States*
 A. S. Ginzburg, *Institute of Atmospheric Physics, A.S., Soviet Union*
 Gary A. Glatzmaier, *Los Alamos National Laboratory, United States*
 Georgi S. Golitsyn, *Institute of Atmospheric Physics, A.S., Soviet Union*
 Yu A. Gostintsev, *Institute of Chemical Physics, A.S., Soviet Union*
 Dariusz Grabowski, *Central Laboratory for Radiological Protection, Poland*
 Paul H. Gudiksen, *Lawrence Livermore National Laboratory, United States*
 Roy M. Harrison, *University of Essex, United Kingdom*
 Ted Harvey, *Lawrence Livermore National Laboratory, United States*
 Mark A. Harwell, *Cornell University, United States*
 S. V. Iesenko, *All Union Institute of Agricultural Radiology, Soviet Union*
 I. L. Karol, *Main Geophysical Observatory, A.S., Soviet Union*
 Lev Khitrov, *Vernadsky Institute of Geochemistry and Analytical Chemistry, A.S., Soviet Union*
 Sergyi Khmelevtsov, *Obninsk, Soviet Union*
 Rene Kirchmann, *International Union of Radioecologists, Belgium*
 G. B. Kolesov, *All Union Institute of Agricultural Radiology, Soviet Union*
 Michayl P. Kolomeyev, *Obninsk, Soviet Union*
 Eugen Komerov, *Institute of Roentgenology and Radiology, Soviet Union*
 Jiro Kondo, *The Science Council of Japan, Japan*
 Kirill Kondratyev, *Institute for Lake Research, A.S., Soviet Union*
 Pavel Koryavov, *Computing Center, A.S., Soviet Union*
 Andrew Kosorukov, *Vernadski Institute of Geochemistry and Analytical Chemistry, A.S., Soviet Union*
 N. Alexander Krenke, *Institute of Geography, A.S., Soviet Union*
 A. M. Kuzin, *Computing Center, A.S., Soviet Union*
 Alexander Leaf, *Massachusetts General Hospital, United States*
 N. Lukyanov, *Computing Center, A.S., Soviet Union*
 Michael C. MacCracken, *Lawrence Livermore National Laboratory, United States*
 Tadeusz Majle, *National Institute of Hygiene, Poland*
 G. M. Makhviladse, *Institute of Problems of Mechanics, A.S., Soviet Union*
 Takashi Maruyama, *National Institute of Radiological Sciences, Japan*
 John F. B. Mitchell, *Meteorological Office, United Kingdom*
 Genrik Nikolosky, *Leningrad University, Soviet Union*
 Henry A. Nix, *Australian National University, Australia*
 Takeshi Ohkita, *National Nagoya Hospital, Japan*
 Martin Parry, *University of Birmingham, United Kingdom*
 John Porter, *Long Ashton Research Station, United Kingdom*
 Alan Robock, *University of Maryland, United States*
 Henning Rodhe, *University of Stockholm, Sweden*
 M. Semenov, *Computing Center, A.S., Soviet Union*
 Charles Shapiro, *San Francisco State University, United States*
 V. A. Shevchenko, *Laboratory of Ecological Genetics, Soviet Union*
 Yuri Abdulkhakim Shukurov, *Tadzhik Republic Department of Hydrometeorology, Soviet Union*
 Richard Small, *Pacific Sierra Research Corporation, United States*
 Nikolai Smirnov, *Institute of Animal Evolutionary Morphology and Ecology, A.S., Soviet Union*
 Irina Sokolik, *Institute of Atmospheric Physics, A.S., Soviet Union*
 G. L. Stenichkov, *Computing Center, A.S., Soviet Union*
 A. G. Sutugin, *Physico-Chemical Institute, A.S., Soviet Union*
 Weihai Su, *Laboratory of Aerosol Chemistry, Research Center for Eco-Environmental Sciences, China*
 Yuri M. Svirezhev, *Computing Center, A.S., Soviet Union*
 A. M. Tarko, *Computing Center, A.S., Soviet Union*
 Richard P. Turco, *R&D Associates, United States*
 N. I. Tumanova, *State Committee for Science and Technology, A.S., Soviet Union*
 Michael Unsworth, *University of Nottingham, United Kingdom*
 Peter Van Voris, *Battelle Pacific Northwest Laboratories, United States*
 E. P. Velikov, *USSR Academy of Sciences, Soviet Union*
 N. N. Veltishev, *Institute of Atmospheric Physics, A.S., Soviet Union*
 Mikhail M. Vilenchik, *Institute of Biophysics, A.S., Soviet Union*
 Konstantin Vinnikov, *State Hydrological Institute, Soviet Union*
 A. A. Voinov, *Computing Center, A.S., Soviet Union*
 Sir Frederick Warner, *University of Essex SCOPE Unit, United Kingdom*
 Douglas Westphal, *NASA Ames Research Center, United States*
 Mark Williamson, *University of York, United Kingdom*
 Andrej Yakolev, *Leningrad Polytechnical Institute, Soviet Union*
 Yuri Yalamov, *Professor of Theoretical Physics, Soviet Union*
 Tomokai Yoshikawa, *Meteorological Research Institute, Japan*