Curriculum Vitae of HEINRICH BEGEHR
Professor of Mathematics, Freie Universität Berlin

1. **Personal Data**
   Date of Birth: April 17, 1939
   Place of Birth: Halle/Saale
   Citizenship: Germany

2. **Education**
   Dipl. Math. (M.S. Mathematics), FU Berlin, 1966
   Dr. rer. nat., FU Berlin, 1968
   Habilitation, FU Berlin, 1970

3. **Experience**
   Assistent, Math. Inst., FU Berlin, 1966
   Assistent with tenure, Math. Inst., FU Berlin, 1969
   Professor (Assoc. Prof.), I. Math. Inst., FU Berlin, 1970–2004
   Director of I. Math. Inst., FU Berlin, 1972–73, 1974–80, 1982–83, 1986, 1990–1999, 2001–2004
   retired Professor, I. Math. Inst., FU Berlin, since 2004

4. **Editorship**
   Editor: Berliner Studienreihe zur Mathematik,
   Publisher: Heldermann Verlag, Lemgo, since 2004;
   Editor: Series on Analysis, Applications & Computations,
   Publisher: World Scientific, Singapore, since 2005;
   Editional Board, Complex Variables, Elliptic Equations
   Publisher: Taylor & Francis, since 1982;
   Editorial Board, Monograph and Surveys in Pure and Applied Mathematics, and Research Notes in Math. Series
   Publisher: Chapman & Hall/CRC–Press, since 1997;
   ISAAC Editorial Board, Publisher: Kluwer Academic Publisher, 1997–2004;
   Editorial Board, General Mathematics,
   Publisher: Lucian Blaga, Univ. of Sibiu, Romania, since 2001;
   Editorial Board, Journal of Applied Funcional Analysis,
   Publisher: NOVA Publ. Inc, since 2004;
   Editorial Board, Journal of Analysis and Applications,

Publisher: SAS Intern. Publ., since 2005;
Editorial Board, Advances in Algebra and Analysis, Publisher: Urmi Scientific Vision, since 2005.
Editorial Board, International Journal of Mathemtics and Applications (IJMA), Publisher: Global Research Publ. and Serials Pupl. India, since 2005;
Editorial Board, International Journal of Mathematics and Mathematical Sciences IJMMS, Mindawi Publ. Co., since 2006.

5. **Society Membership**
Berlin Mathematical Society: Chairman 1984–1988, 1992–1996
Vice–Chairman 1988–1990, 1996–2000, Secretary 1990–1992, 2000–2002;
since 2004
International Society for Analysis,its Applications and Computation, Membership Secretary 1996–2001, President since 2001
Member of Russian Academy of Natural Sciences, Armenian Branch, since 2002
Member of European Acad. Sci., since 2004
Foreign Member of Russian Academy of Natural Sciences, since 2003
Honorary Member of Europäische Akad. Naturwiss. in Hannover, since 2003

6. **Foreign Visiting Appointments**
Guest Research Professor
- Univ. of Delaware, Jan./Feb. 1977, Feb./March 1983, Sept./Oct. 1986;
- Peking Univ., Fudan Univ. (Shanghai), Zhongshan Univ. (Guangzhou), July–Sept. 1985;
- Techn. Univ. Warzawa, Nov. 1986;
- Zhongshan Univ. (Guangzhou), Logistical Engeneering College (Chongqing), Sichuan Normal Univ. (Chendu), Peking Univ., Hebei Normal Univ. (Shijiazhuang), Dec. 1986–Feb. 1987; Kyoto Sangyo Univ., Nov. 1999, Ningxia Univ. (Jinchuan), Zhongshan Univ. (Guangzhou), Sept. 2000, Wuhan Univ., August 2002, Ningxia Univ., July 2004
- Steklov Math. Inst. Acad. Sci. USSR (Moscow), Math. Inst. Georgian Acad. Sci. (Tbilisi), Math. Inst. Tajik Acad. Sci. (Dushanbe), Aug./Sept. 1989

Guest Professor
- Univ. of Hawaii (Fulbright Travel Grants), Aug. 1982–Jan. 1983, Aug. 1992–March 1993
- Univ. of Assiut, Assiut and Qena, Egypt (DAAD short–time lectureship), Sept./Oct. 1991

- Univ. of Bucharest, Romania (Sokrates Lecturer, EU programme), March 1999
- Padova Univ., Italy (Minicorsi Lecturer), June 2000
- Simon Bolivar University, Caracas, Venezuela, May 2004
- L.N. Gumilyov Eurasian National University, Astana, Kazakhstan, October 2005
- Simion Stoilow Inst. of Math. of Romanian Acad. Bucharest, Romania, November 2006
- Delhi Univ. (DAAD short time visitorship) Jan./Febr. 2007

7. **Honors:**
   - Guest Professor Wuhan University, April 2002 to April 2005
   - Begehr Special Issue. Appl. Analysis 73, 1–2, (1999)
   - Complex Variables, Theory Appl. 50, 7–11 (2005) special issues: A Tribute to Heinrich Begehr
   - Honorary Professor L.N. Gumilyov Eurasian National University, Astana, Kazakhstan (Oct. 6, 2005)

8. **Scientific Administration:**
   - INTAS Project Coordinator: INTAS-93-10332: Complex and Clifford analysis for treating systems of partial differential equations, 1.10.1994–14.4.1996, 1.10.1997–30.9.1998
   - NATO Country Co-director: NATO Advance Research Workshop: Topics in analysis and its applications, Yerevan, Armenia, 22.–25.8.2002
   - AQAS Expert for evaluating BCs/MCs Curricula 2003
   - Scientific Committee of EAS Member, since 2006

9. **Listed in:**
   Who's Who in the World,
   Who's Who in Europe,
   EU Who's Who,
   Who's Who in Western Europe,
   Who's Who in Science in Europe,
   Who's Who in West–Germany,
   Who is Who in der Bundesrepublik Deutschland
   European Who's Who Encyclopedia,
   Wer ist Wer
   Kürschners Deutscher Gelehrtenkalender,
   Men of Achievement,

Dictionary of International Biography,
Community Leaders of the World,
International Directory of Dishinguished Leadership,
The World of Learning,
European Biographical Directory 1991/92,
Who's Who in Science and Engineering 2nd ed.,
Biography International. A memorial document of men and women of achievement and distinction
5000 Personalities of the World, ed. four
2000 Outstanding Intellectuals of the 21st Century, 2nd Edition

10. **Ph.D. Students Advised**
   • Wolfgang Reitberger (1976): Untersuchung der analytischen Matrizenfunktionen mittels Reihenentwicklung nach Faber Polynomen (Analysis of analytic matrix functions via series development in Faber polynomials).
   • Dieter Schmersau (1977): Geometrische Untersuchungen der Betragsflächen holomorpher Funktionen (Geometrical analysis of the surfaces of absolute values of analytic functions).
   • Heinz Jürgen Maibaum (1977): Randintegralformeln in der komplexen Analysis (Boundary integral formulas in complex analysis).
   • Dieter Klusch (1978): Funktionalgleichungen für die Riemannsche, die Hurwitzsche und die Lipschitz-Lerchsche Zetafunktion (Functional equations for the Riemann, the Hurwitz and the Lipschitz-Lerch zeta-function).
   • Shaker Ibrahim Sheboul (from Jordan, 1978): Riemannsche Randwertprobleme bei pseudoparabolischen Differentialgleichungen (Riemann boundary value problems for pseudo-parabolic differential equations).
   • Wolfgang Manntz (1982): Simulation funktionentheoretischer Methoden für degenerierte Cauchy-Systeme (Simulation of function theoretic methods for degenerate Cauchy systems).
   • Wolfram Koepf (1984): Extrempunkte und Stützpunkte in Familien nicht verschwindender analytischer Funktionen (Extremal points and support points in families of non-vanishing analytic functions).
   • Jörg Witte (1991): Polynomiale Differentialoperatoren in den Ableitungen nach der komplexen Variablen z und der komplex konjugierten Variablen $\bar{z}$ (Polynomial differential operators in the derivatives with respect to the complex variable z and the complex conjugate variable $\bar{z}$)
   • Constantin Sakkas (from Greece, 1994): Solution of parabolic singular pertur-

bation problems by means of multigrid techniques.

• Mohamed Saad Mohamed Akal (from Egypt, now Saudi Arabia, 1996): Boundary value problems for complex elliptic partial differential equations of higher order.

• Saad Zagloul Rida Ahmed (from Egypt, 1996): Powers of differential operators and explicit polynomials.

• Sonnhard Graubner (1997): Über die Optimierung von Polyzylindern bei Anwendung des Kontraktionsprinzips auf Differetialgleichungen (On the optimization of polydiscs in applying the contraction principle to differential equations).

• Xing Li (from China, 1999): Applications of doubly quasi-periodic boundary value problems in elasticity theory; http://www.diss.fu-berlin.de/1999/31/

• Alip Mohammed (from China, 2003): Boundary value problems of complex variables; http://www.diss.fu-berlin.de/2003/23/

• Vu Thi Ngoc Ha (from Vietnam, 2005): Integral representations in quaternionic analysis related to the Helmholtz operator. http://www.diss.fu-berlin//2005/61/

• Andreas Krausz (2005): Integraldarstellungen mit Greenschen Funktionen höherer Ordnung in Gebieten und Polygebieten (Integral representations with Green functions of higher order in domains and poly-domains). http://www.diss.fu-berlin.de/2005/128/

• Evgenija Gaertner (from Tajikistan 2006): Basic complex boundary value problems in the upper half plane; http://www.diss.fu-berlin.de/2006/320/

• Heinz Otto (2006): Cauchy-Pompeiusche Integraldarstellungen in der Clifford Analysis; http://www.diss.fu-berlin.de/2006/384/

• Jahongir D. Mamjonov (from Uszbekistan, 2007): Non-local boundary value problems for mixed type eqaution with non-smooth line of changing type with spectral parameter;

11. **Addresses:**
   a) ISAAC Home Pages
       http://www.mathisaac.org, http://www.math.fu-berlin.de/rd/ag/isaac
   b) Begehr Home Page
       http://page.mi.fu-berlin.de/~begehr
   c) E-mail: begehr@math.fu-berlin.de

Publications of Heinrich Begehr

BOOKS

- *Boundary value problems for elliptic equations and systems.* Longman, Harlow, 1990, XII, 411 pp. (with G.–C. Wen).

- *Transformations, transmutations, and kernel functions, I.* Longman, Harlow, 1992, 399 pp. (with R.P. Gilbert).

- *Transformations, transmutations, and kernel functions, II.* Longman, Harlow, 1993, 268 pp. (with R.P. Gilbert).

- *Complex analytic methods for partial differential equations.* An introductory text. World Sci., Singapore, 1994, 273 pp.

- *Nonlinear elliptic boundary value problems and their applications.* Addison Wesley Longman, Harlow, 1996, IV + 269 pp. (with G.C. Wen).

- *An introduction to several complex variables and partial differential equations*, Addison Wesley Longman, Harlow, 1997, 454 pp. (with A. Dzhuraev).

TRANSLATIONS and BOOKS edited

- *Ansprachen und Vorträge des Gedenkkolloquiums für Prof. Dr. phil. habil. Alexander Dinghas am 20. Juni 1975 an der Freien Universität Berlin.* Herausgegeben von H. Begehr. Freie Universität Berlin, Fachbereich Mathematik, I. Mathematisches Institut. Berlin, 1977, 56 pp.

- Helmut Pachale in memoriam. Ansprachen und Vorträge des Gedenkkolloquiums vom 14. Juli 1979 und der Trauerfeier vom 21. Juli 1978 an der Freien Universität Berlin. Herausgegeben von H. Begehr. Freie Universität Berlin. Berlin 1980, 62 pp.

- *Sitzungsberichte der Berliner Mathematischen Gesellschaft, 1972–1987.* Berlin, 1987

- A. Dzhuraev: *Systems of equations of composite type.* Translated from Russian by Lin Wei and H. Begehr. Longman, Harlow, 1989, XV, 333 pp.

- *Partial differential equations with complex analysis.* Eds. H. Begehr, A. Jeffrey. Pitman Research Notes in Math. Ser. 22, Longman, Harlow, 1992, 214 pp.

- *Partial differential equations with real analysis.* Eds. H. Begehr, A. Jeffrey. Pitman Research Notes in Math. Ser. 263, Longman, Harlow, 1992, 239 pp.

- *Sitzungsberichte der Berliner Mathematischen Gesellschaft, 1988–1992.* Berlin, 1992.

- *Erhard Schmidt: Vorlesungen über Differential– und Integralrechnung.* Unter Berücksichtigung der Übungen bearbeitet von Hans Pietsch. Herausgegeben von Heinrich Begehr. Akademie Verlag, Berlin, 1992.

- Applicable Analysis 45 (1992) dedicated to Prof. E. Meister on his 60th birthday (ed. with R.P. Gilbert). Complex Variables, Theory Appl. 19, issues 1–2 (1992), dedicated to Prof. E. Meister on his 60th birthday (ed. with R.P. Gilbert).

- Complex Variables, Theory Appl. 26, issues 1–2 (1994), dedicated to Prof. A. Dzhuraev on his 60th birthday (ed. with R.P. Gilbert).

- N.K. Bliev: *Generalized analytic functions in Besov spaces.* Translated from Russian by J.R. Radok and H. Begehr. Addison Wesley Longman, Harlow, 1997.

- Mathematik aus Berlin. Hrsg. H. Begehr, Weidler Buchverlag Berlin, 1997, X, 309 S.

- Mathematik in Berlin. Geschichte und Dokumentation. Hrsg. H. Begehr. Shaker Verlag, Aachen, 1998. 1. Halbband XII, 668 S., 2. Halbband XV, 668 S. .

- Mathematics in Berlin. Hrsg. H. Begehr, H. Koch, J. Kramer, N. Schappacher, E.–J. Thiele. Birkhäuser Verlag, Basel, 1998.

- *Sitzungsberichte der Berliner Mathematischen Gesellschaft 1993–1996*, Berlin, 1998.

- Partial differential and integral equations. Eds. H. Begehr, R.P. Gilbert, G.–C. Wen. Kluwer, Dordrecht, 1999.

- Complex methods for partial differential equations. Eds. H. Begehr, A.O. Celebi, W. Tutschke, Kluwer, Dordrecht, 1999.

- Proceedings of the 2nd International ISAAC Congress, Fukuoka, Japan, 1999. Vol 1, Vol 2. Eds. H. Begehr, R.P. Gilbert, J. Kajiwara, Kluwer, Dordrecht, 2000.

- 100 Jahre Berliner Mathematische Gesellschaft 1901, 2001. Festschrift. Eds. M. Aigner, H. Begehr, H. Koch, G.M. Ziegler. Berlin, 2001.

- Sitzungsberichte der Berliner Mathematischen Gesellschaft 1997–2000, Berlin, 2001.

- Analysis and Applications. Eds. H. Begehr, R.P. Gilbert, M.W. Wong, Kluwer, Dordrecht, 2003.

- Progress in Analysis. Proc. 3rd Intern. ISAAC Congress, Vol. I, Vol. II. Eds. H. Begehr, R.P. Gilbert, M.W. Wong. World Sci., Singapore, 2003.

- Topics in Analysis and its Applications. Eds. G. Barsegian, H. Begehr. NATO Sci. Series II, 147, Kluwer, Dordrecht, 2004.

- Complex Analysis, Differential Equations and Related Topics. ISAAC Conf., Yervan, Armenia, 2002. Eds. G. Barsegian, H. Begehr, A. Nersessian, H. Ghazaryan. Nat. Acad. Sci. Armenia, Yerevan, 2004.

- Advances in Analysis. Provc. 4th Intern. ISAAC Congress, Toronto 2003. Eds. H. Begehr, R.P. Gilbert, M.E. Muldoon, M.W. Wong. World Sci., Singapore, 2005.

- Snopshots in Applied Complex Analysis. Proc. Workshop Recent Trends in Appl. Complex Anal. Middle East Tech. Univ. Ankara 2004. Eds. H. Begehr, O. Celebi, R.P. Gilbert. JAFA 2, 1-3 (2007).

RESEARCH PAPERS

- *Zur Nullpunktabhängigkeit der Nevanlinnaschen Defekte.* Math. Z. 106, 374–378 (1968).

- *Beitrag zum Satz von Picard–Borel–Nevanlinna auf Riemannschen Flächen.* Dissertation. Berlin 1968, 55 pp.

- *Über Defektbegriffe in der Theorie der meromorphen Funktionen.* Math. Z. 116, 349–354 (1970).

- *Zur Wertverteilung approximativ analytischer Funktionen.* Habilitationsschrift. Berlin 1970, 43 pp.

- *Zur Wertverteilung approximativ analytischer Funktionen.* Arch. Math. (Basel) 23 (1972), 41–49.

- *Die logarithmische Methode in der Wertverteilungstheorie pseudoanalytischer Funktionen.* Ann. Acad. Sci. Fenn. Ser. AI, 549 (1973), 17 pp.

- *Das Schwarzsche Lemma und verwandte Sätze für pseudoanalytische Funktionen.* Function theoretic methods in differential equations. Research Notes in Mathematics 8. Pitman, London – San Francisco – Melbourne, 1976, 11–21.

- *Über beschränkte verallgemeinerte analytische Funktionen.* An. Stiint. Univ. Iasi 20 (1974), 295–303.

- *Eine Bemerkung zum Maximumprinzip für morphe Funktionen mehrerer komplexer Veränderlichen.* Math. Nachr. 69 (1975), 133–136.

- *Über das Randwert–Normproblem für ein nichtlineares elliptisches System.* Function Theoretic Methods in Part. Diff. Equ., Darmstadt 1976. Lecture Notes in Math. 561, Springer Verlag, Berlin etc., 1976, 112–122 (with R.P. Gilbert).

- *Randwertaufgaben ganzzahliger Charakteristik für verallgemeinerte hyperanalytische Funktionen.* Applicable Anal. 6 (1977), 189–205. Abstract: Appl. Anal. 6 (1977), 164 (with R.P. Gilbert).

- *Boundary value problems for mixed kind systems of first order partial differential equations.* 3. Roumanian Finnish Seminar on Complex Analysis, Bucharest 1976. Lecture Notes in Math. 743, Springer Verlag, Berlin etc., 1979, 600–614.

- *Das Randwert-Normproblem für ein fastlineares elliptisches System und eine Anwendung.* Ann. Acad. Sci. Fenn. AI 3 (1977), 179–184 (with R.P. Gilbert).

- *Randwertaufgaben für elliptische und für zusammengesetzte Systeme partieller fastlinearer Differentialgleichungen erster Ordnung.* Komplexe Analysis und ihre Anwendungen auf partielle Differentialgleichungen. Martin–Luther–Universität, Halle–Wittenberg, Wissenschaftliche Beiträge 1977/27, 6–10.

- *On Riemann boundary value problems for certain linear elliptic systems in the plane.* J. Diff. Equ. 32 (1979), 1–14 (with R.P. Gilbert).

- *Piecewise continuous solutions of pseudoparabolic equations in two space dimensions.* Proc. Roy. Soc. Edinburgh 81A (1978), 153–173 (with R.P. Gilbert).

- *Topics in Complex Analysis.* Four lectures given at the University of Delaware in January and February 1977. Institute for Mathematical Sciences, Univ. of Delaware, Newark, Delaware, USA (1977), 49 pp.

- *Alexander Dinghas in memoriam.* Jber. Dt. Math.–Verein. 81 (1979), 153–176.

- *On nonlinear boundary value problems of elliptic systems in the plane.* Ordn. part. diff. eq., Proc., Dundee 1980. Lecture Notes in Math. 846, Springer–Verlag, Berlin etc., 1981, 55–63 (with G.C. Hsiao).

- *Nonlinear boundary value problems for a class of elliptic systems.* Komplexe Analysis und ihre Anwendungen auf partielle Differentialgleichungen. Martin–Luther–Universität, Halle–Wittenberg. Wissenschaftliche Beiträge 1980, 90–102 (with G.C. Hsiao).

- *Nonlinear Riemann boundary value problems for a semilinear elliptic system in the plane.* Math. Z. 179 (1982), 241–261 (with G.N. Hile).

- *An approximation method for the Dirichlet problem of nonlinear elliptic systems in $\mathbb{R}^r$.* Rev. Roumaine Math. Pure Appl. 27 (1982), 927–934.

- *Helmut Pachale zum Gedenken.* In: Helmut Pachale in memoriam. Ansprachen und Vorträge des Gedenkkolloquiums vom 14. Juli 1979 und der Trauerfeier vom 21. Juli 1978 an der Freien Universität Berlin. Herausgegeben von H. Begehr. Freie Universität Berlin. Berlin 1980, 9–14.

- *Nonlinear boundary value problems of Riemann–Hilbert type.* Contemporary Math. 11 (1982), 139–153 (with G.C. Hsiao).

- *Boundary value problems for analytic and generalized analytic functions.* Complex Analysis – Methods, Trends and Applications, ed. E. Lankau, W. Tutschke. Akademie–Verlag, Berlin, 1983, 150–165.

- *Value distribution theory.* Complex Analysis–Methods, Trends and Applications, ed. E. Lankau, W. Tutschke. Akademie–Verlag, Berlin, 1983, 59–67.

- *Boundary value problems associated with first order elliptic systems in the plane.* Contemporary Math. 11 (1982), 13–48 (with R.P. Gilbert).

- *Riemann boundary value problem for nonlinear elliptic systems.* Complex Variables, Theory Appl. 1 (1983), 239–261 (with G.N. Hile).

- *A priori estimates for elliptic systems.* Applied Math. Inst. Univ. Delaware, Technical Report No. 153–A (1984), Z. Anal. Anw. 6 (1987), 1–21 (with G.C.Hsiao).

- *The Hilbert boundary value problem for nonlinear elliptic systems.* Proc. Roy. Soc. Edinburgh 94 A (1983), 97–112 (with G.C. Hsiao).

- *Boundary value problems for systems with Cauchy Riemannian main part.* Complex Analysis. Fifth Roumanian Finnish Seminar, Bucharest, 1981. Lecture Notes in Math. 1014, Springer–Verlag, Berlin etc., 1983, 265–279.

- *Remark on Hilbert's boundary value problem for Beltrami systems.* Proc. Roy. Soc.Edinburgh 98 A (1984), 305–310.

- *Schauder estimates and existence theory for entire solutions of linear elliptic equations.* Proc. Roy. Soc. Edinburgh 100 A (1988), 101-123 (with G.N. Hile).

- *Hele–Shaw type flows in $\mathbb{R}^n$.* Applied Math. Inst., Univ. Delaware, Technical Report No. 155 A (1984); Nonlinear Analysis 10 (1986), 65–86 (with R.P. Gilbert).

- *Non–Newtonian Hele–Shaw flows in $n \geq 2$ dimensions.* Applied Math. Inst. Univ. Delaware, Technical Report No. 156 A (1984); Nonlinear Analysis 11 (1987), 17–47 (with R.P. Gilbert).

- *Entire solutions of quasilinear pseudoparabolic equations.* Demonstratio Math. 18 (1985), 673–685.

- *Ganze Lösungen fastlinearer pseudoparabolischer Gleichungen.* Mathematica ad diem natalem septuagesimum quintum data. Festschrift Ernst Mohr zum 75. Geburtstag. Berlin. Universitätsbibliothek der TU Berlin, Abt. Publikationen, 1985, 15–22.

- *Eine Bemerkung zum nichtlinearen klassischen Satz von Cauchy–Kowalewski.* Math. Nachr. 131 (1987), 175–181.

- *Der Satz von Cauchy–Kowalewski für hyperanalytische Funktionen.* Z. Anal. Anw. 6 (1987), 43–47.

- *Optimale Kontrollprobleme für elliptische Systeme vom Beltrami und Douglis Typ.* Results in Math. 10 (1986), 25–39.

- *The discontinuous oblique derivativ problem for nonlinear elliptic systems of first order.* Rev. Roumaine Math. Pures Appl. 33 (1988), 7–19 (with G.–C. Wen).

- *A priori estimates for the discontinuous oblique derivative problem for elliptic systems.* Math. Nachr. 142 (1989), 307–336 (mit G.–C. Wen).

- *Pseudohyperanalytic functions.* Complex Variables, Theory Appl. 9 (1988), 343–357 (with R.P. Gilbert).

- *Boundary value problems for Beltrami equations.* J. Hebei Normal Univ. Nat. Sci. Ed. 3 (1987), 37–42 (Chinese).

- *Entire solutions for linear elliptic equations.* J. Hebei Normal Univ. Nat. Sci. Ed. 3 (1987), 43–47 (Chinese).

- *Nonlinear evolution equations.* J. Hebei Normal Univ. Nat. Sci. Ed. 3 (1987), 48–54 (Chinese).

- *Hele–Shaw flow and the moment problem.* J. Hebei Normal Univ. Nat. Sci. Ed. 3 (1987), 5–63 (Chinese).

- *Moment problem in $\mathbb{R}^n$.* J. Hebei Normal Univ. Nat. Sci. Ed. 3 (1987), 64–66 (Chinese, with Chen Xiu Qui).

- *Non–Newtonian Hele–Shaw flows in $n \geq 2$ dimensions.* J. Hebei Normal Univ. Nat. Sci. Ed. 3 (1987), 67–96 (Chinese, translation by Nonlinear Anal. 11 (1987), 17–47, with R.P. Gilbert).

- *Randwertaufgaben für elliptische Systeme vom Haack–Vekua Typ.* Sber. Berliner Math. Ges. 1972–1987, 159–170.

- *250 Jahre Mathematik in Berlin (Von der Gelehrtenrepublik zur Freien Universität).* FU-Info 8–9 (1987), 14–15 (mit M. Aigner).

- *Mathematik in Berlin. Mathematik aus Berlin.* Hrsg. H. Begehr. Weidler Buchverlag, Berlin, 1997, 3–10.

- *Mathematik an der Akademie der Wissenschaften und den Universitäten in Berlin. Mathematik in Berlin, Geschichte und Dokumentation.* 1. Halbband. Shaker Verlag, Aachen, 1998, 3–449.

- *The two–dimensional nonlinear orthotropic plate.* Journal of Elasticity 26 (1991), 147–167 (with R.P. Gilbert, C.Y. Lo).

- *Berlin. Universität. Mathematische Institute in Deutschland 1800–1945.* Dokumente zur Geschichte der Mathematik, Bd. 5, Hrg. W. Scharlau. Deutsche Mathematiker Vereinigung, Vieweg, Braunschweig/Wiesbaden, 1990, 25–47.

- *Moment problem in $\mathbb{R}^n$.* Demonstratio Math. 23 (1990), 329–333 (with X. Chen).

- *An initial and boundary value problem for nonlinear composite type systems of three equations.* Mathematica Pannonica, 2 (1991), 49–61 (with G.–C. Wen, Z. Zhao).

- *Initial boundary value problem for nonlinear pseudoparabolic equations.* Complex Variables, Theory Appl. 18 (1992), 33–47 (with D. Dai).

- *Nonlinear half–Dirichlet problems for first order elliptic equations in the unit ball of $\mathbb{R}^m$ ($m \geq 3$).* Appl. Anal. 45 (1992), 3–18 (with Z. Xu).

- *A priori estimates for elliptic equations and systems.* Proc. Assiut first intern. conf. Part V, 1990, 37–58.

- *Moving boundary problems of Hele–Shaw type.* Proc. 21. Annual Iranian Math. Conf. 1990, Univ. Isfahan, 1990, 43–63.

- *Entwicklung der Mathematik an der FU, Vortragsauszug.* Sber. Berliner Math. Ges. 1988–1992, 177–187.

- *An initial and boundary value problem for nonlinear composite type systems of three equations.* Proc. intern. conf. integral equations boundary value problems, Beijing 1990. World Sci., Singapore etc., 1991, 1–3 (with G.–C, Wen, Z. Zhao).

- *A mixed–contact boundary value problem for the orthotropic elasticity.* Proc. intern. conf. integral equations boundary value problems, Beijing 1990. World Sci., Singapore etc., 1991, 110–116 (with W. Lin).

- *A mixed–contact boundary problem in orthotropic elasticity.* Partial differential equations with real analysis. Eds. H. Begehr, A. Jeffrey, Longman, Harlow, 1992, 219–239 (with W. Lin).

- *Estimates of solutions to linear elliptic systems and equations.* Partial diff. eq., Banach Centre Publ. 27, Part 1, Warszawa 1992, 45–63.

- *Some boundary value problems for a Beltrami equation.* Complex Variables, Theory Appl. 26 (1994), 113–122 (with E. Obolashvili).

- *Bi–analytic functions of several variables.* Complex Variables, Theory Appl. 24 (1993), 89–106 (with A. Kumar).

- *On boundary value problems for overdetermined elliptic systems.* Complex Analysis in Several Variables, ed. Th.M. Rassias. Hadronic Press, Inc., Palm Harbor, Florida, USA, 1999, 1-42 (with A. Dzhuraev).

- *Elliptic second order equations.* Functional analytic methods in complex analysis and applications to partial differential equations. Eds. A.S. Mshimba, W. Tutschke. World Sci., Singapore, 1995, 115–152.

- *Iteration of the Pompeiu integral operator and complex higher oder equations.* General Math. 7 (1999), 3–23; http://depmath.ulbsibiu.ro

- *Overdetermined systems of complex second order equations.* Complex analysis and its applications, Ed. C.C. Yang, G.C. Wen, K.Y. Li, Y.M. Chiang. Pitman Research Notes in Math. Ser. 305, Longman, Harlow, 1994, 1–13.

- *On a boundary value problem for a first–order holomorphic system in $\mathbb{C}^2$.* Ross. Akad. Nauk Doklady 339 (1994), 297–300 (Russian); Russ. Acad. Sci. Dokl. Math. 50 (1995), 418–422 (with A. Dzhuarev).

- *Higher order Cauchy Pompeiu operators.* Operator Theory for Complex and Hypercomplex Analysis, ed. E. Ramirez de Arellano et al; Contemporary Math. 212 (1998), 41–49 (with G.N. Hile).

- *A hierarchy of integral operators.* Rocky Mountain J. Math. 27 (1997), 669–706 (with G.N. Hile).

- *Pseudoparabolic Vekua systems.* Continuum Mechanics and Related Problems of Analysis. Proc. Int. Symp. Acad. N. Muskhelishvili, Tbilisi, 1991; Metsniereba, Tbilisi, 1993, 345–352.

- *Zum Gedenken an Wolfgang Haack.* Sber. Berl. Math. Ges. 1993–1996, 243–246.

- *Complex analytic methods for partial differential equations.* ZAMM 76 (1996), Suppl. 2, 21–24.

- *Asymptotics of meromorphic solutions for a nonlinear Riemann–Hilbert problem.* ZAMM 76 (1996), Suppl. 2, 25–28 (with M. Efendiev).

- *On the asymptotics of meromorphic solutions for nonlinear Riemann–Hilbert problems.* Math. Proc. Camb. Phil. Soc. 127 (1999), 159–172 (with E. Efendiev).

- *Schwarz problem for Cauchy–Riemann systems in several complex variables.* Analysis and Topology, ed. C. Andreian–Cazacu, O. Lehto, Th. Rassias. World Sci., Singapore, 1998, 63–114 (with A. Dzhuraev).

- *Boundary value problems in $\mathbb{C}$ and $\mathbb{C}^n$.* The HoChiMinh City Math. Soc. 3 (1995), 32–47; Acta Math. Vietnamica 22 (1997), 407–425.

- *Analysisbücher im Vergleich.* Math. Semesterberichte 43 (1996), 194–204 (with N. Schappacher).

- *On the Pompeiu operator of higher order and applications.* Complex Variables, Theory Appl. 32 (1997), 233–261 (with M. Akal).

- *On nonlinear Riemann–Hilbert boundary value problems for second order elliptic systems in the plane.* Appl. Anal. 63 (1996), 331–351 (with M. Akal).

- *Analysisbücher im Vergleich – vier Nachträge.* Math. Semesterberichte 44 (1997), 101–102.

- *Laudatio for Robert Pertsch Gilbert on the occasion of his 65th anniversary. His contributions to complex analysis. Generalized analytic functions*, ed. H. Florian et al., Kluwer, Dordrecht, 1998, XXI–XXIII.

- Overdetermined systems of second order elliptic equations in several complex variables. Generalized Analytic Functions, ed. H. Florian et al., Kluwer, Dordrecht, 1998, 89–109 (with A. Dzhuraev).

- *Riemann–Hilbert boundary value problems in $\mathbb{C}^N$*. Partial differential and integral equations. Eds. H. Begehr et al., Kluwer, Dordrecht, 1999, 59–84.

- *Systems of first order partial differential equations – a hypercomplex approach.* Partial differential and integral equations. Eds. H. Begehr et al., Kluwer, Dordrecht, 1999, 155–175.

- *Iterations of Pompeiu operators.* Memoirs Diff. Eqs. Math. Phys. 12 (1997), 13–21.

- *Oblique derivative problems for elliptic systems of second order equations in infinite domains.* ZAA 18 (1999), 193–204 (with G.–C. Wen).

- *Existence of solutions of Frankl problem for general Lavrent'ev–Bitsadze equations.* Revue Roumaine Math. Pure Appl. 45 (2000), 141–160 (with G.–C. Wen).

- *Jacob Steiner and synthetic geometry.* Mathematics in Berlin. Ed. H. Begehr et al., Birkhäuser, Basel, 1998, 49–54.

- *Constantin Carathéodory (1873–1950).* Mathematics in Berlin. Ed. H. Begehr et al., Birkhäuser, Basel, 1998, 105–109.

- *Freie Universität Berlin, a summary of its history.* Mathematics in Berlin. Ed. H. Begehr et al., Birkhäuser, Basel, 1998, 151–160.

- *Second order Cauchy–Pompeiu representations.* Complex methods for partial differential equations. H. Begehr, A.O. Celebi, W. Tutschke (eds.). Kluwer, Dordrecht, 1999, 165–188.

- *Some second order systems in the complex plane.* Revue Roumaine Math. Pure Appl. 44 (1999), 521–554 (with G.–C. Wen).

- *Iterated integral operators in Clifford analysis.* ZAA 18 (1999), 361–377.

- *Integral representations for inhomogeneous overdetermined second order systems of several complex equations.* Functional analytic and complex methods, their interactions, and applications to partial differential equations. Eds. H. Florian et al. World Scientific. Singapore, 2001, 378–393 (with D.Q. Dai, A. Dzhuraev).

- *Representations in polydomains.* Acta Math. Vietnamica, 27 (2002), 271–282; Finite, Infinite Dim. Compl. Anal. Appl., eds. H.S. Le, W. Tutschke, C.C. Yang. Kluwer, Dordrecht, 2004, 255–268.

- *Integral representation formulas in polydomains.* Complex Var. Theory Appl. 47 (2002), 463–484 (with D.Q. Dai, X. Li).

- *Integral representations for differentiable functions.* Problemi attuali dell'analisi e della fisica matematica. Ed. P.E. Ricci. Aracne, Roma, 2000, 111–130.

- *On continuous solutions of a generalized Cauchy–Riemann system with more than one singularity.* J. Diff. Eq. 196 (2004), 67–90 (with D.–Q. Dai).

- *On non–normal Riemann boundary value problem for analytic functions.* Complex Variables, Theory Appl. 42 (2000), 1–9 (with D.–Q. Dai).

- *Spatial Riemann problem for analytic functions of two complex variables.* ZAA 18 (1999), 827–837 (with D.Q. Dai).

- *On the theory of a singular Vekua system.* Operator Theory Adv. Appl. 121 (2001), 27–35 (with D.Q. Dai).

- *On problems of linear conjugacy for analytic functions of several complex variables.* Proc. 2nd. ISAAC Congress Fukuoka 1999, Vol. 2. Eds. H. Begehr, R.P. Gilbert, J. Kajiwara. Kluwer, Dordrecht, 2000, 1313–1318 (with D.Q. Dai).

- *On the Riemann-Hilbert-Poincarè problem for analytic functions.* Analysis 22 (2002), 183–199 (with D.–Q. Dai).

- *Approximate solution of periodic Riemann boundary value problem for analytic functions.* J. Comput. Appl. Math. 134 (2001), 85–93 (with X. Li).

- *Cauchy–Pompeiu representations.* Problems in Differential Equations, Analysis and Algebra, Actobe, 15.–19.9.1999. Eds. K.K. Kenchebaev et al., Actobe Univ., Actobe, 2000, 218–221.

- *Hypercomplex Bitsadze systems.* Boundary value problems, integral equations and related problems. J.K. Lu, G.C. Wen (eds.), World Scientific, Singapore, 2000, 33–40.

- *Pompeiu operators in complex, hypercomplex and Clifford analysis.* Revue Roumaine Math. Pure Appl. 46 (2001), 1–11.

- *Integral decomposition of differentiable functions.* Proc. 2nd ISAAC Congress Fukuoka 1999. Vol 2. Eds. H. Begehr, R.P. Gilbert, J. Kajiwara. Kluwer, Dordrecht, 2000, 1301–1312.

- *Orthogonal decompositions of the function space $L_2(\overline{D}; \mathcal{C})$.* J. Reine Angew. Math. 549 (2002), 191–219.

- *Some orthogonal decompositions of Sobolev spaces and applications.* Coll. Math. 89 (2001), 199–212 (with Ju. Dubinskii).

- *Orthogonal decompositions of Sobolev spaces in Clifford analysis.* Ann. Mat. Pura Appl. 181 (2002), 55–71 (with Ju. Dubinskii).

- *Integral representations in complex, hypercomplex and Clifford analysis.* Lecture Notes, Minicorsi, Padova 2000, 53–77. Integral Transforms and Special Functions 13 (2002), 223–241.

- *On elliptic boundary value problems in the plane.* Progress in Analysis, Proc. 3rd ISAAC Congress, Vol. II, Eds. H.G.W. Begehr, R.P. Gilbert, M.W. Wong. World Scientific, Singapore, 2003, 779–784 (with A. Soldatov).

- *Lines of catastrophe: problems, examples of solutions, connections with Nevanlinna Theory and Gamma–lines.* Progress in Analysis, Proc. 3rd ISAAC Congress, Vol. II, Eds. H.G.W. Begehr, R.P. Gilbert, M.W. Wong. World Scientific, Singapore, 2003, 791–799 (with G. Barsegian).

- *Die Berliner Mathematische Gesellschaft und der Mathematische Verein an der Universität Berlin.* 100 Jahre Berliner Mathematische Gesellschaft. Festschrift. Hrg. Vorstand der BMG, BMG, Berlin, 2001, 1-20.

- *Die Berliner Mathematische Gesellschaft: Ursprung, Gründung, Neugründung.* Sitzungsberichte BMG 1997–2000, Berlin, 2001, 267–366.

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- *The Schwarz problem for analytic functions in torus related domains.* Appl. Anal., 85 (2006), 1079–1101 (with A. Mohammed)

- *Stability phenomenon for generalizations of algebraic differential equations.* ZAA 21 (2002), 495–503 (with G. Barseghyan, I. Laine)

- *Biharmonic decomposition of the Hilbert space L_2.* Revue Roumaine Math. Pure Appl. 47 (2002), 559–570.

- *Representation formulas in Clifford analysis.* Acoustics, Mechanics and the Related Topics of Mathematical Analysis. Ed. A. Wirgin. World Sci., New Jersey, 2002, 8-13.

- *On Cauchy-Pompeiu formula for functions with values in a universal Clifford algebra.* Acta Math. Scientia (China) 23B (2003), 95-103 (with J.-Y. Du, Z.-X. Zhang)

- *On higher order Bessel potentials.* Arch. Math. (Basel) 82 (2004), 361–370 (with A.S. Abdel-Rady)

- *Integral representations in octonionic analysis.* Proc. 10th Intern. Conf. Complex Analysis. Eds. J. Kajiwara, K.W. Kim, K.H. Shon. Busan, Korea, 2002, 1–7 (with F. Gackstatter, A. Krausz)

- *On a higher order Cauchy-Pompeiu formula in Clifford analysis and its application.* Gen. Math. 11 (2003), 5–26 (with J.-Y. Du, Z.-X. Zhang)

- *On asymptotics of solutions to the hypergeometric equation.* Complex Var., Theory Appl. 49 (2004), 1–13 (with Z.D. Usmanov)

- *On some complex differential and singular integral operators.* Topics in Analysis and its Appl., eds. G. Barsegian, H. Begehr, NATO Sci. Ser. II, 47, Kluwer, Dordrecht, 2004, 235–269 (with A. Dzhuraev)

- *Iterated Neumann problem for the higher order Poisson equation.* Math. Nachr. 279 (2006), 38–57 (with C.J. Vanegas)

- *Boundary value problems for bi-polyanalytic functions.* Appl. Anal., 85 (2006), 1045–1077 (with A. Kumar)

- *Combined integral representations*, Advances in Analysis, Proc. 4th Intern. ISAAC Congress, Toronto, 2003. Eds. H. Begehr et al. World Sci., Singapore, 2005, 187–195

- *Some boundary value problems for bi-bianalytic functions.* Complex Anal., Diff. Eqs., Related Topics, ISAAC Conf., Yerevan, Armenia, 2002, eds. G. Barsegian et al., Nat. Acad. Sci. Armenia, Yerevan, 2004, 233–253.

- *Neumann problem in complex analysis.* Proc. 11th Intern. Conf. Finite, Infinite Dim. Complex Anal. Appl., Chiang Mai, Thailand, 2003, eds. P. Niamsup, A. Kananthai, 212–225 (with C.J. Vanegas)

- *Boundary value problems in complex analysis.* Lecture Notes from a mini-course at the Simón Bolivar Univ., Caracas, May 2004, Preprint, FU Berlin, 1–52; Part I, Bol. Asoc. Mat. Venezolana, XII (2005), 65–85; Part II, 217–250.

- *The Schwarz problem for polyanalytic functions.* ZAA 24 (2005), 341–351 (with D. Schmersau).

- *Basic boundary value problems in complex analysis.* Snapshots in Applied Complex Analysis. Proc. Workshop Recent Trends in Appl. Complex Analysis, Ankara, 2004. J. Appl. Funct. Anal. 2 (2007), 57–71.

- *Boundary value problems for complex Poisson equation.* Proc. AMADE 2006, to appear.

- *Boundary value problems for the Bitsadze equation.* Memoirs Diff. Eqs. Math. Phys. 33 (2004), 5–23.

- *Boundary value problems for the inhomogenous polyanalytic equation.* I, Analysis 25 (2005), 55-71; II, Preprint, FU Berlin, 2004, Analysis, to appear (with A. Kumar).

- *Mixed complex boundary value problems in complex analysis.* Proc. 12th Intern. Conf. Finite, Infinite Compl. Anal. Appl., eds. H. Kazame, M. Morimoto, C.C. Yang. Kyushu Univ. Press, Fukuoka, 2005, 25–40 (with A. Kumar, D. Schmersau, J.C. Vanegas).

- *Generalized integral representations in Clifford analysis.* Complex Var. Ell. Eqs. 51 (2006), 745–762 (with Z.-X. Zhang, T.N.H. Vu).

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- *Polyharmonic Dirichlet problems*, Prof. Steklov Inst. Math. 255 (2006), 13–34 (with T.N.H. Vu, Z.-X. Zhang).

- *Dirichlet problems for the biharmonic equation.* Gen. Math., 13 (2006), 65–72.

- *Academic contributions of Professor Guo-Chun Wen*, Complex Var. Ell. Eqs. 51 (2006), 733–743 (with D.C. Chen, X. Li).

- *Robin boundary value problem for the Cauchy-Riemann operator*, Complex Var., Theory Appl. 50 (2005), 1125–1136 (with G. Harutyunyan).

- *Robin boundary value problem for the Poisson equation*, J. Anal. Appl. 4 (2006), 201–213 (with G. Harutyunyan).

- *Differential operators, their fundamental solutions, and related integral representations in Clifford analysis*, Complex Var. Ell. Eqs. 51 (2006), 407–427 (with H. Otto, Z.-X. Zhang).

- *A Dirichlet problem for polyharmonic functions*, Ann. Mat. Pura Appl., to appear (with J.Y. Du, Y.F. Wang)

- *Some Schwarz problems in a quarter plane*, Eurasian Math. Zh. 3 (2005), 22–35 (with S.A. Abdymanapov, A.B. Tungatarov)

- *Complex boundary value problems in a quarter plane.* Complex Anal. Appl., Proc. 13th Intern. Conf. Finite Infinite Dimensional Complex Anal. Appl., Shantou, China. Eds. Y. Wang et al. World Sci., New Jersey, 2006, 1–10 (with G. Harutyunyan).

- *Four boundary value problems for the Cauchy-Riemann equation in a quarter plane.* ISAAC Proc. 2005 (with S.A. Abdymanapov, G. Harutyunyan, A.B. Tungatarov).

- *The main theorem of calculus in complex analysis.* Ann. EAS, 2005, 184–210.

- *A Dirichlet problem for the inhomogeneous polyharmonic equation in the upper half plane.* Georg. Math. J. 14 (2007), 33–52 (with E. Gaertner).

- A new approach for solving a Dirichlet problem for polyharmonic functions, Complex Var., Ell. Eq., to appear (with Y.F. Wang).

- *Six biharmonic Dirichlet problems in complex analysis.* Preprint, FU Berlin, 2006.

- *Biharmonic Green functions.* Le Matematiche 61 (2006), 395–405.

- *Hybrid Green functions and related boundary value problems.* Extended Abstracts of AIMC 37, 37th. Annual Iranian Math. Conf., Sept. 2006. Eds. S. Rezapour, 275–278.

- *A particular polyharmonic Dirichlet problem.* Preprint, FU Berlin, 2006.

- *Iterated Dirichlet problem for higher order Poisson equation.* Preprint, FU Berlin, 2006 (with T. Vaitsiakhovich) Le Matematiche, to appear.

- Complex partial differential equation in a manner of I.N. Vekua.Proc. Tbilisi 2007 (with T. Vaitsiakhovich).