

## CURRICULUM VITAE

**SURNAME:** Sukov

**FIRST NAME(S):** Alexander

**Affiliation and official address:** Moscow State Technological University "STANKIN",  
Department of Applied Mathematics, Vadkowskiy per., 3a, 127055 Moscow, (Russia)

**Date and place of birth:** 07 April 1949, Tver, Russia

**Nationality:** Russian

### **Education (*degrees, dates, universities*)**

- Engineer-mathematician, 1972, Moscow Institute of Electronics and Mathematics
- PhD in Physics and Mathematics, 1979, Moscow Institute of Physics and Techniques

### **Career/Employment (*employers, positions and dates*)**

- Professor of the Department of Applied Mathematics in the Moscow State Technological University "STANKIN", 2001-up to present
- Associate Professor of the Department of Applied Mathematics in the Moscow State Technological University "STANKIN", 1993-2001
- Head of Laboratory of Central Sci.-Res. Radio Eng. Inst., Moscow, 1989-1993
- Senior RW, Head of Laboratory of Sci.-Res. Inst. of the Computer Complexes, Moscow, 1980-1989
- Engineer of Sci.-Res. Inst. "Polus", Moscow, 1972-1980

### **Specialization (*specify*)**

**(i) main field**

Waves propagation

**(ii) other fields**

Numerical analysis for linear and nonlinear differential and integral equations

**(iii) current research interest**

Computer modelling for waves propagation in complex media

### **Honours, Awards, Fellowships, Membership of Professional Societies**

Investigator of the Scientific Research Projects and Grants:

- Target-Oriented Program "Integratsiya", Projects No. A0106 & No. B0021, Russian Fund for Basic Research, 1997-2001;
- Project No. 97-02-16722, Russian Fund for Basic Research, 1997-1999;
- Project No. 00-01-00674, Russian Fund for Basic Research, 2000-2002;
- Project No. 02-01-00050, Russian Fund for Basic Research, 2002-2004;
- Project No. 03-01-00324, Russian Fund for Basic Research, 2003-2005;
- Project No. 06-01-00548, Russian Fund for Basic Research, 2006-2008;
- Project No. 08-01-00139, Russian Fund for Basic Research, 2008-2010; etc.

## **Publications**

- Number of papers in refereed journals: 59
- Number of communications to scientific meetings: 54
- Number of books: 4

## **Recent selected publications:**

1. P.M.Lima, N.B.Konyukhova, A.I.Sukov, N.V. Chemetov, Mathematical Analysis and Numerical Solution of a Singular Problem in Nonlinear Physics. J. "Bulletin of Nizh. Univ. name N.I.Lobachevskogo. Series: Mathematical Modeling and Optimal Control", 2005, No.1(28), pp.162-170.
2. P.M.Lima, N.B.Konyukhova, A.I.Sukov, N.V.Chemetov, Analytical-Numerical Investigation of Bubble-Type Solutions of Nonlinear Singular Problems. Journal of Computational and Applied Mathematics, 2006, V.189, pp.260-273.
3. A.I.Sukov, A.A. Kolokolov, P.M. Lima, Analytical-Numerical Investigation of Propagation of Localized Electromagnetic Structures in Layered Media. Final Program and Abstract Book, 17-th National Congress 2006, Australian Institute of Physics, p.140
4. A.L.Dyshko, N.B.Konyukhova, A.I.Sukov, Singular Problem for a Third-Order Nonlinear Ordinary Differential Equation Arising in Fluid Dynamics. Computational Mathematics and Mathematical Physics, 2007, V.47, №7, pp. 1108-1128.
5. A.I.Sukov, P.M.Lima, K.V.Tregubov, Planar-Dielectric Layered Media: Guided Localized Electromagnetic Structures and Optical Switches. International Conference on Numerical Analysis and Applied Mathematics, Corfu, Greece. American Institute of Physics Conference Proceedings, New-York, 2007, pp. 539-542.
6. N.B. Konyukhova, A.I. Sukov, Singular Nonlinear Problem for Self-Similar Solutions to the Boundary Layer Equation. Proceedings of Radio Science and Communications & Mathematical Modelling of Wave Phenomena (RVK08/MMWP08), Vaxjo University, Sweden, 2008, pp. 318-321.
7. A.I. Sukov, S.A. Budylna, Diffraction Electromagnetic Waves by Curvilinear Periodic Structures: "Dolphin"-Effect. GAeF-Meeting 2008. Light Scattering: Mie and More – Commemorating 100 Years Mie's 1908 Publications (XC101-1). Conference Material. Poster Part 2/9 (A018), FTU Fortbildungszentrum Fur Technik und Umwelt, Fortbildungszentrum Karlsruhe, Germany, 2008.
8. A.I. Sukov, V.Yu. Soldatov, C. Nitu, V.F. Krapivin, Direct and Inverse Problems of the Microwave Monitoring of the Environment. Proceedings of the International World Energy System Conference, Iasi, Romania, Technical University Gh. ASACHI, 2008, pp. 230-234.

- 9 A.I. Sukov, K.V. Tregubov, I.N. Hayrullin, Mathematical Modeling of Diffraction Electromagnetic Waves by Curvilinear Periodic Structures. *Physics of Elementary Particles and Atomic Nuclei*, letters, 2008, V. 5, No. 3(145), pp. 300-302.
10. A.I. Sukov, K.V. Tregubov, I.N. Hayrullin, S.A. Sukov, Mathematical Simulation of Electromagnetic Fields Inside an Anechoic Chamber of Rectangular Shape. *Physics of Elementary Particles and Atomic Nuclei*, Letters, 2008, V. 5, No. 3(145), pp. 303-309.
11. A.I. Sukov, V.Yu. Soldatov, A Sequential Analysis Method for the Prediction of Tropical Hurricanes. *Refereed Papers from the 18th National Congress of the Australian Institute of Physics*, Australian Institute of Physics (AIP), 2008, ISBN 1 876346 57 4, CD.
12. A.I. Sukov, V.Yu. Soldatov, C.A. Varotsos, V.F. Krapivin, A.P. Cracknell, A Sequential Analysis Method for the Prediction of Tropical Hurricanes. In: *Cracknell A.P., Varotsos C.A., and Krapivin V.F.* (Eds.) *Problems of Global Climatology and Ecodynamics: Anthropogenic Effects on the State of Planet Earth.* - Chichester, UK: Springer/PRAXIS, 2008

