

RĂZVAN DIACONESCU

curriculum vitae

ADDRESS:

Str. Democrației 32
Ploiești 100559
ROMANIA

phone Ploiești: (+4)0244-513-664

phone Sinaia: (+4)0244-315-463

Fax IMAR: (+4)021-319-6505

GSM: (+4)0744-153-703

E-mail: Razvan.Diaconescu@imar.ro

Web page: <http://www.imar.ro/~diacon>

PERSONAL DATA:

Born on 19 March 1964 in Ploiești, România.
Romanian nationality.
Fluent in Romanian and English languages.

EDUCATION:

D.Phil. Mathematical Sciences, University of Oxford (England), 1994.
M.Sc. Mathematics and Computation, Universitatea București (România), 1988.
B.Sc. Mathematics and Computation, Universitatea București (România), 1987.
Bacalaureat, Liceul teoretic "Mihai Viteazul" Ploiești (România), 1982.

PROFESSIONAL POSITIONS:

- Director, Informatics Dept. of SNSB[§], since 2002.
- Scientific Researcher I (= Professor) at IMAR[†], since 2001.
- Scientific Researcher II (= Associate Professor) at IMAR[†], 1997–2001
- Panasonic-Fujitsu-USAC Endowed Chair & Associate at JAIST*, 1996–1999.
- Scientific Researcher III (= Assistant Professor) at IMAR[†], 1995–1997.
- Visiting Researcher at the Naval Postgraduate School, Monterey, CA, Sept 1994.
- Researcher at IMAR[†], 1990–1995.

PROFESSIONAL AWARDS AND DISTINCTIONS:

- Birkhäuser Award for the winner of the contest “How to translate a logic into another one?” of the *2nd World Congress of Universal Logic* (joint work with T. Mossakowski and A. Tarlecki) (2007).
- *Grigore Moisil Award* (for 2002) of the Romanian Academy (2004).
- J. William Fulbright Award under *Mutual Educational Exchange Program* (1996).[‡]
- US National Research Council *Resident Research Associateship Award* (1995).[‡]

EDITORIAL ACTIVITY:

- member of editorial board of *Studies in Universal Logic* book series at Birkhäuser, Switzerland

RESEARCH GRANTS:

- Project Director of CNCSIS Grants (202GR/2006, 54GR/2007, 23GR/2008)
- Project Director of Romanian Academy Grants (contracts 171/29.4.2004, 170/21.7.2003, and 3787/1995) for basic research in information science and technology.
- Project Director from the Romanian side of research contract 1938/12.11.1998 of scientific collaboration between Romania and Japan.
- Project Director from the Romanian side for the collaboration project 65/640 between the National Technical University Athens and IMAR.

TEACHING:

- Director of Master (by research) programme in Logic and Formal Secification, SNSB, 2004-2009.
- “Structuring specifications and programs”, SNSB 2008.
- “Model theory for specification and programming”, SNSB 2005-2006.
- “Mathematical foundations of Algebraic Specification”, SNSB, 2002-2006, 2008.
- “Formal Specification and Verification Methodologies”, SNSB 2005, 2007 and Master in Computing, Faculty of Mathematics, University of Bucharest, 2003-2004.
- “Heterogenous Multi-Logic Specification”, SNSB, 2004.
- “Logic Programming”, SNSB, 2003.
- “Introduction to Algebraic Specification”, Inter-University Program in Graduate Studies in *Logic and Theory of Algorithms and Computation*, University of Athens, Greece, March 2003.
- “Theory of Institutions”, MSc in Computing, Faculty of Mathematics, University of Bucharest, 2000.

[§] Academic school of postgraduate studies “Școala Normală Superioară București”. snsb.online.fr

[†] The Institute of Mathematics “Simion Stoilow” of the Romanian Academy. www.imar.ro

* Japan Advanced Institute for Science and Technology, Hokuriku. www.jaist.ac.jp

[‡] But fellowship declined due to concurrency with other professional commitments.

- “Formal Languages and Automata”, undergraduate, Faculty of Mathematics and Informatics, University of Ploiești, 1995.
- “Equational Logic Programming”, MSc in Computing, Faculty of Mathematics, University of Bucharest, 1995.

PUBLICATION LIST

MONOGRAPHS AND TEXTBOOKS

- [1-B] Răzvan Diaconescu. *Institution-independent Model Theory*, volume of *Studies in Universal Logic* series. Birkhäuser Basel-Boston-Berlin, 2008. ISBN 978-3-7643-8707-5. (386 pages).
- [2-B] Răzvan Diaconescu and Kokichi Futatsugi. *CafeOBJ Report: the language, proof techniques, and methodologies for object-oriented algebraic specification*, volume 6 of *AMAST Series in Computing*. World Scientific Singapore-New Jersey-London-Hong Kong, 1998. ISBN 981-02-3513-5.
- [3-B] Răzvan Diaconescu. *Category-based Semantics for Equational and Constraint Logic Programming*. D.Phil thesis, University of Oxford, 1994. ISBN 0-902928-91-0. (published as OUCL Monograph PRG-116)

JOURNAL ARTICLES

- [4-J] Răzvan Diaconescu. Quasi-Boolean encodings and conditionals in algebraic specification, *Journal of Logic and Algebraic Programming*, Elsevier. DOI:10.1016/j.jlap.2009.09.001. To appear in print.
- [5-J] Răzvan Diaconescu. An encoding of partial algebras as total algebras, *Information Processing Letters*, Elsevier, DOI:10.1016/j.ipl.2009.09.008. To appear in print.
- [6-J] Răzvan Diaconescu. Grothendieck inclusion systems. *Applied Categorical Structures*, Springer, DOI:10.1007/s10485-009-9211-6. To appear in print.
- [7-J] Till Mossakowski, Răzvan Diaconescu and Andrzej Tarlecki. What is a Logic Translation? *Logica Universalis*. 3(1):59–94, Birkhäuser, 2009.
- [8-J] Răzvan Diaconescu. A categorical study on the finiteness of specifications. *Information Processing Letters*. 108(2):75–80, Elsevier, 2008.
- [9-J] Răzvan Diaconescu and Petros Stefaneas. Ultraproducts and possible worlds semantics in institutions. *Theoretical Computer Science*. 379(1):210–230, Elsevier, 2007.
- [10-J] Marc Aiguier and Răzvan Diaconescu. Stratified institutions and elementary homomorphisms. *Information Processing Letters*. 103(1):5–13, Elsevier, 2007.
- [11-J] Marius Petria and Răzvan Diaconescu. Abstract Beth definability in institutions. *Journal of Symbolic Logic*. 71(3):1002–1028, 2006.
- [12-J] Răzvan Diaconescu. Proof systems for institutional logic. *Journal of Logic and Computation*. 16(3):339–357, Oxford Univ. Press, 2006.
- [13-J] Răzvan Diaconescu. Behavioural specification for hierarchical object composition. *Theoretical Computer Science*. 343(3):305–331, Elsevier, 2005.
- [14-J] Răzvan Diaconescu. Elementary diagrams in institutions. *Journal of Logic and Computation*. 14(5):651–674, Oxford Univ. Press, 2004.

- [15-J] Răzvan Diaconescu. Herbrand theorems in arbitrary institutions. *Information Processing Letters*. 90:29–37, Elsevier, 2004.
- [16-J] Răzvan Diaconescu. An institution-independent proof of Craig interpolation theorem. *Studia Logica*. 77(1):59–79, Springer, 2004.
- [17-J] Răzvan Diaconescu. Interpolation in Grothendieck institutions. *Theoretical Computer Science*. 311:439–461, Elsevier, 2004.
- [18-J] Răzvan Diaconescu and Petros Stefaneas. Modality in open institutions with concrete syntax. *Bulletin of the Greek Mathematical Society*. 49:91–101, 2004.
- [19-J] Răzvan Diaconescu, Kokichi Futatsugi, and Kazuhiro Ogata. CafeOBJ: logical foundations and methodologies. *Computing and Informatics*. 22:257–283, 2003.
- [20-J] Răzvan Diaconescu. Institution-independent ultraproducts. *Fundamenta Informaticæ*. 55(3-4):321–348, IOS Press, 2003.
- [21-J] Răzvan Diaconescu and Kokichi Futatsugi. Logical foundations of CafeOBJ. *Theoretical Computer Science*. 285:289–318, Elsevier, 2002.
- [22-J] Răzvan Diaconescu. Grothendieck institutions. *Applied Categorical Structures*. 10(4):383–402, Kluwer, 2002.
- [23-J] Răzvan Diaconescu and Kokichi Futatsugi. Behavioural coherence in object-oriented algebraic specification. *Universal Computer Science*, 6(1):74–96, Springer, 2000.
- [24-J] Răzvan Diaconescu. Category-based constraint logics. *Mathematical Structures in Computer Science*, 10(3):373–407, Cambridge Univ. Press, 2000.
- [25-J] Răzvan Diaconescu. Extra theory morphisms for institutions: logical semantics for multi-paradigm languages. *Applied Categorical Structures*, 6(4):427–453, Kluwer, 1998.
- [26-J] Răzvan Diaconescu. Category-based modularization for equational logic programming. *Acta Informatica*, 33(5):477–510, Springer, 1996.
- [27-J] Răzvan Diaconescu. Completeness of category-based equational deduction. *Mathematical Structures in Computer Science*, 5(1):9–41, Cambridge Univ. Press, 1995.
- [28-J] Răzvan Diaconescu and Joseph Goguen. An Oxford survey of order sorted algebra. *Mathematical Structures in Computer Science*, 4(4):363–392, Cambridge Univ. Press, 1994.
- [29-J] Răzvan Diaconescu. Contraction algebras and unification of infinite terms. *Journal of Computer and System Sciences*, 44(1):23–43, Academic Press, 1992.
- [30-J] Joseph Goguen and Răzvan Diaconescu. A short Oxford survey of order sorted algebra. *Bulletin of EATCS*, 48:121–133, European Association of Theoretical Computer Science, 1992.

BOOK CHAPTERS

- [31-BC] Răzvan Diaconescu. A methodological guide to CafeOBJ logic. In Dines Björner and Martin Henson editors, *Logics of Specification Languages*, pages 153–240, Springer-Verlag Berlin Heiderberg, 2008. ISBN 978-3-540-74106-0.
- [32-BC] Răzvan Diaconescu. Institutions, Madhyamaka, and universal model theory. In Jean-Yves Béziau and Alexandre Costa-Leite editors, *Perspectives in Universal Logic*, pages 41–65, Polimetrica, ISBN 978-88-7699-077-9, 2007.

- [33-BC] Till Mossakowski and Joseph Goguen and Răzvan Diaconescu and Andrzej Tarlecki. What is a Logic? In Jean-Yves Beziau editor, *Logica Universalis*, pages 113–133. Birkhauser, ISBN-10 3764372591, ISBN-13 978-3764372590, 2005.
- [34-BC] Răzvan Diaconescu and Kokichi Futatsugi and Shusaku Iida. CafeOBJ jewels. In Kokichi Futatsugi, Ataru Nakagawa, and Tetsuo Tamai editors, *Cafe: An Industrial-Strength Algebraic Formal Method*. Elsevier, 2000.
- [35-BC] Shusaku Iida, Kokichi Futatsugi and Răzvan Diaconescu. Component-based algebraic specification - behavioural specification for component-based software engineering - In *Behavioral specifications of businesses and systems*, pages 103–119. Kluwer, 1999.
- [36-BC] Rod Burstall and Răzvan Diaconescu. Hiding and behaviour: an institutional approach. In A. William Roscoe, editor, *A Classical Mind: Essays in Honour of C.A.R. Hoare*, pages 75–92. Prentice-Hall, 1994.
- [37-BC] Joseph Goguen and Răzvan Diaconescu. A short Oxford survey of order sorted algebra. *Current Trends in Theoretical Computer Science: Essays and Tutorials*, World Scientific, 1993, pages 209–221.

REFEREED CONFERENCE PUBLICATIONS

- [38-C] Răzvan Diaconescu. Jewels of institution-independent model theory. In Kokichi Futatsugi, Jean-Pierre Jouannaud, and Jose Meseguer editors, *Algebra, Meaning, and Computation* (a Festschrift in honour of Professor Joseph Goguen), volume 4060 of *Lecture Notes in Computer Science*, pages 65–98. Springer, Berlin Heidelberg, ISBN 3-540-35462-X, 2006.
- [39-C] Răzvan Diaconescu. Behavioural specification of hierarchical object composition. In Frank S. de Boer, Marcello M. Bonsangue, Susanne Graf and Willem-Paul de Roever editors, *Formal Methods for Components and Objects*, volume 3188 of *Lecture Notes in Computer Science*, pages 134–156. Springer, ISBN 3-540-22942-6, 2004.
- [40-C] Răzvan Diaconescu, Kokichi Futatsugi and Shusaku Iida. Component-based algebraic specification and verification in CafeOBJ. In Jeanette M. Wing, Jim Woodcock and Jim Davies editors, *FM'99 – Formal Methods*, volume 1709 of *Lecture Notes in Computer Science*, pages 1644–1663. Springer, 1999.
- [41-C] Răzvan Diaconescu, Kokichi Futatsugi, Makoto Ishisone, Ataru Nakagawa, and Toshimi Sawada. An overview of CafeOBJ. In *Proceedings, 2nd International Workshop on Rewriting Logic and its Applications.*, volume 15 of *Electronic Notes in Theoretical Computer Science*. Elsevier Science, 1998.
- [42-C] Răzvan Diaconescu. Foundations of behavioural specification in rewriting logic In *Proceedings, First International Workshop on Rewriting Logic and its Applications.*, volume 4 of *Electronic Notes in Theoretical Computer Science*. Elsevier Science, 1996.
- [43-C] Răzvan Diaconescu. A category-based equational logic semantics to constraint programming. In Magne Haveraaen, Olaf Owe, and Ole-Johan Dahl, editors, *Recent Trends in Data Type Specification*, volume 1130 of *Lecture Notes in Computer Science*, pages 200–221. Springer, 1996.
- [44-C] Joseph Goguen and Răzvan Diaconescu. An introduction to category-based equational logic. In V.S. Alagar and Maurice Nivat, editors, *Algebraic Methodology and Software Technology*, volume 936 of *Lecture Notes in Computer Science*, pages 91–126. Springer, 1995.

- [45-C] Joseph Goguen and Răzvan Diaconescu. Towards an algebraic semantics for the object paradigm. In Harmut Ehrig and Fernando Orejas, editors, *Recent Trends in Data Type Specification*, volume 785 of *Lecture Notes in Computer Science*, pages 1–34. Springer, 1994.
- [46-C] Răzvan Diaconescu, Joseph Goguen, and Petros Stefaneas. Logical support for modularization. In Gerard Huet and Gordon Plotkin, editors, *Logical Environments*, pages 83–130. Cambridge Univ. Press, 1993. Proceedings of a Workshop held in Edinburgh, Scotland, May 1991.
- [47-C] Shusaku Iida, Kokichi Futatsugi and Răzvan Diaconescu. Component-based algebraic specification: – behavioural specification for component based software engineering –. In *7th OOPSLA Workshop on Behavioral Semantics of OO Business and System Specification*, 1998. Also in the technical report of Technical University of Munich TUM-I9820.
- [48-C] Răzvan Diaconescu and Kokichi Futatsugi. Logical semantics for CafeOBJ. In *Precise Semantics for Software Modeling Techniques*, 1998. Technical Report TUM-I9803, Technical University Munchen, pages 31–54. Proceedings of an ICSE’98 workshop held in Kyoto, Japan.
- [49-C] Răzvan Diaconescu. Free monads in the hypercategory of all the monads. In *East European Category Seminar 1990*. Proceedings of a Workshop held in Predela, Bulgaria, March 1990.

TECHNICAL REPORTS

- [50-R] Răzvan Diaconescu. Interpolation in Grothendieck institutions. IMAR Preprint 8-2003, Institute of Mathematics of the Romanian Academy, July 2003. ISSN 250 3638.
- [51-R] Răzvan Diaconescu and Petros Stefaneas. Possible worlds semantics in arbitrary Institutions. IMAR Preprint 7-2003, Institute of Mathematics of the Romanian Academy, June 2003. ISSN 250 3638.
- [52-R] Răzvan Diaconescu. An institution-independent proof of Craig interpolation property. IMAR Preprint 8-2002, Institute of Mathematics of the Romanian Academy, September 2002. ISSN 250 3638.
- [53-R] Răzvan Diaconescu. Elementary diagrams in institutions. IMAR Preprint 7-2002, Institute of Mathematics of the Romanian Academy, August 2002. ISSN 250 3638.
- [54-R] Răzvan Diaconescu. Institution-independent ultraproducts. IMAR Preprint 5-2002, Institute of Mathematics of the Romanian Academy, June 2002. ISSN 250 3638.
- [55-R] Răzvan Diaconescu. Grothendieck institutions. IMAR Preprint 2-2000, Institute of Mathematics of the Romanian Academy, February 2000. ISSN 250 3638.
- [56-R] Răzvan Diaconescu, Kokichi Futatsugi, and Shusaku Iida. Component-based algebraic specification and verification in CafeOBJ. Technical Report IS-RR-99-0020S, Japan Advanced Institute for Science and Technology, April 1999.
- [57-R] Răzvan Diaconescu. Behavioural coherence in object-oriented algebraic Specification. Technical Report IS-RR-98-0017F, Japan Advanced Institute for Science and Technology, June 1998.
- [58-R] Răzvan Diaconescu and Petros Stefaneas. Categorical foundations of modularization for multi-paradigm languages. Technical Report IS-RR-98-0014F, Japan Advanced Institute for Science and Technology, May 1998.
- [59-R] Shusaku Iida, Michihiro Matsumoto, Răzvan Diaconescu, Kokichi Futatsugi, and Dorel Lucanu. Concurrent object composition in CafeOBJ. Technical Report IS-RR-98-0009S, Japan Advanced Institute for Science and Technology, 1998.
- [60-R] Răzvan Diaconescu and Petros Stefaneas. Modality in open institutions with concrete syntax. Technical Report IS-RR-97-0046F, Japan Advanced Institute for Science and Technology, 1997.

- [61-R] Răzvan Diaconescu. Extra theory morphisms for institutions: logical semantics for multi-paradigm languages. Technical Report IS-RR-97-0032F, Japan Advanced Institute for Science and Technology, 1997.
- [62-R] Răzvan Diaconescu and Kokichi Futatsugi. Logical semantics for CafeOBJ. Technical Report IS-RR-96-0024S, Japan Advanced Institute for Science and Technology, 1996.
- [63-R] Răzvan Diaconescu. Completeness of semantic paramodulation: a category-based approach. Technical Report IS-RR-96-0006S, Japan Advanced Institute for Science and Technology, 1996.
- [64-R] Răzvan Diaconescu and Rod Burstall. Hiding and behaviour: an institutional approach. Technical Report ECS-LFCS-8892-253, Laboratory for Foundations of Computer Science, University of Edinburgh, 1992.
- [65-R] Răzvan Diaconescu. The formal completeness of equational logics. Technical Report PRG-TR-12-92, Programming Research Group, University of Oxford, 1991.
- [66-R] Răzvan Diaconescu. The logic of Horn clauses is equational. Technical Report PRG-TR-3-93, Programming Research Group, University of Oxford, 1990.
- [67-R] Răzvan Diaconescu. Monadic equational logic. Technical Report 9-90, INCREST București, 1990.

PRESENTATIONS

INVITED TALKS

- “Institution theory and Buddhist thinking”, *2nd World Congress on Universal Logic*, Xi’an, China, August 2007.
- “CafeOBJ: logical foundations and methodologies”, lecture course in the European Summer School on *Logics for Specification Languages*, Stara Lesna, Slovakia, June 2004.
- “Behavioural Specification of Hierarchical Object Composition”, *2nd Formal Methods for Components and Objects Symposium*, Leiden, Netherlands, November 2003.

ORDINARY TALKS

- “What is a formal proof?”, *Conference on Logic, Algebra, and Fundamentals of Computer Science*, IMAR, Bucharest, Romania, May 2008.
- “What is a logic translation?”, *2nd World Congress on Universal Logic*, Xi’an, China, August 2007. (winner of the UNILog’07 contest ‘What is a logic translation?’)
- “Inclusion Systems”, Faculty of Mathematics and Informatics, University “Ovidius” Constanța, April 2007.
- “Behavioural specification of hierarchical object composition”, *DFKI*, University of Bremen, November 2006.
- “Ultraproducts in institution-independent model theory”, *KatMAT* (category theory) seminar, University of Bremen, November 2006.
- “Jewels of institution-independent model theory”, *Symposium Algebra, Meaning and Computation*, La Jolla, California, June 2006.
- “Institution-independent Model Theory”, *IFIP 1.3 WG meeting*, La Roche, Belgium, June 2006.
- “Behavioural specification of hierarchical object composition”, *Institute d’Informatique*, Universite Notre-Dame de la Paix, Namur, Belgium, May 2006.
- “Behavioural specification of hierarchical object composition”, *Language Design Laboratory seminary*, Japan Advanced Institute for Science and Technology, Ishikawa-ken, Japan, March 2006.
- “Institution-independent Model Theory”, *Symposium for the 100th anniversary of Grigore Moisil*, Bucharest, Romania, January 2006.
- “Institutions: methodological implications”, *Logic Colloquium 2005* (Association of Symbolic Logic European Summer Meeting), Athens, Greece, July-August 2005.
- “What is a Logic?”, *First World Congress on Universal Logic*, Montreux, Switzerland, March-April 2005.

- “Abstract Modalities and Institutions”, Workshop on *Combination of Logics: theory and applications*, Lisbon, Portugal, July 2004.
- “Formal Specification and Verification with CafeOBJ: logical foundations and methodologies”, VERIMAG, Grenoble, France, March 2004.
- “Abstract Modal Logic”, *4th Panhellenic Logic Symposium*, Thessaloniki, Greece, July 2003.
- “From Birkhoff axiomatizability to Interpolation: a categorical model theoretic approach”, Logic Seminar, University of Athens, Greece, March 2003.
- “Institutions in algebraic specification”, a V-a conferință *Modelarea structural-fenomenologică*, Academia Română, June 2001.
- “Specificații Algebrice: drumul de la logica ecuațională la teoria abstractă a modelelor categorială”, Seminarul *Mari teme matematice in secolul XX*, Bucharest, Romania, May 2000.
- “Grothendieck Institutions”, Instituto Tecnico Superior, Lisbon, Portugal, November 1999.
- “Component-based Algebraic Specification and Verification in CafeOBJ”, *World Congress on Formal Methods FM’99*, Toulouse, France, September 1999.
- “Object-oriented Algebraic Specification and Verification in CafeOBJ”, project presentation at *2nd Panhellenic Logic Symposium*, Delfi, Greece, July 1999.
- “Behavioural Methodologies for Algebraic Specification and Verification”, IFIP2.2 WG Meeting, Udine, Italy, June 1999.
- “Rezultate Recente in Teoria Specificațiilor Algebrice”, *50th Anniversary of the IMAR Conference*, Bucharest, Romania, June 1999.
- “Object-oriented Methodologies in CafeOBJ”, *CafeOBJ Workshop*, Miurakaigan, Japan, April 1999.
- “A Survey of Institutions”, National Technical University of Athens, Greece, November 1998.
- “CafeOBJ: language definition, proof techniques and methodologies”, *CafeOBJ Symposium*, Numazu, Japan, April 1998.
- “Logical Semantics for CafeOBJ”, *Precise Semantics for Software Modeling Techniques*, Kyoto, Japan, April 1998.
- “Overview of the CafeOBJ Definition”, University of Kyushu, Fukuoka, Japan, February 1998.
- “Modern Algebraic Specification and Verification in CafeOBJ”, Philips Research Laboratories, Eindhoven, The Netherlands, January 1998.
- “Overview of the CafeOBJ Definition”, the 3rd CafeOBJ International Workshop, Kanazawa, Japan, October 1997.
- “The CafeOBJ Definition”, the First Romanian-Japanese Algebraic Specification Meeting, Sinaia, Romania, August 1997.
- “Teorii Categoriale ale Modelelor în Informatica Teoretică”, Institute of Mathematics of the Romanian Academy, May 1997.
- “Modern algebraic specification and programming in CafeOBJ”, National Technical University of Athens, Greece, April 1997.
- “An overview of the current stage of CafeOBJ”, 2nd CafeOBJ International Workshop, Saitama, Japan, March 1997.
- “The CafeOBJ Definition”, CafeOBJ project meeting, Tōkyō, Japan, January 1997.
- “Foundations of behavioural specification in rewriting logic”, 1st International Workshop on Rewriting Logic and its Applications, Asilomar, California, September 1996.
- “Logical Semantics for CafeOBJ”, 1st CafeOBJ International Workshop, Shonnan International Village, Kanagawa, Japan, August 1996.
- “Institutions: abstract model theory for Computing”, Algebra and Logic Seminar, Japan Advanced Institute for Sci. & Tech., May 1996.
- “Common Framework Initiative”, CafeOBJ project meeting, Tōkyō, Japan, February 1996.
- “Extensible Modular Constraint Programming: a category-based equational logic perspective”, the University of Amsterdam, Netherlands, November 1995.
- “Category-based Equational Logic Semantics to Constraint Programming”, presented at the joint 11th ADT conference and COMPASS workshop, Oslo, Norway, September 1995.
- “Category-based Equational Logic Programming”, presented at BRICS, University of Aarhus, Denmark, August 1995.
- “Completeness of Model Theoretic Paramodulation: a Category-based Approach” joint 10th ADT conference and COMPASS workshop, St Margherita Ligure, Italy, May/June 1994.

- “Equational logic programming in Eqlog”, Abo Academy, Turku, Finland, November 1993.
- “A model-theoretic approach to rewriting”, University of Turku, Finland, November 1993.
- “Hiding and Behaviour: an Institutional Approach”, ISCORE group meeting, Oxford, England, March 1993.
- “The Equational Logic Programming project in Oxford”, Edinburgh LFCS, Scotland, February 1992.
- “The Formal Completeness of Equational Logics”, London Mathematical Society conference on Applications of Categories to Computer Science, Durham, England, July 1991.
- “Logical Support for Modularisation”, Amsterdam University, Netherlands, January 1992.
- “Logical Support for Modularisation”, joint COMPASS and WADT workshop, Dourdan, France, August 1991.
- (with Joseph Goguen) “Logical Support for Modularisation”, Workshop of ESPRIT project in Logical Frameworks, Edinburgh, Scotland, May 1991.
- “Equational Logic Programming”, PRG Oxford University Computing Laboratory meeting on Future Research Directions, England, April 1991.
- “Free Monads in the Hypercategory of All the Monads”, East European Category Seminar 1990, Predela, Bulgaria, March 1990.

SCIENTIFIC EVENTS:

- Co-chair and organizer of *Sinaia School on Formal Verification of Software Systems*, 3-10 March 2008. (www.imar.ro/~diacon/sinaiaschool.html; co-chairs: R. Diaconescu and K. Futatsugi)
- Program Committee member at *AMAST 2008*, Urbana, Illinois, USA. (co-chairs: J. Meseguer and G. Roşu)
- Program Committee member at *International Workshop on Rewriting Logic and its Applications (WRLA2000)*, Kanazawa, Japan, 2000. (chair: K. Futatsugi)
- Program Committee member at *OBJ/CafeOBJ/Maude satellite workshop at World Congress of Formal Methods '99*, Toulouse, France, 1999. (co-chairs: K. Futatsugi, J. Goguen and J. Meseguer)
- Program Committee member at *Distributed Systems satellite workshop at FCT'99 conference*, Iaşi, Romania, 1999. (chair: G. Ştefanescu)

MEMBERSHIP:

- International Tibet Support Network
- Scientific Council of “Şcoala Normală Superioară” Bucharest
- Mathematical Reviews, Zentralblatt fur Mathematik
- Scientific committee for Barbier, Fabrice Ph.D thesis, University Evry, France, 2005.
- Scientific committee for Găină, Daniel Ph.D thesis, Japan Advanced Institute for Science and Technology, 2009.

PHD STUDENTS:

- Madeira, Alexandre, University of Minho, Portugal.

SYSTEMS:

- (1) Designer of CafeOBJ,* an industrial strength multi-logic heterogenous algebraic language, sucesor of the OBJ, and directly incorporating some modern developments in algebraic specification such as behavioural specification and rewriting logic.

*Developed at the Japan Advanced Institute for Science & Technology; supported on a large scale by the Japanese Government through its Information-technology Promotion Agency.

- (2) Built the first prototype of EQLOG, an equational and constraint logic programming system with subtypes and generic modules, extending the OBJ3 system.