

CURRICULUM VITAE

Prof. David Shoikhet

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EDUCATION

- 1981-1983 Ph.D. (Mathematics) Institute of Physics, Siberian Branch of the Academy of Sciences of the USSR Diploma PM 018881
On the Solvability of Operator Equations with Analytic Non-Linearities
- 1970-1976 M.Sc. (Mathematics) Krasnoyarsk State University (USSR)
Diploma G-1 No.429886
On Univalent Functions in Complex Spaces

RESEARCH INTERESTS

- Complex Analysis
- Dynamical Systems
- Operator Theory

ACADEMIC APPOINTMENTS

- 2008-present Vice President for Academic Affairs of the ORT Braude College, Karmiel, Israel
- 2002-present Professor, Mathematics Department of the ORT Braude College, Karmiel, Israel
- 2004 Visiting Professor, Mathematics Department of Bar-Ilan University, Israel
- 1999 -2003 Visiting Professor, Mathematics Department, Technion, Israel
- 1999-2002 Associate Professor, Mathematics Department of the ORT Braude College, Karmiel, Israel
- 1996-2008 Adjunct Professor, Mathematics Department, Technion, Israel
- 1991-1996 Adjunct Senior Teaching Associate, Mathematics Department, Technion, Israel
- 1985-1990 Associate Professor, Department of Higher Mathematics, Institute of Non-Ferrous Metals, Krasnoyarsk (USSR)

1984-1985 Senior Lecturer, Department of Higher Mathematics, Institute of Non-Ferrous Metals, Krasnoyarsk (USSR)

1976-1984 Lecturer, Department of Higher Mathematics, Institute of Non-Ferrous metals, Krasnoyarsk (USSR)

TEACHING EXPERIENCE

The ORT Braude College

Undergraduate courses: Calculus 1, Calculus 2, Algebra 1, Differential Equations, Laplace Transforms and Fourier Series, Complex Analysis

The Technion

Undergraduate courses: Calculus 1, Calculus 2, Algebra 1, Complex Functions

University of Bar-Ilan

Undergraduate courses: Calculus for Economists

University of Haifa

Undergraduate courses: Calculus for Economists

Voronez State University

Graduate courses: Spectral Theory, Functional Analysis

Krasnoyarsk Institute of Non-Ferrous Metals

Graduate courses: Mathematical Analysis, Analytic Geometry, Algebra, Differential Equations, Laplace Transforms and Fourier Series, Complex Analysis, Functional Analysis

ACADEMIC AND PROFESSIONAL AWARDS AND GRANTS

1983 Medal for achievements in Sciences and Education, Committee of Sciences and Education of Czechoslovak Republic.

1986, 88 Winner in the national competition for Excellence in Teaching and Research, Ministry of Higher Education of the RSFSR (Russian Federation)

1994 V. Khatskevich and D. Shoikhet, Operator theory in spaces with indefinite metrics, holomorphic mappings in Banach spaces, and their applications. Grant was awarded by the Ministry of Sciences of Israel

1997 Award for Excellence in Teaching, Technion, Israel

1999, 2000 A research grant from the Technion's chairs of the Department of Mathematics

2004 Grant awarded by The Lady Davis Fellowship Trust, Hebrew University and Technion and by the Gelbart Research Institute for the Mathematical Sciences, Bar-Ilan University.

- 2009-2010 Member of ESF Network Program "Harmonic and Complex Analysis and Applications"
- 2008-2010 European Committee Project TODEQ (Theory of Operators and Differential Equations) (MTKD-CT-2005-030042)
- 2009-2010 DFG (Deutsche Forschungsgemeinschaft) Grant
- 2010-2011 Grant of Institut Mittag-Leffler on "Complex analysis and integrable systems".
- 2010 An Honorary Mention in the "Outstanding Immigrant Scientists 1990-2010" Book, Ministry of Immigrant Absorption, State of Israel, p.214

PROFESSIONAL ACTIVITIES

- 1991-present At the ORT Braude College and the Technion: *Hyperbolic Geometry, Nonlinear Semigroups, Evolution Equations, Complex Dynamical Systems*
- 2004 Feb.-July At the Bar-Ilan University: *Geometric Function Theory*
- 1999 Sep.-Oct. At the University of Kentucky, USA : *Holomorphic Functions in C^* -and J^* -algebras*
- 1976-1990 At the Institute of Physics, Siberian Branch of the Academy of the USSR:
- 1988-1990 Senior Research Associate, Completion of the Work on Thesis for Second Doctor's Degree on "*Holomorphic Mappings in Banach Manifolds, and Applications to Non-Linear Equations*"
- 1985-1988 Senior Research Fellow, "*Integral equations*"
- 1976-1984 Research Fellow, "*Equations with Non-Compact Operators, Solutions of Equations in Singular Cases*"
- 1981(Jan.-June) Research Institute of Mathematics, Voronezh (Visiting) *Theory of Spaces with Indefinite Metric* (With Prof. T.Y. Azizov and Dr. V.A. Khatskevich)
- 1972-1976 At the Department of Function Theory of the Krasnoyarsk State University (During Studies) Diploma Work "*On Univalent Functions in Complex Spaces*" (Published in 1976)

RESEARCH COLLABORATION

- 2011 At the Mittag-Leffler Institute Royal Academy of Sciences, Stockholm, Sweden (with Professors F. Bracci, A. Vasiliev, S.Diaz-Madrigal)
- 2010 At the Institute of Mathematics of Polish Academy of Sciences, Warsaw, Poland (with Professor J. Zemanek and Professor M. Lin)
- 2010 At the University of Potsdam, Germany (with Professor N. Tarkhanov)

- 2009 At the University of Bergen, Norway (with Professor A. Vasiliev)
- 2009 At the University of Bielefeld, Germany (with Professor Yu. Kondratiev)
- 2009 At the University of Potsdam, Germany (with Professor N. Tarkhanov)
- 2008 At the Banach Center for Mathematics of Polish Academy of Sciences, Warsaw, Poland (with Professor J. Zemanek)
- 2008 At the Department of Mathematics, University of South Florida, USA (with Professor D. Khavinson)
- 2008 At the Department of Mathematics, College of William & Mary, Virginia, USA (with Professors I. Spitkovskii and V. Bolotnikov)
- 2007 At the Department of Mathematics, University of Rome 2, Italy (with Professor F. Bracci and R. Tauraso)
- 2006 At the Department of Mathematics, University of Seville, Spain (with Professors M. Contreras and S. Diaz-Madrigal)
- 2006 At the Department of Differential Equations and Mathematical Physics, People's Friendship University of Moscow, Russia (with Professor A. Skubachevskii)
- 2006 At the Galilee Research Center for Applied Mathematics, Karmiel (with Professor R. Tauraso)
- 2005 At the Galilee Research Center for Applied Mathematics, Karmiel (with Professor L. Harris)
- 2004 At the Department of Mathematics, University of Bar-Ilan University, Israel (with Professors M. Agranovsky, L. Aizenberg, S. Krushkal and L. Zalcman)
- 1999 At the Department of Mathematics, University of Kentucky (with Professor L. Harris)
- 1993-present At the Mathematic Department of the Technion (with Professors Ya. Alber, D. Aharonov, D. Bshouty and S. Reich)

LIST OF PUBLICATIONS

Refereed Papers

1. D. Shoikhet, On some estimates of the radius of univalence of a holomorphic mapping in C^n and an analogue of Caratheodory's theorem, *Holomorphic Functions of Many Complex Variables*, Institute of Physics, Siberian Branch, Academy of Sciences of the USSR, (1976), 139-148, (in Russian)
2. V. Bolotov, D. Shoikhet, On some estimate of the remainder term of Taylor's formula for implicit function's systems, *Izvestiya Vuzov, Matematika*, **8** (1980), 3-9

3. V. Khatskevich, D. Shoikhet, On some analogue of the Montel theorem for the case of analytical operators in Banach spaces, *Functional Analysis Theory of Operators* **15**(1980), 157-159, (in Russian)
4. V. Khatskevich, D. Shoikhet, On the extension and approximation of the resolvent of an analytic operator, *VINITI (All-Union Institute of Scientific and Technological Information)* 5335 (1980), 15 pps.
5. D. Shoikhet, On some existence principles of solutions of analytic operator equations, *VINITI* **1853** (1980), 9 pps. (in Russian)
6. D. Shoikhet, Some properties of analytic operators in a Banach space and converse theorems, *VINITI* **1654** (1980), 15 pps. (in Russian)
7. D. Shoikhet, Some analytic isomorphisms in a strictly convex Banach space and Cartan's theorem, *Some Problems of Multi-Dimensional Complex Analysis*, Institute of Physics, Siberian Branch, Academy of Sciences of the USSR, (1980), 253-254
8. D. Shoikhet, Some estimates for the domain of existence of p-valued inversions of holomorphic mappings in \mathbb{C} , *Some Problems of Multidimensional Complex Analysis*, Institute of Physics, Siberian Branch, Academy of Sciences of the USSR, (1980), 257- 260 (in Russian)
9. V. Khatskevich, D. Shoikhet, Fixed points of analytic operators in a Banach space and their applications, *Siberian Math. Journal* **25**, 1(1984), 189-200, English translation: *S.M.J.* **25**, 1(1984), 156-166
10. D. Shoikhet, On fixed points of analytical operators in a Banach space and some applications, *Theory of Functions and Functional Analysis and Applications* **41** (1984), 127-131
11. D. Shoikhet, Some theorems on analytically varying implicit maps, *Multidimensional Analysis*, Institute of Physics, Siberian Branch, Academy of Sciences of the USSR, (1985), 264-267
12. D. Shoikhet, A fixed point theorem for analytic operators in a Banach space, *VINITI* **11**, 3564 (1986) (in Russian)
13. D. Shoikhet, Note on fixed points of holomorphic maps in a strictly convex Banach space, *Complex Analysis and Mathematical Physics*, Institute of Physics, Siberian Branch, Academy of Sciences of the USSR, (1987), 131
14. D. Shoikhet, Note on fixed-points of nonexpansive analytic operators, *Complex Analysis and Mathematical Physics*, Institute of Physics, Siberian Branch, Academy of Sciences of the USSR, (1988), 145-150
15. D. Shoikhet, N. Tarkhanov, Remark on the probability of degeneration of a multidimensional branching Galton-Watson processes, *Serdica* **15**(1989), 171-173

16. T. Azizov, V. Khatskevich, D. Shoikhet, On the number of fixed points of holomorphism, *Sib. Math. Journal* **31**, 6(1990), English translation: *S.M.J.* **31**, 6(1990), 1040-1042
17. D. Shoikhet, On singular bifurcation points of analytic operators, *VINITI* **15**, (1990) (in Russian)
18. D. Shoikhet, Some properties of Fredholm mappings of Banach analytic manifolds, *Soviet Math. Dokl.* **319**, 6(1991), 1336-1341; English translation: **44**, 1(1991), 358-363
19. D. Shoikhet, Strong Browder's fixed points principle for Fredholm mappings, *Complex Analysis*, Krasnoyarsk State University, (1991), 6 pps. (in Russian).
20. D. Shoikhet, Some properties of Fredholm operators in Banach analytic manifolds, *Integr. Equat. Oper. Th.* **16**, (1993), 430-451
21. V. Khatskevich, D. Shoikhet, One version of implicit function theorem for holomorphic mappings, *C. R. Acad. Sci.* **319**, Serie 1 (1994), 599-604
22. V. Khatskevich, D. Shoikhet, Stationary points of one-parameter semigroups with holomorphic generators, *Functional Differential Equations* **2** (1994), 91-110
23. V. Khatskevich, S. Reich, D. Shoikhet, Fixed point theorems for holomorphic mappings and operator theory in indefinite metric spaces, *Integral Equations and Operator Theory* **22**, (1995)
24. V. Khatskevich, D. Shoikhet, Null-points set of holomorphic generators of one-parameter semigroup, *Dynamic Systems and Applications* **4**(1995), 611-631
25. L. Aizenberg, S. Reich, D. Shoikhet, One-sided estimates for the existence of null points of holomorphic mappings in Banach spaces, *J. Math. Anal. Appl.* **203**, (1996), 38-54
26. V. Khatskevich, S. Reich, D. Shoikhet, Global Theorem On Implicit Function and fixed point theorems for holomorphic mappings and semigroups, *Dokl. of Russian Akad. Nauk* **347**, 6(1996), 743-745
27. V. Khatskevich, S. Reich, D. Shoikhet, Global implicit function and fixed point theorems for holomorphic mappings and semigroups, *Complex Variables* **28**, (1996), 347-356
28. S. Reich, D. Shoikhet, The existence of resolvents of holomorphic generators in Banach spaces, *Theory and Applications of Nonlinear Operators of Accretive and Monotone Type*, Lecture Notes in Pure and Appl. Math., Marcel Dekker, (1996), 251-258
29. S. Reich, D. Shoikhet, Generation theory for semigroups of holomorphic mappings in Banach Spaces, *Abstract and Applied Analysis* **1**(1996), 1-44

30. V. Khatskevich, S. Reich, D. Shoikhet, Ergodic methods for the construction of holomorphic retractions, *Operator Theory Birkhauser* **98**(1997), 145-152
31. V. Khatskevich, S. Reich, D. Shoikhet, Complex dynamical systems on bounded symmetric domains, *E. J. Diff. Equations* **19**(1997), 1-9
32. S. Reich, D. Shoikhet, Semigroups and generators on convex domains with the hyperbolic metric, *Rend. Mat. Acc. Lincei* **8**(1997), 231-250
33. V. Khatskevich, S. Reich, D. Shoikhet, Asymptotic behavior of solutions of evolution equations and the construction of holomorphic retractions, *Mathematische Nachrichten* **189**(1998), 171-178
34. S. Reich, D. Shoikhet, Averages of holomorphic mappings and holomorphic retractions on convex hyperbolic domains, *Studia Math.* **130**(1998), 231-244
35. S. Reich, D. Shoikhet, A characterization of holomorphic generators on the Cartesian product of Hilbert balls, *Taiwanese J. Math.* **2**, (1998), 383-396
36. S. Reich, D. Shoikhet, Metric domains, holomorphic mappings and nonlinear semigroup, *Abstr. Appl. Anal.* **3**, (1998), 203-228
37. D. Aharonov, M. Elin, S. Reich, D. Shoikhet, Parametric representation of semi-complete vector-fields on the unit ball in C^n and in Hilbert space, *Atti Acad. Naz. Lincei* **9**, 10(1999), 229-253
38. D. Aharonov, S. Reich, D. Shoikhet, Flow invariance conditions for holomorphic mappings in Banach spaces, *Math. Proceedings of the Royal Irish Academy* **99A**(1999), 93-104
39. S. Reich, D. Shoikhet, An interior flow invariance condition for nonlinear semigroups on convex domains in Banach spaces, *Numerical Functional Analysis and Optimization* **20**(1999), 333-339
40. M. Elin, S. Reich, D. Shoikhet, Asymptotic behavior of semigroups of holomorphic mappings, *Progress in Nonlinear Differential Equations and Their Applications*, Birkhauser, Verlag, **42**(2000), 249-258
41. M. Elin and S. Reich, D. Shoikhet, Holomorphically accretive mappings and spiral-shaped functions of proper Contractions, *Nonlinear Analysis Forum* **5**(2000), 149-161
42. M. Elin, S. Reich, D. Shoikhet, A semigroup approach to the geometry of domains in complex Banach spaces, *Nonlinear Analysis* **47** (2001), 3271-3280
43. M. Elin, S. Reich, D. Shoikhet, Dynamics of inequalities in geometric function theory, *J. of Inequalities and Applications*, 6(2001), 651-664

44. M. Elin, D. Shoikhet, Dynamic Extension of the Julia-Wolff-Caratheodory Theorem, *Dynamic Systems and Applications* **10**, 3(2001), 421-438
45. L. Harris, S. Reich, D. Shoikhet, Dissipative holomorphic functions, Bloch radii, and the Schwarz Lemma, *J.d'Analyse Math.* **82**(2001), 221-232
46. V. Khatskevich, S. Reich, D. Shoikhet, Schroder's functional equation and the Koenigs embedding property, *Nonlinear Analysis* **47** (2001), 3977-3988
47. V. Katzkevich, S. Reich, D. Shoikhet, One-parameter Semigroups of Fractional-linear Transformations. *Operator Theory: Advances and Applications*, Burkhauser Verlag, **123**(2001)
48. T. Kuczumow, S. Reich, D. Shoikhet, The existence and non-existence of common fixed points for commuting families of holomorphic mappings, *Nonlinear Analysis* **43**(2001), 45-59
49. T. Kuczumow, S. Reich, D. Shoikhet, Fixed points of holomorphic mappings: a metric approach, *Hand Book of Metric Fixed Point Theory* (ed. by W. A. Kirk and B. Sims), Kluwer Academic Publishers, (2001), 437-516
50. L. Aizenberg, D. Shoikhet, Boundary behavior of Semigroups of holomorphic mappings on the unit ball in C^n , *Complex Variables* **47**, 2(2002), 109-121
51. L. Aizenberg, D. Shoikhet, A remark on uniform Bloch radii and Bohr phenomena in C^n , *Multidimensional Complex Analysis*, (2002), 5-17
52. Y. Alber, S. Reich, D. Shoikhet, Iterative approximations of null points of uniformly accretive operators with estimates of the convergence rate, *Communications in Applied Analysis*, (2002)
53. M. Elin, L. Harris, S. Reich, D. Shoikhet, Evolution equations and geometric function theory in J^* -algebras. *Journal of Nonlinear and Convex Analysis* **3**, 1(2002), 81-121
54. M. Elin, S. Reich, D. Shoikhet, Asymptotic behavior of semigroups of ρ -non-expansive and holomorphic mappings of the Hilbert Ball. *Annali di Matematica* **181**(2002), 501-526
55. M. Elin, D. Shoikhet, Univalent functions of proper contractions spirallike with respect to a boundary point, *Multidimensional Complex Analysis*, (2002), 28-36
56. S. Reich, D. Shoikhet, Semigroups of holomorphic mappings, *Math. Encyclopaedia, Supplement Kluwer Academic Publishers*, **3**(2002), 354-358
57. S. Reich, D. Shoikhet, The Denjoy-Wolff theorem, *Math. Encyclopaedia*, Supplement Kluwer Academic Publishers, **3**(2002), 121-123
58. D. Shoikhet, The Julia-Wolff-Caratheodory theorem, *Math. Encyclopaedia*,

Supplement Kluwer Academic Publishers, 3(2002), 222-224

59. V. Goryainov, M. Elin, S. Reich, D. Shoikhet, Fractional iterations and functional equations for functions analytic in the unit disk, *Computational Methods in Function Theory*, Vol.22, (2002), n.2, 353-366
60. D. Aharonov, M. Elin, D. Shoikhet, Spiral-like functions with respect to a boundary point, *J. of Math. Anal. and Appl.* **280**(2003), 17-29
61. D. Shoikhet, Representation of holomorphic generators and distortion theorems for spirallike functions with respect to a boundary point, *International Journal of Pure and Applied Mathematics* **5**, 3(2003), 335-361
62. V. Khatskevich, S. Reich, D. Shoikhet, Abel-Schröder equations for linear fractional mappings and the Koenig embedding problem, *Acta Sci. Math (Szeged)*, **69**(2003), 67-98 pp.
63. M. Elin, D. Shoikhet and V. Volkovich, Semigroups of holomorphic mappings on the unit disk with a boundary fixed point, *Intern. Journ. Pure Appl. Math.* **12** (2004), 427-453.
64. L. Aizenberg, M. Elin and D. Shoikhet, On the Rogosinski radius for holomorphic mappings and some its applications, *Studia Math.* **168** (2) (2005).
65. M. Elin and D. Shoikhet, An angle distortion theorem for starlike and spirlike functions with respect to a boundary point. *Intern. Journal. Math., Math Sci.*, 2006, Article ID 81615, 1-13
66. M. Elin, D. Shoikhet and L. Zalcman, Controlled approximation and interpolation for some classes of holomorphic functions, *Complex analysis and Dynamical Systems III, Contemp. Math.*, (preprint is available in arXiv:math.CV/0602332, 2006).
67. D. Shoikhet, Koenigs type linearization models and asymptotic behavior of one-parameter semigroups, *Contemporary Mathematics. Fundamental Directions*, (2007) Vol. 21, pp. 149-166
68. M. Levenshtein, S. Reich and D. Shoikhet, An application of the resolvent method to rigidity theory for holomorphic mappings. *J. of Nonlinear Convex Anal.*, **8**, (2007), n.1, 99-103
69. M. Elin, M. Levenshtein, D. Shoikhet and R. Tauraso, Rigidity of holomorphic generators and one-parameter semigroups, *Dynamic Systems and Applications* **16**, 2(2007), 251-266.
70. M. Elin, M. Levenshtein, S. Reich, D. Shoikhet, Rigidity results for holomorphic mappings on the unit disk, *Complex and Harmonic Analysis*, 2007, 93-109
71. M. Elin, D. Shoikhet and L. Zalcman, A structure of backward flow invariant domains for semigroups, *Ann. Acad. Sci. Fenn. Math.*, **33** (2008), 3-34.

72. M. Elin, D. Shoikhet and L. Zalcman, A flower structure of backward flow invariant domains for semigroups, *C.R. Acad. Sci. Paris, Ser. I Math.*, **346** (2008), 293-296
73. M. Elin, S. Reich, D. Shoikhet A Julia-Caratheodory theorem for hyperbolically monotone mappings in the Hilbert ball, *Israel J. Math.*, **164** (2008), 397-411
74. M. Elin, F. Jacobzon, S. Reich, D. Shoikhet, Asymptotic behavior of one-parameter semigroups and rigidity of holomorphic generators, *Comp. Anal. Oper. Theory*, **2** (2008), 55-86
75. D. Shoikhet, Another look at the Burnz-Krantz Theorem, *Journ. d'Anal. Math.* **19** (2008) Vol. 105, 19-42
76. M. Elin, M. Levenshtein, S. Reich, D. Shoikhet, Two rigidity theorems for holomorphic generators of continuous semigroups, *J. of Nonlinear Convex Anal.*, Vol. 9, N1 (2008), 59-64
77. M. Elin, D. Shoikhet, F. Yacobzon, Linearization models for parabolic type semigroups, *J. Nonlinear Convex Anal.* **9** (2008), 205-214
78. M. Elin, M. Levenshtein, S. Reich, D. Shoikhet, A rigidity theorem for holomorphic generators on the Hilbert ball, *Proc. AMS.* **136** (2008), 4313-4320.
79. M. Elin, M. Levenshtein, S. Reich, D. Shoikhet, Commuting semigroups of holomorphic mappings, *Math. Scand.* **103** (2008), 295-319
80. F. Jacobzon, S. Reich and D. Shoikhet, Linear fractional mapping: invariant sets, semigroups and commutativity, *J. on Fixed Point Theory and Appl.*, 5(2009), 63-91
81. A. Goldvard, S. Reich, D. Shoikhet, *Asymptotic representations of star-like functions via continuous semigroups of holomorphic mappings*, Mathematical Proceedings of the Royal Irish Academy, 108A(2) (2008), 175-197.
82. D. Khavinson, M. Elin, S. Reich and D. Shoikhet, Linearization models for parabolic dynamical systems via Abel's functional equations, *Ann. Acad. Sci. Fenn. Math.* **35** (2010), 439-472.
83. M. Elin, D. Shoikhet and F. Yacobzon, A distortion theorem for functions convex in one direction, *Compl. Anal. Oper. Theory*, **5** (2011) 751–758.
84. F. Bracci, M. Elin, D. Shoikhet, Normal forms and linearization of holomorphic dilation type semigroups in several variables *J. Nonlinear Convex Anal.* **12** (2011) 143-154.
85. M. Elin and D. Shoikhet, Boundary behavior and rigidity of semigroups of holomorphic mappings, *Analysis and Math. Physics*, **1** (2011) 241-258.

86. M. Elin, D. Shoikhet and N. Tarkhanov, Separation of boundary singularities for holomorphic generators, *Annali di Matematica Pura ed Applicata*, **190** (2011) 595-618.
87. L.A. Harris, D. Shoikhet, M. Elin and S. Reich, Dynamics of self-maps of the unit disk, Appendix H, in: D.S. Alexander, F. Iavernaro, A. Rosa, *Early Days in Complex Dynamics*, American Math. Soc. & London Math. Soc., 2011, 307-312.
88. Shoikhet D., A Generalized Version of the Earle-Hamilton Fixed Point Theorem for the Hilbert Ball, *Journal of Mathematics Research* **Vol 4 No. 2** (2012). DOI: 10.5539/jmr.v4n2p45

Books & Monographs

1. V. Khatskevich, D. Shoikhet, Differentiable Operators, Leningrad Financial Economical Inst., 1991, 150 pp.
2. V. Khatskevich, D. Shoikhet, Differentiable Operators and Nonlinear Equations, Birkhäuser Verlag AG, Basel, 1993, 270 pp.
3. D. Shoikhet, Semigroups in Geometrical Function Theory, Kluwer Academic Publishers, Dordrecht/Boston/London, 2001, 222pp.
4. S. Reich, D. Shoikhet, Fixed Points, Nonlinear Semigroups and the Geometry of Domains in Banach Spaces, World Scientific Publisher, Imperial College Press, London, 2005, 372 pp.
5. M. Elin, S. Reich, D. Shoikhet, Complex Dynamical Systems and the Geometry of Domains in Banach Spaces, 2004. *Dissertations Math. (Rozprawy Mat.)* [427](#) (2004), 62 pp.
6. M. Elin, D. Shoikhet, Linearization Models for Complex Dynamical Systems. Topics in univalent functions, functions equations and semigroup theory, Birkhäuser Basel, 2010, 265 pp.

Conference Proceedings (refereed)

1. D. Shoikhet, On the local structure of the fixed point set for analytic operators in a ball, Proceedings of the XII School on the Theory of Operators in Functional Spaces, Academy of Sciences of the USSR, Tambov, 1987, 122
2. D. Shoikhet, Apriori estimates and continuations on parameters of the solution of functional equations with analytic operators. In: "Functional-Differential Equations and Applications", 133, Permy, 1988
3. V. Khatskevich, S. Reich, D. Shoikhet, Ergodic type theorems for nonlinear semigroups with holomorphic generators In: "Recent Developments in Evolution Equations", Pitman Research Notes in Math., **324**(1995), 191-200

4. V. Khatskevich, S. Reich, D. Shoikhet, Fixed points of holomorphic mappings and semigroups in Banach spaces: regularity and uniqueness. In: "Interaction between Functional Analysis, Harmonic Analysis and Probability", Marcel Dekker, New York, 1996, 249-254
5. V. Khatskevich, S. Reich, D. Shoikhet, Null points of holomorphic generators in the Hilbert ball. In: "Recent Advances in Metric Fixed Point Theory", Seville, Spain, 1996, 59-72
6. V. Khatskevich, S. Reich, D. Shoikhet, Semi-complete vector fields on homogeneous balls in Banach spaces, *Ann. Univ. Mariae Curie-Sklodowska, Sect. A* **51** (1997), 143-148
7. S. Reich, D. Shoikhet, Results and conjectures in holomorphic fixed point theory, Proceedings of the Second World Congress of Non linear Analysts, Athens, Marcel Dekker, NY. *Nonlinear Analysis Theory, Methods and Applications* **30**(1997), 3529-3538
8. S. Reich, D. Shoikhet, An interior flow invariance condition for locally accretive mappings in Banach spaces, *Nonlinear Analysis and its applications to Engineering and Economics*, accepted for publication.
9. S. Reich, D. Shoikhet, The Denjoy-Wolff theorem, *Ann. Univ. Mariae Curie-Sklodowska, Sect. A* **51** (1997), 219-240
10. M. Elin, A. Goldvard, S. Reich, D. Shoikhet, Dynamics of spirallike functions, *Complex Analysis and Differential Equations, Contemp. Math.* **364** (2004), 41-57
11. M. Agranovsky and D. Shoikhet, Lawrence Zalcman at Sixty, *Contemporary Mathematics, Volume 382, 2005*, 1-6
12. M. Elin and D. Shoikhet, Semigroups of holomorphic mappings with boundary fixed points and spirallike mappings, *Geometric Function Theory in Several Complex Variables*, 82-117, World Sci. Publishing, River Edge, NJ, 2004. *Proceedings of a Satellite Conference to the International Congress of Mathematicians in Beijing 2002.*
13. M. Elin, S. Reich, D. Shoikhet and F. Yacobzon, Rates of convergence of one-parameter semigroups with boundary Denjoy-Wolff fixed points, *Proceedings of the 8th International Conference on Fixed Point Theory and its Applications (Chiang Mai, Thailand, 2007)*, 43-58, Yokohama Publishers, 2008

Other Publications

Edited Books

1. M. Agranovsky, L. Karp, D. Shoikhet and L. Zalcman, Complex Analysis and Dynamical Systems, Contemporary Mathematics, AMS, Israel Mathematical Conference Proceedings, Vol. 364, 2004
2. M. Agranovsky, L. Karp, D. Shoikhet, Complex Analysis and Dynamical Systems, *Contemporary Mathematics*, AMS, Israel Mathematical Conference Proceedings, Vol. 382, 2005.
3. M. Agranovsky, D. Bshouty, L. Karp, S. Reich, D. Shoikhet, L. Zalcman, Complex Analysis and Dynamical Systems, *Contemporary Mathematics*, AMS, Israel Mathematical Conference Proceedings, Vol. , 2008

Patent

1. D. Shoikhet, Holographic interferometer for the measurement of two - refraction in optically active materials, Author's Certificate No.1079025, State Committee on Inventions of the USSR, 1983

Professional and Research Reports

1. D. Shoikhet, On some conditions for the solvability of equations with an analytic operator, Preprint, Institute of Physics, Siberian Branch, Academy of Sciences of the USSR, 1980, No.11M,14pp.
2. D. Shoikhet, On solutions of operator equations with analytic nonlinearities, In Report "Theoretical Investigations in Modern Mathematics and Applications", No. of the State Registration 018 50003791, 1985 (Russian)
3. D. Shoikhet, Iteration methods for solutions of algebraic and transcendental equations, Ministry of Education of RSFSR, Institute of Non-Ferrous Metals, Krasnoyarsk, 1985, 36 pp.
4. D. Shoikhet, The invariance principle in the fixed point theory for analytic operators, Preprint. Institute of Physics, Siberian Branch, Academy of Sciences of the USSR, 24 pp., No. 33M, 1986
5. V. Khatskevich, D. Shoikhet, Operator Theory in Spaces with Indefinite Metrics, Holomorphic Mappings in Banach Spaces, And Their Applications, 1991
6. D. Shoikhet, A note on the Koenigs functions of a one-parameter semigroup and a distortion theorem for starlike functions with respect to a boundary point. Preprint, 2003.