



საქართველოს მეცნიერებათა ეროვნული აკადემია
GEORGIAN NATIONAL ACADEMY OF SCIENCES

Founded in 1941 by G. Akhvdiani, I. Beritashvili, A. Chikobava, G. Chubinishvili, S. Janashia, A. Janelidze, K. Kekelidze, N. Ketskhoveli, T. Kvaratskhelia, G. Khachapuridze, N. Muskhelishvili, A. Shanidze, A. Tvalchrelidze, D. Uznadze, K. Zavriev, and Ph. Zaytsev



Professor George Janelidze
Elected in 2013

Current Affiliation: University of Cape Town
Email: George.Janelidze@uct.ac.za

Research interests, collaboration, and publications

The main area of research of G. Janelidze is category theory and its applications in pure mathematics, especially in algebra and topology. This includes: (a) his Galois theory in general categories with various special cases (classical Galois theory, Galois theory of commutative rings in sense of Chase–Harrison–Rosenberg and Magid – with earlier publications unrelated to the categorical context, Grothendieck Galois theory, several geometric/topological/simplicial theories of covering maps, and theory of generalized central extensions he developed in joint work with G. M. Kelly); (b) Grothendieck descent theory in algebra and topology (mostly joint work with W. Tholen, and later also with M. Sobral); (c) new links with homological and universal algebra via central extensions, Huq–Smith–Pedicchio commutator theory, protomodular and semi-abelian categories, internal actions and semidirect products, internal categories and crossed modules, and Ursini theory of ideals and ideal determined categories; (d) the so-called Kurosh–Amitsur radical theory; (e) several other topics of research in algebra and general and algebraic topology with one or two publications devoted to each of them.

International collaboration, for which he was invited many times to Western Europe, North America, and Australia, played an important role in Janelidze’s research. His co-authors are distinguished mathematicians D. Bourn (France), F. Borceux, S. Caenepeel, and M. Gran (Belgium), R. Brown (UK), A. Carboni, M. Grandis, M. C. Pedicchio, and A. Ursini (Italy), M. M. Clementino, D. Hofmann, and M. Sobral (Portugal), G. M. Kelly and R. H. Street (Australia), V. Laan (Estonia), A. R. Magid (USA), L. Márki (Hungary), R. Paré, D. Schumacher, and W. Tholen (Canada).

List of publications of George Janelidze

1. F. Borceux, S. Caenepeel, and G. Janelidze, Monadic approach to Galois descent and cohomology, *Theory and Applications of Categories* 23, 5, 2010, 92-112
2. F. Borceux and G. Janelidze, *Galois Theories*, Cambridge Studies in Advanced Mathematics 72, Cambridge University Press, 2001

3. F. Borceux, G. Janelidze, and G. M. Kelly, Internal object actions, *Commentationes Mathematicae Universitatis Carolinae*, 46, 2, 2005, 235-255
4. F. Borceux, G. Janelidze, and G. M. Kelly, On the representability of actions in a semi-abelian category, *Theory and Applications of Categories*, 14, 11, 2005, 244-286
5. D. Bourn and G. Janelidze, Protomodularity, descent, and semidirect products, *Theory and Applications of Categories* 4, 1998, 37-46
6. D. Bourn and G. Janelidze, Characterization of protomodular varieties of universal algebras, *Theory and Applications of Categories* 11, 6, 2003, 143-147 (Also Preprint 16/2002, Dept. Math. Instituto Superior Técnico, Lisbon 2002)
7. D. Bourn and G. Janelidze, Extensions with abelian kernels in protomodular categories, *Georgian Mathematical Journal* 11, 4, 2004, 645-654
8. D. Bourn and G. Janelidze, Centralizers in action accessible categories, *Cahiers de Topologie et Géométrie Différentielles Catégoriques* 50, 3, 2009, 211-232
9. R. Brown and G. Janelidze, Van Kampen theorems for categories of covering morphisms in lextensive categories, *Journal of Pure and Applied Algebra* 119, 1997, 255-263
10. R. Brown and G. Janelidze, Galois theory of second order covering maps of simplicial sets, *Journal of Pure and Applied Algebra* 135, 1999, 23-31
11. R. Brown and G. Janelidze, Galois theory and a new homotopy double groupoid of a map of spaces, *Applied Categorical Structures* 12, 2004, 63-80 (Also Preprint 02.18, University of Wales, Bangor 2002)
12. A. Carboni and G. Janelidze, Modularity and Descent, *Journal of Pure and Applied Algebra* 99, 1995, 255-265
13. A. Carboni and G. Janelidze, Decidable (=separable) objects and morphisms in lextensive categories, *Journal of Pure and Applied Algebra* 110, 1996, 219-240
14. A. Carboni and G. Janelidze, Boolean Galois theories, *Georgian Mathematical Journal* 9, 4, 2002, 645-658 (Also Preprint 15/2002, Dept. Math. Instituto Superior Técnico, Lisbon 2002)
15. A. Carboni and G. Janelidze, Smash product of pointed objects in lextensive categories, *Journal of Pure and Applied Algebra* 183, 2003, 27-43
16. A. Carboni and G. Janelidze, Points of affine categories and additivity, *Theory and Applications of Categories*, 16, 6, 2006, 127-131
17. A. Carboni, G. Janelidze, G. M. Kelly, and R. Paré, On localization and stabilization of factorization systems, *Applied Categorical Structures* 5, 1997, 1-58
18. A. Carboni, G. Janelidze, and A. R. Magid, A note on Galois correspondence for commutative rings, *Journal of Algebra* 183, 1996, 266-272
19. M. M. Clementino, D. Hofmann, and G. Janelidze, Local homeomorphisms via ultrafilter convergence, *Proceedings of American Mathematical Society* 133, 3, 2004, 917-922
20. M. M. Clementino, D. Hofmann, and G. Janelidze, On exponentiability of étale algebraic homomorphisms, *Journal of Pure and Applied Algebra* 217, 2013, 1195-1207
21. M. M. Clementino and G. Janelidze, A note on effective descent morphisms of topological spaces and relational algebras, *Topology and its Applications* 158, 17, 2011, 2431-2436
22. M. Gran and G. Janelidze, Covering morphisms and normal extensions in Galois structures associated with torsion theories, *Cahiers de Topologie et Géométrie Différentielles Catégoriques* 50, 3, 2009, 171-188
23. M. Grandis and G. Janelidze, Galois theory of simplicial complexes, *Topology and its Applications* 132, 3, 2003, 281-289 (Also Preprint 459, Dip. Mat. Univ. Genova (September 2002))
24. M. Grandis, G. Janelidze, and L. Márki, Non-pointed exactness, radicals, closure operators, *Journal of the Australian Mathematical Society* 94, 2013, 348-361
25. G. Janelidze, Galois theory in categories with inclusions, *Proc. Junior Sci., Tbilisi State University*, 2, 1974, 9-16 (in Russian)
26. G. Janelidze, Profinite extensions of rings and the Harrison isomorphism, *Bull. Georgian Acad. Sci.* 78, 3, 1975, 529-532 (in Russian)
27. G. Janelidze, On satellites in arbitrary categories, *Bull. Georgian Acad. Sci.* 82, 3, 1976, 529-532 (in Russian)
28. G. Janelidze, Satellites with respect to Galois extensions, *Proc. Math. Inst. Georgian Acad. Sci.* LXII, 1979, 38-48 (in Russian)

29. G. Janelidze, Description of the finite Galois extension functor of an arbitrary commutative ring, *Bull. Georgian Acad. Sci.* 101, 1, 1981, 17-20 (in Russian)
30. G. Janelidze, Cohomology of category objects and Galois extensions of commutative rings, *Bull. Georgian Acad. Sci.* 102, 1, 1981, 17-20 (in Russian)
31. G. Janelidze, Computation of Kan extensions by means of injective objects and the functors Ext in nonadditive categories, *Proc. Math. Inst. Georgian Acad. Sci.* LXX, 1982, 42-51 (in Russian)
32. G. Janelidze, Cohomology of pairs of monoids and homological algebra of internal modules, *Proc. Math. Inst. Georgian Acad. Sci.* LXX, 1982, 56-68 (in Russian)
33. G. Janelidze, On abelian extensions of commutative rings, *Bull. Georgian Acad. Sci.* 108, 3, 1982, 477-480 (in Russian)
34. G. Janelidze, Galois extensions of commutative rings by profinite families of groups, *Proc. Math. Inst. Georgian Acad. Sci.* LXXIV, 1983, 39-51 (in Russian)
35. G. Janelidze, Magid's theorem in categories, *Bull. Georgian Acad. Sci.* 114, 3, 1984, 497-500 (in Russian)
36. G. Janelidze, Galois theory of separable polynomials over a commutative ring, *Investigations in Algebra, Tbilisi and Moscow State Universities, Tbilisi 1985*, 44-64 (in Russian)
37. G. Janelidze, Abelian extensions (of invertible rank, with normal basis) of commutative rings with an infinite number of idempotents, *Proc. Math. Inst. Georgian Acad. Sci.* LXXVII, 1985, 36-49 (in Russian)
38. G. Janelidze, The fundamental theorem of Galois theory, *Math. USSR Sbornik* 64 (2), 1989, 359-384
39. G. Janelidze, Galois theory in categories: the new example of differential fields, *Proc. Conf. Categorical Topology in Prague 1988*, World Scientific 1989, 369-380
40. G. Janelidze, Pure Galois theory in categories, *Journal of Algebra* 132, 1990, 270-286
41. G. Janelidze, Cohomology and extensions of internal modules, *Lecture Notes in Mathematics* 1437, 1990, 157-168
42. G. Janelidze, What is a double central extension? (the question was asked by Ronald Brown), *Cahiers de Topologie et Géométrie Différentielles Catégoriques* XXXII-3, 1991, 191-202
43. G. Janelidze, Precategories and Galois theory, *Lecture Notes in Mathematics* 1488, 1991, 157-173
44. G. Janelidze, A note on Barr-Diaconescu covering theory, *Contemporary Mathematics* 131, 3, 1992, 121-124
45. G. Janelidze, Internal crossed modules, *Georgian Mathematical Journal* 10, 1, 2003, 99-114 (Also Preprint 14/2002, Dept. Math. Instituto Superior Técnico, Lisbon 2002)
46. G. Janelidze, Categorical Galois theory: revision and some recent developments, *Galois Connections and Applications*, Kluwer Academic Publishers B.V., 2004, 139-171
47. G. Janelidze, Galois groups, abstract commutators, and Hopf formula, *Applied Categorical Structures* 16, 6, 2008, 653-761
48. G. Janelidze, Light morphisms of generalized T_0 -reflections, *Topology and its Applications* 156, 12, 2009, 2109-2115
49. G. Janelidze and G. M. Kelly, Galois theory and a general notion of a central extension, *Journal of Pure and Applied Algebra* 97, 1994, 135-161
50. G. Janelidze and G. M. Kelly, The reflectiveness of covering morphisms in algebra and geometry, *Theory and Applications of Categories* 3, 1997, 132-159
51. G. Janelidze and G. M. Kelly, Central extensions in universal algebra: a unification of three notions, *Algebra Universalis* 44, 2000, 123-128
52. G. Janelidze and G. M. Kelly, Central extensions in Mal'tsev varieties, *Theory and Applications of Categories* 7, 10, 2000, 219-226
53. G. Janelidze and G. M. Kelly, A note on actions of a monoidal category, *Theory and Applications of Categories* 9, 4, 2001, 61-91
54. G. Janelidze, V. Laan, and L. Márki, Limit preservation properties of the greatest semilattice image functor on semigroups, *International Journal of Algebra and Computation* 18, 5, 2008, 853-867
55. G. Janelidze and L. Márki, Radicals of rings and pullbacks, *Journal of Pure and Applied Algebra* 97, 1994, 29-36

56. G. Janelidze and L. Márki, Kurosh-Amitsur radicals via a weakened Galois connection, *Communications in Algebra* 31, 1, 2003, 241-258
57. G. Janelidze and L. Márki, A simplicial approach to factorization systems and Kurosh-Amitsur radicals, *Journal of Pure and Applied Algebra* 213, 2009, 2229-2237
58. G. Janelidze, L. Márki, and W. Tholen, Locally semisimple coverings, *Journal of Pure and Applied Algebra* 128, 1998, 281-289
59. G. Janelidze, L. Márki, and W. Tholen, Semi-abelian categories, *Journal of Pure and Applied Algebra* 168, 2002, 367-386
60. G. Janelidze, L. Márki, W. Tholen, and A. Ursini, Ideal-determined categories, *Cahiers de Topologie et Géométrie Différentielles Catégoriques* 51, 2, 2010, 115-125
61. G. Janelidze, L. Márki and A. Ursini, Ideals and clots in universal algebra and in semi-abelian categories, *Journal of Algebra* 307, 1, 2007, 191-208
62. G. Janelidze, L. Márki and A. Ursini, Ideals and clots in pointed regular categories, *Applied Categorical Structures* 17, 4, 2009, 345-350
63. G. Janelidze and M. C. Pedicchio, Internal categories and groupoids in congruence modular varieties, *Journal of Algebra* 193, 1997, 552-570
64. G. Janelidze and M. C. Pedicchio, Pseudogroupoids and commutators, *Theory and Applications of Categories* 8, 15, 2001, 408-456
65. G. Janelidze, D. Schumacher, and R. H. Street, Galois theory in variable categories, *Applied Categorical Structures* 1, 1993, 103-110
66. G. Janelidze and M. Sobral, Finite preorders and topological descent I, *Journal of Pure and Applied Algebra* 175(1-3), 2002, 187-205
67. G. Janelidze and M. Sobral, Finite preorders and topological descent II: étale descent, *Journal of Pure and Applied Algebra* 174, 2002, 303-309
68. G. Janelidze and M. Sobral, Descent for compact 0-dimensional spaces, *Theory and Applications of Categories* 21, 10, 2008, 181-190
69. G. Janelidze and M. Sobral, Profinite relational structures, *Cahiers de Topologie et Géométrie Différentielles Catégoriques* 49, 4, 2008, 280-288
70. G. Janelidze and M. Sobral, Descent for regular epimorphisms in Barr exact Goursat categories, *Applied Categorical Structures* 19, 1, 2011, 271-276
71. G. Janelidze, M. Sobral, and W. Tholen, Beyond Barr exactness: effective descent morphisms, *Categorical Foundations; Special Topics in Order, Topology, Algebra, and Sheaf Theory*, Cambridge University Press, 2004, 359-405
72. G. Janelidze and R. H. Street, Galois theory in symmetric monoidal categories, *Journal of Algebra* 220, 1999, 174-187
73. G. Janelidze and W. Tholen, How algebraic is the change-of-base functor?, *Lecture Note in Mathematics* 1488, 1991, 174-186
74. G. Janelidze and W. Tholen, Facets of Descent I, *Applied Categorical Structures* 2, 1994, 245-281
75. G. Janelidze and W. Tholen, Facets of Descent II, *Applied Categorical Structures* 5, 1997, 229-248
76. G. Janelidze and W. Tholen, Functorial factorization, well-pointedness and separability, *Journal of Pure and Applied Algebra* 142, 1999, 99-130
77. G. Janelidze and W. Tholen, Extended Galois theory and dissonant morphisms, *Journal of Pure and Applied Algebra* 143, 1999, 231-253
78. G. Janelidze and W. Tholen, Facets of Descent III: Monadic descent for rings and algebras, *Applied Categorical Structures* 12, Nos 5-6, 2004, 461-467
79. G. Janelidze and W. Tholen, Characterization of torsion theories in general categories, *Contemporary Mathematics* 431, 2007, 249-256
80. G. Janelidze and W. Tholen, Strongly separable morphisms in general categories, *Theory and Applications of Categories* 23, 5, 2010, 136-149

Curriculum Vitae of George Janelidze
(Short version)

DATE OF BIRTH, NATIONALITY, STATUS:

19 May 1952 • Georgian • Married (two children and three grandchildren)

SCIENTIFIC DEGREES AND TITLES:

- 1974 – Diploma of Highest Education, Mathematician, Tbilisi State University
- 1978 – Ph.D. (“Candidate of Sciences”), Tbilisi State University, confirmed by Highest Certification Commission (VAK) in Moscow. Title of the PhD Thesis: “Satellites and Galois extensions of commutative rings”. Supervisor: Professor Hvedri Inassaridze.
- 1992 – D.Sc. (“Doctor of Science”), St.-Petersburg State University confirmed by Highest Certification Commission (VAK) in Moscow. Title of the DSc Thesis: “Cohomology of internal categories and Galois theory of commutative rings”.
- 2013 – Georgian National Academy Academician

POSITIONS HELD:

- A. Razmadze Mathematical Institute, Formerly of the Georgian Academy of Sciences (1 M. Alexidze str., Tbilisi, Georgia) Mathematical Institute: 1975-1978 Assistant; 1978-1985 Junior Research Scientist; 1985-1989 Senior Research Scientist; 1989-2006 Leading Research Scientist; from 2006 – Honorary Member.
- Professor of Department of Mathematics and Applied Mathematics, University of Cape Town (Rondebosch 7701, South Africa).
- South African A2 Rating (Category theory, Galois theory – General categories, Homological algebra, Universal algebra, Galois theory – Commutative rings, Radicals theory (Mathematics), Algebraic topology) from October 2005. Fellow of the University of Cape Town from 2011.

AWARDS/HONOURS

- From 2004: Senate Member of the University of Cape Town
- From 2005: South African A2 Rating (Category theory, Galois theory – General categories, Homological algebra, Universal algebra, Galois theory – Commutative rings, Radicals theory (Mathematics), Algebraic topology)
- From 2006: Honorary Member of A. Razmadze Mathematical Institute
- From 2011: Fellow of the University of Cape Town
- In 2013: Elected as a Georgian National Academy Academician

FORMER AND PRESENT PHD STUDENTS:

- D. Zangurashvili, Dissertation “Categorical algebraic properties in functor categories and Grothendieck topoi” defended at Tbilisi State University in 1993
- N. Inassaridze, Dissertation “Nonabelian tensor product and homology of groups” defended at Tbilisi State University in 1997
- B. Mesablishvili, Dissertation “Galois Theory of connected commutative rings in topoi” defended at Tbilisi State University in 1998
- J. J. Xarez, Dissertation “The monotone-light factorization system for categories via preordered and ordered sets” defended at Aveiro University (Portugal) in 2003
- A. H. Roque, Dissertation “Grothendieck descent in quasi-varieties of algebraic and relational structures” defended at Aveiro University (Portugal) in 2004
- N. Martins Ferreira, Dissertation “Low-dimensional internal categorical structures in weakly Mal’cev sesquicategories” defended at the University of Cape Town in 2008
- T. Janelidze, Dissertation “Foundation of relative non-abelian homological algebra” defended at the University of Cape Town in 2009 (co-supervision with H.-P. Künzi and W. Tholen)
- E. B. Inyangala, Dissertation “Categorical semi-direct products in varieties of groups with multiple operators” defended at the University of Cape Town in 2010
- J. R. A. Gray, Dissertation “Algebraic exponentiation and internal homology in general categories” defended at the University of Cape Town in 2010

- I. M. Xarez, Dissertation “Reflections of universal algebras into semilattices, their Galois theories, and related factorization systems” defended at Aveiro University (Portugal) in 2013
- K. A. Olurode, University of Cape Town, from 2009
- T. Yildirim, University of Cape Town, from 2010
- P. Ramasu, University of Cape Town, from 2011
- Sh. Gogoladze, Dissertation “Solvability in radicals of separable polynomials over commutative rings”, completed but not submitted

UNDERGRADUATE TEACHING

- Special courses in General Algebra, Homological Algebra, Category Theory, and Galois Theory (Tbilisi State University, Georgia, 1980-1990, in Georgian)
- Foundation of Mathematics (McGill University, Canada, 1995)
- Category Theory (York University, Canada, 1995)
- Calculus I (Sydney University, Australia, 1996)
- Category Theory (Sydney University, Australia, 1996)
- Category Theory (Coimbra University, Portugal, 1998)
- Linear Algebra (York University, Canada, 1999)
- Classical Mathematical Structures and Category Theory (MSc course, Aveiro University, Portugal, 2000)
- Algebraic Topology (Aveiro University, MSc course, Portugal, 2000)
- Seminário I and II – Introduction to sets, categories, number systems defined via universal properties (Aveiro University, Portugal, Three courses in 2000/01)
- Category Theory (Honours courses, University of Cape Town, South Africa, from 2004)
- Algebra (Honours courses, University of Cape Town, South Africa, 2004-2007)
- Topology II (Honours course, University of Cape Town, South Africa, 2010)
- Algebraic Topology (Honours course, University of Cape Town, South Africa, 2011)
- Algebra (Third year courses, University of Cape Town, South Africa, 2006-2010, 2012)
- Topics in Algebra (Third year courses, University of Cape Town, South Africa, from 2012)
- Logic and Computation (Third year course, University of Cape Town, South Africa, 2013)

EDITORIAL WORK

- Member, Editorial Board of *Proceedings of the Mathematical Institute of the Georgian Academy of Sciences* (from 1994)
- Member, Editorial Board of *Homology, Homotopy and Applications* (from its foundation in 1999)
- Member, Editorial Board of *Applied Categorical Structures* (from 2002)
- Member, Editorial Board of *Journal of Homotopy and Related Structures* (from its foundation in 2005)
- Member, Editorial Board of *Tbilisi Mathematical Journal* (from its foundation in 2007)
- Editor (together with A. Carboni and R. H. Street) of Special Volume of *Journal of Pure and Applied Algebra* [Vol. 175(1-3), 2002] dedicated to G. M. Kelly
- Editor (together with B. Pareigis and W. Tholen) of Proceedings Volumes of the International Workshop on Categorical Structures for Descent and Galois Theory, Hopf Algebras and Semiabelian Categories (The Fields Institute For Research In Mathematical Sciences, Toronto, Canada, 2002) in *Fields Institute Communications* [Vol. 43, 2004] and *Applied Categorical Structures* [Vol. 12, No 5-6, 2004]
- Editor (together with S. Lack, W. Lawvere, E. Vitale, and R. Wood) of Special Volume of *Theory and Applications of Categories* [Vol. 13, 2004] dedicated to A. Carboni
- Editor (together with J. McDonald, W. Tholen, R. H. Street) of CT2004 Proceedings Volume of *Theory and Applications of Categories* [Vol. 15, 2005]
- Editor (together with M. Barr, R. Brown, and P. Freyd) of Special Volume of *Journal of Homotopy and Related Structures* [Vol. 2, No 2, 2007] dedicated to the memory of S. Mac Lane
- Editor (together with M. M. Clementino, R. Rosebrugh, and J. Rosický) of Special Volume of *Theory and Applications of Categories* [Vol. 21, 2008] dedicated to W. Tholen

- Editor (together with M. Hyland, M. Johnson, P. T. Johnstone, S. Lack, R. H. Street, W. Tholen, and R. Wood) of Special Volume of *Applied Categorical Structures* dedicated to the memory of G. M. Kelly [Vol. 19, No 1, 2011]
- Editor (together with J. Adámek, A. Ehresmann, M. Gran, and R. Kieboom) of Special Volume of *Cahiers de Topologie et Géométrie Différentielles Catégoriques* dedicated to F. Borceux [Vol. XLIX-3, 2008; XLIX-4, 2008; L-1, 2009]
- Editor (together with A. Ehresmann, J. Rosický, W. Tholen, and E. Vitale) of Special Volume of *Theory and Applications of Categories* [Vol. 23, 2008] dedicated to D. Bourn
- Editor (together with J. Adámek, R. Rosebrugh, and G. Rosolini) of CT2010 Proceedings Volume of *Journal of Pure and Applied Algebra* [Vol. 216, No 8-9, 2012]
- Editor (together with M. Gran, S. Lack, J. MacDonald, and W. Tholen) of CT2011 Proceedings Volume of *Theory and Applications of Categories* [Vol. 27, 2012/2013]
- Editor (together with J. Bénabou, M. Gran, A. Ehresmann, and R. Paré) of Special Volume of *Cahiers de Topologie et Géométrie Différentielles Catégoriques* dedicated to R. Guitart [to appear in 2013/2014]

OTHER SCIENTIFIC ACTIVITIES

- Organization of Category Theory Seminars: at A. Razmadze Mathematical Institute of the Georgian Academy of Sciences (1980-2000); at Aveiro University (2000-2001); at the University of Cape Town (from 2004)
- Member, Scientific Committee in Mathematical Logic, Algebra, Number Theory, Analysis, Geometry, and Topology at Tbilisi State University (Until the end of 2006 this was the examining committee responsible for awarding the Ph.D. and D.Sc. degrees in Georgia in the subjects mentioned above)
- Co-organizer (together with I. Moerdijk and W. Tholen) of International Conference on Geometric and Logical Aspects of Descent Theory (Oberwolfach, Germany, 1995)
- Co-organizer (together with B. Pareigis and W. Tholen) of International Workshop on Categorical Structures for Descent and Galois Theory, Hopf Algebras and Semiabelian Categories (The Fields Institute For Research In Mathematical Sciences, Toronto, Canada, 2002)
- Co-organizer (together with G. C. L. Brümmer, J. Frith, P. P. Ghosh, C. R. A. Gilmour, J. R. A. Gray, K. A. Hardie, D. Holgate, T. Janelidze, Z. Janelidze, Z. Mushaandja, P. Ouwehand, and I. Rewitzky) and Scientific Committee Member (together with M. Hyland, M. Johnson, P. T. Johnstone, S. Lack, R. H. Street, W. Tholen, and R. J. Wood) of International Conference in Category Theory dedicated to the memory of G. M. Kelly (Cape Town, South Africa, 2008)
- Co-organizer (together with D. Baboolal, B. Bartlett, G. C. L. Brümmer, T. Dube, J. Frith, P. P. Ghosh, C. R. A. Gilmour, J. R. A. Gray, K. A. Hardie, D. Holgate, E. Inyangala, T. Janelidze, Z. Janelidze, H.-P. Künzi, Z. Mushaandja, I. Naidoo, P. Ouwehand, I. Rewitzky, A. Schauerte, and Peter J. Witbooi) and Scientific Committee Member (together with J. Adámek, D. Bourn, M. Gran, M. Grandis, P. T. Johnstone, S. Lack, A. J. Power, M. Sobral, R. H. Street, W. Tholen, and R. J. Wood) of International Conference in Category Theory CT2009 (Cape Town, South Africa, 2009)
- Member, Programming Committee of International Conference in Category Theory CT2000 (Como, Italy, 2000)
- Member, Scientific Committee of International Conference on Semiabelian Categories (Haute-Bodeux, Belgium, 2001)
- Member, Advisory Committee of International Conference in Category Theory CT2004 (Vancouver, Canada, 2004)
- Member, Scientific Committee of Summer School on Contemporary Categorical Methods in Algebra and Topology (Haute-Bodeux, Belgium, 2001)
- Member, Scientific Committee of International Conference in Category Theory CT2007 (Algarve, Portugal, 2007)
- Member, Scientific Committee of International Conference in Category Theory CT2008 (Calais, France, 2008)
- Organizer of the Category Theory Section at the 49th Annual Congress of the South African Mathematical Society

- Member, Program Committee of International Conference in Category Theory CT2009 (Cape Town, South Africa, 2009)
- Member, Program Committee of International Conference in Category Theory CT2011 (Vancouver, Canada, 2011)
- Member, Scientific Committee of International Conference in Category Theory CT2014 (Cambridge, UK, 2014)
- Local Coordinator at Mathematical Institute of the Georgian Academy of Sciences of the International Research Projects: “Algebraic K-theory, Groups, and Categories” – INTAS-93-416-ext. (Coordinator: R. Brown; other local coordinators: A. Bak, V. Gerasimov, A. Mikhalev, A. Suslin, N. Vavilov), and “Algebraic Homotopy, Galois Theory, and Descent” – INTAS-97-31961 (Coordinator: T. Porter; other local coordinators: M. Sobral, D. Zangurashvili)
- Selected Invited Lecture Courses: Galois Theory (Louvain-la-Neuve University, Belgium, 1996; Coimbra University, Portugal, 1998; Warsaw University, 2007); Category Theory (Instituto Superior Técnico in Lisbon, Portugal, 2002)