

CURRICULUM VITAE

21 March 2025

ROBERT ANTHONY KOWALSKI

Distinguished Research Fellow
Emeritus Professor of Computational Logic

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Wikipedia: https://en.wikipedia.org/wiki/Robert_Kowalski
Google Scholar: <https://scholar.google.co.uk/citations?user=pvkQAj0AAAAJ&hl=en&oi=sra>

EDUCATION:

1958-59 University of Chicago
1960-63 University of Bridgeport, BA Mathematics
1963-64 and
1965-66 Stanford University, MSc Mathematics
1964-65 Mathematics Institute, Polish Academy of Sciences and University of Warsaw,
Mathematical Logic
1967-70 University of Edinburgh, IBM Research Fellowship, PhD Computer Science

MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS (past and present)

American Association for Artificial Intelligence
Association for Artificial Intelligence and Law
Association for Artificial Intelligence and Simulation of Behaviour
Association for Automated Reasoning
Association for Computing Machinery
Association for Logic Programming
British Computer Society
European Association for Logic, Language and Information (FoLLI)
Interest Group in Propositional and Predicate Logics

EMPLOYMENT:

1966-67 Assistant Professor and Acting Head, Mathematics Department,
Inter American University, San Juan, Puerto Rico

1970-75	Research Fellow, Department of Computational Logic, University of Edinburgh
1975-82	Reader in Computing, Department of Computing and Control (Department of Computing since 1980), Imperial College, University of London
1982-1999	Professor of Computational Logic, Department of Computing, Imperial College, University of London
1999-2011	Senior Research Investigator, Emeritus Professor, Department of Computing, Imperial College London
2011-	Distinguished Research Fellow, Emeritus Professor, Department of Computing, Imperial College London

VISITING ACADEMIC OR RESEARCH APPOINTMENTS:

1972, 1974	University of Marseille, Luminy, France
1972, 1978, 1981	University of Syracuse, New York
1974	Ricerche Istituto per le Applicazioni del Calcolo, Rome
1999	University of Melbourne
2000, 2001	Meme Media Laboratory, Hokkaido University, Japan
2001	Swiss Federal Institute of Technology at Lausanne (EPFL)
2005	Universidad de Los Andes, Venezuela
2002, 2006	National Institute of Informatics, Tokyo, Japan
2007	Centro de Inteligência Artificial (CENTRIA), Universidade Nova de Lisboa
2012	University of Kyoto, Japan
2013, 2014	National Institute of Informatics, Tokyo, Japan

DEPARTMENTAL RESPONSIBILITIES AT IMPERIAL COLLEGE

1975-84	Member of Academic Committee
1978-82	Chairman of Academic Committee and Director of Studies
1979-82 and 1984	Member of Departmental Management Committee
1978-82	Member of Appointments and Staff Review Committees
1985-87 and 1990-96	Head of Logic Programming Section
1994-97	Senior Deputy Head of Department and member of Departmental Executive Committee
1997-99	Head of Department

PHD SUPERVISION

David H.D. Warren, Applied Logic - its Use and Implementation as Programming Tool. (University of Edinburgh). 1977. Professor Emeritus, Department of Computing, University of Bristol.

Christopher Hogger, Derivation of Logic Programs. 1978. Senior Lecturer in Department of Computing, Imperial College.

Keith Clark, Predicate Logic as a Computational Formalism. 1980. Professor in Department of Computing, Imperial College.

Marek Sergot, The Formalisation of Legal reasoning. Professor in Department of Computing, Imperial College.

George Pollard, Parallel execution of Horn clause programs. 1981.

Christopher Moss, The Formal Description of Programming Languages Using Predicate Logic. 1981.

Fariba Sadri, A Theorem-Proving Approach to Database Integrity. 1988. Senior Lecturer in Department of Computing, Imperial College.

Kave Eshghi, Meta-language in Logic Programming. 1986. Senior Researcher, Hewlett-Packard Research Laboratories, Bristol.

Jin-Sang Kim, Lecturer, Keimyung University, Taegu, Korea.

David Frost, The Design of a Natural Language Interface for Medical Expert Systems. 1990. Department of Psychiatry, UCMSM.

Suryanarayana Sripada, Temporal Reasoning in Deductive Databases. Senior Researcher, The Boeing Company, Seattle.

Francis McCabe, Logic and Objects. 1989. Senior Researcher, Fujitsu Research Laboratories, California.

Francesca Toni, Abductive Logic Programming. 1995. Professor, Department of Computing, Imperial College.

Tze Ho Fung, Theorem Proving Approach with Constraint Handling and its Application on Database. 1996. Hong Kong Examinations and Assessment Authority.

Gerhard Wetzel, Abductive and Constraint Logic Programming. 1997.

Jacinto Davila, Agents in Logic Programming. 1997. Lecturer, Universidad de Los Andes, Mérida, Venezuela.

Christopher Preist, Abductive Representation of Disjunctive Information. 1998. Researcher Hewlett-Packard Research Laboratories, Bristol.

Yongyuth Perpoontanalarp, Logical Specification of Multi-Agent Systems. 1998. Lecturer in King Mongkut University of Technology, Thailand.

RESEARCH GRANTS:

1975-78 SRC grant for "Predicate Logic as a Programming Language"

1978-81 SRC grant for "Logic Programming" (with K L Clark)

1980-83 SRC grant for "Logic as a Computer Language for Children" (two research assistants)

1981-83 Nuffield Foundation grant in support of "Logic as a Computer Language for Children"

1982 SERC visiting fellowship for Professor John McCarthy, Stanford University (May 1982)

1982-83 SERC visiting fellowship for Professor Maarten van Emden, University of Waterloo, (Sept.ember 1982 - September 1983)

1982-85 SERC grant for "Logic Databases" (two research assistants)

1982-85 Sinclair Research grant in additional support of "Logic as a Computer Language for Children" (one research assistant)

1983-84 SERC Visiting Fellowship for Professor Dov Gabbay, Bar-Ilan University, (September 1983 - September 1986)

1983-85 Nuffield Foundation grant in further support of "Logic as Computer Language for Children", (one research assistant)

1983-86 SERC grant for "Logic-based Man-machine Interaction, (one research assistant)

1983-86 ICL University Research Council grant for Expert Systems, (one research assistant, with K L Clark)

1983-86 ICL University Research Council grant for PROLOG implementation, (one research assistant, with K. L. Clark)

1984-85 ESPRIT project ALPES, an environment for logic programming, (two research assistants, with K L Clark, J Darlington and C J Hogger)

1984-87 ALVEY grant: A logic-based front end for the statistics package, GLIM (one research assistant, with D Cox, P Hammond and M J Sergot)

1984-89 ALVEY DHSS Demonstrator Project (three research assistants, with M J Sergot)

1985-88 ALVEY grant: Logic for representing legislation, (two research assistants, with M J Sergot)

1986-89 ALVEY grant: Logic Databases, (two research assistants, with M J Sergot)

1985-94 Hitachi support for logic programming

1984-86 ALVEY support for management of research projects

1985-86 ALVEY support for IKBS "Journeyman" Scheme

1987-88 DTI support for IKBS "Journeyman" Scheme

1989-91 ESPRIT project EQUATOR, temporal reasoning (two research assistants, with M J Sergot)

1989-91 ESPRIT Basic Research Action in Computational Logic (project co-ordinator, two research assistants)

1989-91 ESPRIT Basic Research Working Group in Foundations of Legal Reasoning

1990-95 Fujitsu support for abduction (one research assistant)

1991-92 ESPRIT Network of Excellence in Computational Logic (founding chairman)

1992- 93 ESPIRIT Basic Research Project in Computational Logic, Compulog 2, (one research assistant)

1993-96 ESPRIT Logic Programming in Knowledge Representation and Reasoning (collaboration with P M Dung, Bangkok)

1994-95 Human Captital and Mobility, Compulog Group, Co-operation in Computational Logic (Fellowship for Danilo Montesi)

A1997-2000 EPSRC grant for "Logic-Based Multi-agent Systems" (one research assistant, with Fariba Sadri)

2011-2012 Imperial College EPSRC Pathways to Impact funding, to support the implementation of LPS. (with Fariba Sadri)

- 2016-2017 Imperial College EPSRC Pathways to Impact funding, to support the online implementation of LPS, reachable from lps.doc.ic.ac.uk (with Fariba Sadri)
- 2019-2021 Thailand Research Fund grant for "Research and Development of Thai Open Scada Platforms for SMEs" (with Fariba Sadri)

CONFERENCE AND WORKSHOP ORGANISATION:

International Symposium on Proving and Improving Programs

July 1975 Member of programme committee, Arc-et-Senans, France

Logic Programming Conferences

- May 1976 Organiser of workshop, Imperial College, London
- July 1980 Member of programme committee, Debrecen, Hungary
- April 1981 Co-organiser of workshop, Syracuse, New York
- September 1982 Member of programme committee, Marseille, France
- August 1988 Chairman of programme committee, Seattle, Washington
- October 1989 Member of programme committee, Cleveland, Ohio

Conference on Automated Deduction

- July 1980 Joint programme chairman, Les Arcs, France
- June 1982 Member of programme committee, New York, USA
- July 1986 Member of programme committee, Oxford, UK

Functional Languages and Computer Architecture

September 1981 Member of programme committee, New Hampshire, USA

BCS Conference on Knowledge Based Systems

September 1982 Member of programme committee, London, UK

International Joint Conference on Artificial Intelligence

August 1983 Member of programme committee, Karlsruhe, Germany

Workshop on Artificial Intelligence and Database Research

June 1985 Member of advisory committee, Crete

Colloquium on Functional and Logic Programming and Specification (TAPSOFT 87)

March 1987 Member of organising committee and programme committee, Pisa, Italy

International Conference on Principles of Knowledge Representation and Reasoning

- May 1989 Member of programme committee, Vancouver, Canada
- April 1991 Member of programme committee, Cambridge, Massachusetts

Third International Congress: Logic, Computing and Law

November 1989 Member of scientific committee, Florence, Italy

Conference on Knowledge-Based Computer Systems

- December 1989 Member of international advisory committee, Bombay, India
- December 1990 Member of international advisory committee, Pune, India
- December 1996 Member of programme committee, Bombay, India

Conference on Extending Data Base Technology

May 1990 Member of programme committee, Venice, Italy

Symposium on Computational Logic

November 1990 Member of programme committee, Brussels, Belgium

International Workshop on Processing Declarative Knowledge

July 1991 Member of programme committee, Kaiserslautern, Germany

Third Workshop on Metaprogramming in Logic

June 1992 Member of programme committee, Uppsala, Sweden

Compulog-net workshop on Logic Programming in Artificial Intelligence
March 1992 Organisation and programme committee chairman, London

International Conference on Formal and Applied Practical Reasoning
June 1996 Member of programme committee, Bonn, Germany

International Symposium on Methodologies for Intelligent Systems
June 1996 Member of programme committee, Zakopane, Poland

International Workshop on Logic in Databases
July 1996 Member of programme committee, San Miniato, Italy

Logic Programming and the Internet
December 1996 Organiser of workshop, Imperial College

Logic in Human Reasoning
March 1997 Co-organiser of workshop, London School of Economics

Logic Programming and Non-Monotonic Reasoning
July 1997 Member of programme committee, Dagstuhl, Germany

Logical Foundations of Common sense Reasoning
January 1998 Member of programme committee, London

Logic Programming and Distributed Knowledge Management
April 1999 Organiser of workshop, London

JURISIN
October 2013 Member of programme committee, Yokohama, Japan
November 2014 Member of programme committee, Kanagawa, Japan
November 2015 Member of advisory committee, Kanagawa, Japan

ReactKnow
August 2014 Member of programme committee, Prague

RuleML
August 2015 Member of programme committee, Berlin

CLOUT (Computational Logic for Use in Teaching)
January and May 2017 Co-organiser of workshop, London

OTHER PROFESSIONAL SERVICE:

1980-86 British Computer Society Special Interest Group in Expert Systems
Member of steering committee. Vice-chairman from January 1982

1980 Advisory Board member for anthology of papers on Automated Theorem Proving,
published by Springer Verlag

1980-83 Member of Science and Engineering Research Council Subcommittee for
Computing and Communications

1981-82 SERC ad hoc panel on knowledge-based systems

1981 Participant in EEC ESPRIT study on advanced information processing

1982 Organiser of SERC workshop on logic programming and its computer architecture

1982 Member of SERC Information Engineering Committee Working Party on Further
Education and Training

1982	British Council sponsored study of the Fifth Generation Project in Japan (22 November-10 December)
1983	SERC assessor for lectureships in Information Technology
1983	Member of Advisory Panel for SPL Insight Programme
1983	Steering Committee, SERC/DOI IKBS Architecture study
1983-2013	Editorial Board, New Generation Computing Journal
1983-2000	Editorial Board, Logic Programming Journal
1984	Coordinator, Inference Research Theme, IKBS Directorate, Alvey Programme
1984	SERC panel on British-Japanese research collaboration in Engineering (July)
1984	British Council sponsored research tour. Tata Institute, Bombay (December)
1984	Co-organiser of Alvey Programme Study on Logic Programming
1985	British Council sponsored lecture tour, 2 day seminars in Madras, Bangalore, Trivandrum (November)
1986-present	Advisory Board, Mind and Language
1986	Associate Editor, Addison-Wesley Series on Logic Programming
1986-1998	Association for Logic Programming Honorary Secretary
1987	Consultant to ESPRIT project, INDOC
1987-91	Scientific Advisor to U.N.D.P. sponsored "Knowledge Based Computer Systems Project" in India.
1987-89	Co-chairman Artificial Intelligence technical area, PACE (European Programme of Continuing Education)
1989-1998	Scientific Advisory Board member, Deutsches Forschungszentrum für Künstliche Intelligenz
1989	Member of Scientific Committee of Centro Interdipertimentale di Ricerca in Filosofia del Diritto e Informatica Giuridica "H Kelsen" dell'Università degli Studi di Bologna
1990-	Editorial board, Journal of Logic and Computation
1990-	Editorial board, Journal of Artificial Intelligence and Law
1990-	Editorial Advisory Board, IEICE transactions on Information and Systems
1991	Editorial Board, ESPRIT Basic Research Series
1993-	Editorial Board, Interest Group in Propositional and Predicate Logics
1994	Correspondent of the Scientific Committee of the Journal "Informatica e Diritto"
1995	Editorial Board, Vivek Quarterly Journal in Artificial Intelligence, NCST, Bombay, India
1995	Member EPSRC Computing College

- 1995-96 Co-organiser Joint Imperial College LSE Seminar on Practical Reasoning
- 1996 Editorial Board, Electronic Journal of Positive Reviews in Logic and Artificial Intelligence
- 2000-2021 Editorial Board, Theory and Practice of Logic Programming (TPLP)
- 2002 Advisory Board, Springer Book-Series on Cognitive Science and Artificial Intelligence
- 2003- Advisory Board, National Institute of Informatics, Tokyo, Japan
- 2007- International Advisory Board, CENTRIA, Universidade Nova de Lisboa.
- 2008-2013 Consultant to the World Health Organisation, Geneva.
- 2022 Honorary Chair, The Year of Prolog, International Scientific Committee.

INVITED CONTRIBUTIONS TO WORKSHOPS AND CONFERENCES:

- 1968 Symposium on Automatic Demonstration. Invited paper. Versaille, France
- 1968 Fourth Systems Symposium. Panel presentation. Case Western Reserve University
- 1968 Machine Intelligence Workshop 4. Invited paper. Edinburgh
- 1969 Machine Intelligence Workshop 5. Invited paper. Edinburgh
- 1972 Conference on Mathematical Foundations of Computer Science. Invited presentation. Jablonna, Poland
- 1973 Workshop on Automatic Problem Solving. Invited presentation. Pajaro Dunes, California
- 1976 Workshop on Automatic Theorem Proving. Invited presentation. Oberwolfach, Germany
- 1978 Workshop on Logic and Databases. Invited paper. Toulouse, France
- 1979 Workshop on Applicative Languages and Computer Architecture. Invited presentation. Newcastle
- 1979 Workshop on Program Transformation. Invited presentation. Harvard University
- 1979 IFIP meeting of working group 2.1. Invited presentation. Summit, New Jersey
- 1980 Conference on Very Large Databases. Panel presentation. Montreal
- 1981 Workshop on Functional Languages and Computer Architectures. Panel presentations. Gothenberg, Sweden
- 1981 Workshop on Logic Programming for Intelligent Systems. Invited presentations. Los Angeles
- 1981 Workshop on Theoretical Issues in Databases. Short course, lectures on logic in databases. Calabria, Italy
- 1981 Seminar on Cross Currents of Computer Science. University of New Hampshire
- 1981 Conference on Functional Languages and Computer Architectures. Panel presentation. Portsmouth, New Hampshire
- 1981 Annual Italian Computer Association Congress. Invited paper. Pavia, Italy
- 1982 Workshop on Prolog Programming Environments. Invited paper. Linkoping, Sweden

- 1982 Interdisciplinary Conference on Language, Reasoning and Inference. Invited paper. Edinburgh
- 1982 European Conference on Artificial Intelligence. Invited paper. Orsay, France
- 1982 Conference on Fifth Generation Computer Systems. Systems Programmers Limited. Invited paper. London
- 1982 Conference on Fifth Generation Computer Systems. Pergamon Infotech. Invited paper. London
- 1982 UK National Computer Conference. Invited presentation. Wembley, London
- 1983 Workshop on Program Specification. Invited paper. York
- 1983 Conference on Computer Assisted Learning. Invited paper. Bristol
- 1983 Easter Conference on Artificial Intelligence and Education. Invited paper. Exeter
- 1983 International Federation of Information Processing. Invited paper. Paris (September)
- 1983 BCS Conference on Expert Systems. Invited paper. Cambridge (December)
- 1984 Royal Society Discussion Meeting on "Mathematical Logic and Programming Languages". Invited paper. London (February)
- 1984 Logic Programming Conference. Keynote Speaker. Uppsala, Sweden (July)
- 1984 British National Conference on Databases, 3. Invited paper. Leeds (July)
- 1984 Fifth Generation Software. Programming Logic Systems. Leader of Seminar. New York, (August)
- 1984 Inter-University Advanced Course on Logic Programming. Presenter. Rio de Janeiro, Brazil (November)
- 1984 IEEE Conference on Computers, Systems and Signal Processing. Invited Speaker. Bangalore, India (December)
- 1984 Fourth Conference on Foundations of Software Technology and Theoretical Computer Science. Keynote Speaker. Bangalore, India (December)
- 1985 Seminar on Logic Programming, Association for Computing Machinery. Presenter. Boston, Massachusetts (March)
- 1985 Conference on Artificial Intelligence and its Applications. Invited speaker. Capri (May)
- 1985 British Association for the Advancement of Science, Annual Meeting. Invited Speaker. Strathclyde University (August)
- 1985 Summer School on Logic Programming. Invited lectures. Turku, Finland (August).
- 1985 Symposium on Logic Programming. Tutorial on Logic Programming. Boston, Massachusetts (with F Kriwaczek, July)
- 1986 ACM Computer Science Conference. Keynote Speaker. Cincinnati, Ohio (February)
- 1986 International Conference on Logic Programming. Tutorial on Logic Programming. London (with F Kriwaczek, July)
- 1986 Conference on Automated Deduction. Banquet Speaker. Oxford (July)

- 1986 2nd International Conference on Artificial Intelligence-Methodology, Systems, Applications. Invited Speaker. Varna, Bulgaria (September)
- 1987 International Conference on Logic Programming. Banquet Speaker. Melbourne (May)
- 1987 Seminar on Advanced Data and Knowledge Base Systems. Invited speaker. Capri (June)
- 1987 Annual Conference of the British Society for the Philosophy of Science. Invited Speaker
- 1987 Second International GI-Kongress on Knowledge-Based Systems. Invited speaker. Munich (October)
- 1987 Seminar on Logic Programming. Presenter. Lyngby, Denmark (October)
- 1987 IBM seminar on Mechanization of Intelligence and Brain Models. Sendai, Japan (November)
- 1988 Workshop on Machine Learning, Meta-Reasoning and Logics. Invited Speaker. Sesimbra, Portugal (February)
- 1988 Expert Database Systems Conference. Panel on Knowledge Management. Tyson's Corner, Virginia, USA (April)
- 1988 Knowledge Based Computer Systems Conference. Invited Speaker. Bangalore, India (June)
- 1988 International Conference on Automata, Languages and Programming (ICALP). Invited Speaker. Tampere, Finland (July)
- 1988 International Conference on Logic Programming. Tutorial on Logic and Legal Reasoning. Seattle (August)
- 1988 International Symposium on Methodologies for Intelligent Systems. Invited Speaker. Torino, Italy (October)
- 1989 U.K. Logic Programming Association Workshop. Keynote Speaker. London (February)
- 1989 Conference on Law and Artificial Intelligence. Keynote Speaker. Bologna, Italy (May)
- 1989 Eurotra Conference. Tutorial on Knowledge Representation. Portugal (September)
- 1989 UNESCO Symposium on Artificial Intelligence in Higher Education. Keynote Speaker. Prague (October)
- 1990 U.K. Logic Programming Association Workshop. Invited Speaker. Bristol (March)
- 1990 Meta 90 Workshop. Invited Speaker. Leuven, Belgium (April)
- 1990 International Conference on Logic Programming. Banquet Speaker. Jerusalem, Israel (June)
- 1990 Logic Programming Conference of Japan. Keynote Speaker. Tokyo, Japan (July)
- 1990 Summer School on Logic, Natural Language, Computation. Tutorial Presentation. Leuven, Belgium (August)
- 1990 Advanced Summer School on Logic Programming. Lectures on Knowledge Representation. Zurich (August)

- 1990 European Conference on Artificial Intelligence. Invited lecture on "Achievements of ESPRIT Basic Research". Stockholm (August)
- 1990 Summer School on Foundations of Logic Programming. Lectures on logic programming for AI. Alghero, Italy (September)
- 1990 ESPRIT Conference. Invited Lecture. Brussels (November)
- 1990 Symposium on Computational Logic. Invited lecture and panel presentation. Brussels (November).
- 1991 Seminar on Expert Systems and their Micro Computer Applications. Invited Speaker. Ankara, Turkey (May)
- 1991 Lecture course on knowledge representation and reasoning. Faculty of Law, Bologna (May-June).
- 1991 Italian Logic Programming Association Conference. Invited Speaker. Pisa (June)
- 1991 Information Technology into the 90's. Invited Speaker. London (June)
- 1991 International Conference on Logic Programming. Keynote Speaker. Paris (June)
- 1991 13th IMACS World Congress on Computation and Applied Mathematics. Invited Speaker. Dublin (July)
- 1991 International Joint Conference on Artificial Intelligence. Invited speaker. Sydney (July)
- 1991 German Logic Programming Association Workshop. Invited speaker. Berlin (October)
- 1991 Dutch Conference on Artificial Intelligence. Invited speaker. Amsterdam (December)
- 1992 Fifth Generation Computer Systems Conference. Panel Chairman. Tokyo (June)
- 1992 Compulog-Net summer school on applications of logic programming. Invited lectures. Zurich (September)
- 1992 JAIST International Symposium on Advanced Information Science. Invited speaker, Kanzawa, Japan (October)
- 1992 Research Conference on Logic, Language and Information. Invited speaker, Autrans, France (December)
- 1992 Symposium on Logic in Databases, Knowledge, Representation and Reasoning. Invited speaker, College Park, Maryland (November)
- 1992 Logic Programming in Artificial Intelligence. 2 day lecture course. ICCF, London (September)
- 1993 Logic Programming and Non-Monotonic Reasoning. Invited speaker. Lisbon, (June)
- 1993 Dagstuhl Seminar on Reasoning and Argumentation. Invited Speaker, Schloss Dagstuhl, Germany (August)
- 1994 Workshop on Theorem Proving with Analytic Tableaux. Invited speaker. Abingdon (May)
- 1994 Workshop on Logic Programming and Law, ICLP, Invited speaker, Santa Margherita, Italy, (June)
- 1994 Workshop on Legal Reasoning, FGCS Conference. Invited speaker, Tokyo (December)

- 1995 Fifth International Conference on Artificial Intelligence and Law. Invited speaker, Washington, D.C. (May)
- 1995 Workshop on Deductive Databases and Abduction, ICLP, Invited speaker, Kanagawa, Japan, (June)
- 1995 15th International Machine Intelligence Workshop, Invited speaker. Oxford, (July)
- 1995 GULP-PRODE95. Invited speaker, Salerno, Italy, (September)
- 1996 PAAM96, Conference on Practical Application of Intelligent Agents and Multi-agent Technology, Invited speaker, London, (March)
- 1996 International Workshop on Logic in Databases, San Miniato, Italy, (July)
- 1996 Benelog Conference. Invited Speaker, Louvain la Neuve, (September)
- 1996 Joint European Conference on Logic in Artificial Intelligence, Invited speaker, Evora, Portugal, (September)
- 1996 Argumentation Day. Invited Speaker, Maastricht, (December)
- 1997 AISB Workshop on Practical Reasoning and Rationality. Invited Speaker, Manchester, (April)
- 1997 International Conference on Logic Programming. Tutorial on Logic Programming and Intelligent Agents, Leuven, (July)
- 1997 Conference on Logic, Philosophy and Computer Science, Invited Speaker, Queretaro, Mexico (September)
- 1998 Workshop on Strategic Directions for Logic Programming, Invited Speaker, Shakertown, Kentucky, (April)
- 1998 Workshop on Logic Programming and Non-monotonic reasoning, Invited Speaker, Trento, Italy, (May)
- 1998 British Society for the Philosophy of Science: Annual Conference. Invited Speaker, Reading, (September)
- 1998 Chilean Conference on Computer Science, Invited Speaker, Antofagasta, Chile, (November)
- 1999 Pacific Rim Conference on Artificial Intelligence, Invited Speaker, Singapore, (November)
- 2000 Jubilee of University Professors, Information Science and Technology for the Next Century, Invited Speaker, Rome, (September)
- 2001 CLEI2001 Conference, Mérida, Venezuela, Invited Speaker, (September)
- 2001 International Conference on Logic Programming, Invited Speaker, Cyprus, (November)
- 2002 EDUSAT and Internet seminar at the National Autonomous University of Mexico (UNAM), Mexico City (November)
- 2003 International Conference on Digital Aided Modelling and Simulation, Keynote Speaker, Coimbatore, India (January)
- 2003 Workshop on Intuitive Human Interface for Organizing and Accessing Intellectual Assets, Invited Speaker, Sapporo, Japan (March)

- 2003 Anniversary of Founding of the Department of Computing, Benemerita Universidad Autonoma de Puebla, Mexico, Invited Speaker and Workshop Presenter (November)
- 2005 Mexican International Conference in Computer Science, ENC'05, Invited Speaker, Puebla, Mexico (Sept)
- 2007 Course on Logic-based Agents (with Fariba Sadri), Summer School on Logic for Artificial Intelligence, ACAI 2007, Leuven, Belgium (August)
- 2008 Course on Computational Logic in Human Reasoning, ICCL Summer School 2008: Computational Logic and Cognitive Science (ICCL-SS-2008) TU Dresden, (August)
- 2009 Third International Conference of Web Reasoning and Rule Systems, RR2009, Invited Speaker, Chantilly, VA, USA (October)
- 2009 National Computer Science and Engineering Conference, NCSEC 2009, Invited Speaker, Bangkok, Thailand (November)
- 2011 Tutorial on Computational Logic and Human Thinking, International Spring School on Computational Logic (ISCL). Bertinoro, Italy (April)
- 2011 Tutorial on Computational Logic and Human Thinking, CADE – the 23rd International Conference on Automated Deduction. Wroclaw, Poland (August)
- 2011 JURISIN: Fifth International Workshop on Juris-informatics, Invited Speaker, Takamatsu, Japan (December)
- 2012 RuleML: The 6th International Symposium on Rules, Invited Speaker, Montpellier, France (August)
- 2012 The 6th International Conference on Web Reasoning and Rule Systems, the 4th International Conference on Computational Models of Argument and the Datalog 2.0 Workshop, Invited Plenary Speaker, Vienna, Austria (September)
- 2012 Course on Computational Logic and Human Thinking, University of Kyoto, (Sept-Dec)
- 2012 International Workshop on Information Search, Integration and Personalization, Sapporo, Japan, Keynote Speaker (October)
- 2012 International Joint Agent Workshop and Symposium, Tsumagoi, Japan, Invited Speaker (October)
- 2012 Anniversary Symposium of NII Shonan Meetings, Tokyo, Japan, Keynote Speaker (November)
- 2013 10th Annual Computing Department PhD Conference, University of Surrey, Academic Keynote Speaker, and Member of the Panel of Judges (March)
- 2013 Commonsense-2013, 11th International Symposium on Logical Formalization on Commonsense Reasoning, Cyprus, Keynote Speaker (May)
- 2013 LPNMR-2013 12th International Conference on Logic Programming and Non-monotonic Reasoning, Corunna, Spain, Keynote Speaker (September)
- 2014 HYBRUS, 4th Workshop on Hybrid Reasoning for Intelligent Systems, Leipzig, Invited Speaker (May)
- 2014 WIC 2014 Web Intelligence Conference, Warsaw, Keynote Speaker (August)
- 2014 NII Shonan Meeting "Towards Explanation Production Combining Natural Language Processing and Logical Reasoning". Invited contributor. Shonan Village, Japan (November)
- 2015 ICAART 7th International Conference on Agents and Artificial Intelligence, Lisbon, Keynote Speaker (January)
- 2015 Chicago Society Conference on Technology and Society, Keynote Speaker (May)

- 2015 Boole Bicentenary, Cork, Invited Speaker (August)
- 2017 Tutorial on CLOUT (Computational Logic for Use in Thinking), RuleML+RR 2017: International Joint Conference on Rules and Reasoning, London (July)
- 2017 RuleML+RR 2017: International Joint Conference on Rules and Reasoning, London, Banquet Speaker (July)
- 2017 Bridging the Gap: Is Logic and Automated Reasoning a Foundation for Human Reasoning? Workshop, CogSci 2017, London, Invited Speaker (July)
- 2017 CS&P 2017 - Concurrency, Specification, and Programming Workshop 2017, Warsaw, Invited Speaker (September)
- 2018 RuleML+RR 2018: International Joint Conference on Rules and Reasoning, Luxemboug, Tutorial on Logic and Smart Contracts (September)
- 2019 ReMeP 2019 – Where Research Meets Practice, Vienna, Keynote Speaker (September)
- 2021 Logical English on World Logic Day. Invited talk, presented online at the University of Texas at Dallas, 14 January 2021
- 2023 NII Shonan Meeting "Policy Modelling and Reasoning". Invited contributor. Shonan Village, Japan (March)
- 2023 Workshop on Argumentation. Invited speaker. Gero Onsen, Japan (March)
- 2025 Declarative AI 2025: Istanbul, Keynote Speaker, (September)

ONLINE PODCASTS AND VIDEOS (retrieved 7 March 2025)

- 2011 IJCAI: Artificial Intelligence and Human Thinking. https://youtu.be/k_HGvkdDnT8?si=JdEgrG7Snq_iOKaA
- 2020 The Search Space interview: <https://thesearch.space/episodes/1-the-poet-of-logic-programming>
- 2020 Archivesit interview: <https://archivesit.org.uk/interviews/robert-bob-kowalski/>
- 2021 World Logic Day: Logical English = Logic + English + Computing
<https://www.doc.ic.ac.uk/~rak/papers/Logical%20English%20on%20World%20Logic%20Day.mp4>
- 2022 ProLALA'22: Logical English as a Programming Language for the Law
<https://youtu.be/2BP-ftZlhB8?si=26BHYC5ERRNrRZnL>
- 2024 Prolog Education Group: Teaching Computing, Logic, Human Communication, and Problem Solving through Prolog: <https://youtu.be/3mrs8rEzSpk?si=ne7bVE180MOqIP8m>
- 2024 Labour Party Presentation: What is AI? https://youtu.be/No1qOPHNW_k?si=mooC3Cm7YPRek2Dg

OTHER DISTINCTIONS:

- 1963 Woodrow Wilson and US National Science Foundation Fellowships
- 1983 MIT Distinguished Lecture. Cambridge, Massachussets
- 1984 Insight Award for Contributions to Fifth Generation Computing

- 1987 Cray Distinguished Lectureship. University of Minnesota
- 1987 Annual IBM public lecture. University of East Anglia
- 1988 Honorary Distinguished Alumnus, Phi Kappa Phi. University of Bridgeport
- 1990 "Docente a titolo individuale" Centro Interdipartimentale di Ricerca in Filosofia del Diritto e Informatica. Giuridica "H Kelsen", dell'Università degli Studi di Bologna
- 1991 Fellow, Association for the Advancement of Artificial Intelligence
- 1993 Turing Lecture. Strathclyde University, Glasgow
- 1997 Fellow, City and Guilds of London Institute
- 1998 Fellow, Deutsches Forschungszentrum für Künstliche Intelligenz
- 1999 Fellow, ECCAI (the European Coordinating Committee for Artificial Intelligence)
- 1999-2000 Miegunyah Distinguished Fellow, University of Melbourne
- 2000 Fellow of the ACM (Association for Computing Machinery)
- 2001-2002 CLUSTER Chair, Swiss Federal Institute of technology at Lausanne (EPFL)
- 2001 Special issue of ACM Transactions on Computational Logic (TOCL) Volume 2, Number 4 (October 2001) "Dedicated to Robert A Kowalski"
- 2002 Computational Logic: Logic Programming and Beyond, Essays in Honour of Robert A. Kowalski (eds. A C Kakas and F Sadri) Springer, 2002
- 2002 First Annual Boole Lecture in Informatics, University of Cork, Ireland
- 2011 IJCAI (International Joint Conference on Artificial Intelligence) Award for Research Excellence
- 2012-2014 JSPS (Japan Society for the Promotion of Science) Award for Eminent Scientists
- 2014 Distinguished Lecture, University of Texas, Dallas
- 2016 Distinguished Lecture, Royal Holloway College, University of London
- 2021 CodeX Prize, shared with Fariba Sadri and Marek Sergot for noteworthy contribution to Computational Law.

PUBLICATIONS AND OTHER ARTICLES:

- 1 Kowalski, R. and Hayes, P. J., "Semantic Trees in Automatic Theorem-Proving", in *Machine Intelligence 4*, (eds. B. Meltzer and D. Michie), Edinburgh University Press, 1969, pp. 181-201. Reprinted in *Anthology of Automated Theorem-Proving Papers*, Vol. 2, Springer-Verlag, 1983, pp. 217-232.
- 2 Kowalski R., "The Case for Using Equality Axioms in Automatic Demonstration", in *Symposium on Automatic Demonstration*, Lecture notes in Mathematics, Vol. 125, Springer-Verlag, 1970, pp. 112-127. Reprinted in *Anthology of Automated Theorem-Proving Papers*, Vol. 2, Springer-Verlag, 1983, pp. 377-398.
- 3 Kowalski, R., "Search Strategies for Theorem-proving", in *Machine Intelligence 5*, (eds. B. Meltzer and D. Michie), Edinburgh University Press, 1970, pp. 181-201.
- 4 Kowalski, R., "Studies in the Completeness and Efficiency of Theorem-proving by Resolution", *Ph.D. Thesis, University of Edinburgh*, 1970.

- 5 Hayes, P. J. and Kowalski, R., "Automatic Theorem Proving", *Lecture Notes, Department of Artificial Intelligence, University of Edinburgh*, 1971.
- 6 Kowalski, R. and Kuehner, D., "Linear Resolution with Selection Function", in *Artificial Intelligence*, Vol. 2, 1971, pp. 227-60. Reprinted in *Anthology of Automated Theorem-Proving Papers*, Vol. 2, Springer-Verlag, 1983, pp. 542-577.
- 7 Kowalski, R., "And-or Graphs, Theorem-proving Graphs and Bi-directional Search", in *Machine Intelligence 7*, (eds. B. Meltzer and D. Michie), Edinburgh University Press, 1972, pp. 167-94.
- 8 Kowalski, R., "Logic for Problem-Solving", *DCL Memo 75, Department of Artificial Intelligence, University of Edinburgh*, 1974.
- 9 Kowalski, R., "Predicate Logic as Programming Language", in *Proceedings IFIP Congress*, Stockholm, North Holland Publishing Co., 1974, pp. 569-574. Reprinted in *Computers for Artificial Intelligence Applications*, (eds. Wah, B. and Li, G.-J.), IEEE Computer Society Press, Los Angeles, 1986, pp. 68-73.
- 10 Kowalski, R., "A Proof Procedure Using Connection Graphs", in *JACM* Vol. 22, No. 4, 1975, pp. 572-595.
- 11 van Emden, M. and Kowalski, R., "The Semantics of Predicate Logic as a Programming Language", in *JACM*, Vol. 23, No. 4, 1976, pp. 733-742.
- 12 Kowalski, R., "Logic for Data Description" in *Logic and Data Bases*, (eds. H. Gallaire and J. Minker), Plenum Press, 1978, pp. 77-103. Reprinted in *Readings in Artificial Intelligence and Databases*, (eds. J. Mylopoulos and M. Brodie), Morgan Kaufman, 1989, pp. 259-271.
- 13 Deliyanni, A. and Kowalski, R., "Logic and Semantic Networks", in *CACM*, Vol. 22, No. 3, 1979, pp. 184-192.
- 14 Kowalski, R., "Algorithm = Logic + Control", in *CACM*, Vol. 22, No. 7, 1979, pp. 424-436. Reprinted in *Programming Languages: A Grand Tour*, Third Edition, (ed. E. Horwitz), Computer Science Press, Maryland, 1986, pp. 480-492.
- 15 Kowalski, R., "Prolog as a Logic Programming Language", in *Proceedings of AICA Congress*, Pavia, Italy, Sept. 1981, pp. 1029-1034.
- 16 Kowalski, R., "Logic as a Computer Language", in *Logic Programming*, (eds. K. Clark and S-A. Tarnlund), Academic Press, 1982, pp. 3-16. Earlier version in *Proc. of Infotech State of the Art Conference on Software Engineering*, London, June 1980. Also in *Proceedings of Seminar on Cross Currents of Computer Science*, University of New Hampshire, Oct. 1981.
- 17 Bowen, K. and Kowalski, R., "Amalgamating Language and Meta-language in Logic Programming", in *Logic Programming*, (eds. K. Clark and S-A. Tarnlund), Academic Press, 1982, pp. 153-172.
- 18 Kowalski, R., "Amalgamating Object Level and Meta-level Reasoning", in *Proceedings of Conference on Language, Reasoning and Inference*, Edinburgh, March 1982.
- 19 Kowalski, R., "The Use of Metalanguage to Assemble Object Level and Abstract Programs", in *Proceedings of Workshop on Prolog Programming Environments*, Linkoping, Sweden, March 1982.
- 20 Kowalski, R., "Logic Programming in the Fifth Generation", in *Proceedings of SPL Conference on Fifth Generation Computing*, London, July 1982.
- 21 Kowalski, R., "Logic as a Computer Language for Children", in *Proceedings of European Conference on Artificial Intelligence*, Orsay, France, July 1982. Reprinted in *New Horizons in Educational Computing*, (ed. M. Yazdani), Ellis Horwood Ltd., Chichester, 1984, pp. 121-144. Reprinted in *Progress in Artificial Intelligence*, (eds. L. Steel and J. A. Campbell), Ellis Horwood Ltd., Chichester.
- 22 Kowalski, R., "The Frame Problem in Logic Databases", *Department of Computing, Imperial College*, October 1982, revised November 1983.

- 23 Kowalski, R., "Logic Programming", in *Proceedings of IFIP Congress*, (ed. R. E. A. Mason), Paris, France, Sept. 1983, North Holland Publishing Company, pp. 133-145.
- 24 Kowalski, R., "Logic for Expert Systems" in *Proceedings BCS Expert Systems Conference*, Cambridge, The British Computer Society, London, December 1983, pp. 80-93.
- 25 Kowalski, R. and Sergot, M., "Micro-PROLOG for Problem Solving", in *Micro-PROLOG Programming in Logic*, (eds. K. Clark and F. McCabe), Prentice Hall International, 1984, pp. 341-364.
- 26 Kowalski, R., "The Relationship between Logic Programming and Logic Specification", in *Phil. Trans. R. Soc. Lond. A*, Vol 312, 1984, pp. 345-361.
- 27 Kowalski, R., "Logic as a Database Language", in *Proceedings of BNCOD-3*, Cambridge University Press, July 1984, pp. 163-172. Earlier version in *Proceedings of Advanced Seminar on Theoretical Issues in Data Bases*, Cetraro Italy, August 1981.
- 28 Kowalski, R., "Computing in the New Generation", in *SPL-Insight Bulletin*, Vol. 1, No. 2, February 1984.
- 29 Kowalski, R., "Logic Programming in Artificial Intelligence and Software Engineering", in *Future Generation Computing Systems*, Vol. 1, No. 1, North Holland, July 1984, pp. 39-49. Abridged version in *Datamation*, 1st November 1984, pp. 92-102. Revised version in *Intelligent Knowledge Based Systems*, (eds. T. O'Shea and J. Self), Harper and Row, London, 1987, pp. 83-96.
- 30 Kowalski, R., "Logic for Knowledge Representation", in *Proceedings of Fourth Conference on Foundations of Software Technology and Theoretical Computer Science*, Lecture Notes on Computer Science, Springer-Verlag, 1984, pp. 1-12.
- 31 Kowalski, R. and Sergot, M., "Computer Representation of the Law", in *Proceedings of Ninth International Joint Conference on Artificial Intelligence*, Los Angeles, Ca., Morgan Kaufman Publishers Inc., Los Altos, Ca., August 1985, pp. 1269-1270.
- 32 Kowalski R., "Directions for Logic Programming", in *Proceedings of Symposium on Logic Programming*, IEE, Computer Society Press, Los Angeles, Ca., 1985, pp. 2-7. Revised version in *Proceedings of Second International GI-Kongress on Knowledge-based Systems*, Munich, 1987, pp. 128-146.
- 33 Kowalski, R., "Logic-based Open Systems", Department of Computing, Imperial College, 1985, in *Representation and Reasoning*. Jakob ph. Hoepelman (Hg.) Max Niemeyer Verlag, Tübingen 1988, pp. 125-134.
- 34 Kowalski, R., "Logic Programming", in *BYTE*, August 1985, pp. 161-177.
- 35 Kowalski, R. and Sergot, M., "A Logic-based Calculus of Events", in *New Generation Computing*, Vol. 4, No.1, February 1986, pp. 67-95. Also in *Knowledge Base Management-Systems*, (eds. C. Thanos and J. W. Schmidt), Springer-Verlag, pp. 23-51. Also in *The Language of Time: A Reader* (eds. Inderjeet Mani, J. Pustejovsky, and R. Gaizauskas) Oxford University Press. 2005.
- 36 Kowalski, R., "The Limitations of Logic", in *Proceedings of ACM Computer Science Conference*, 1986, pp 7-13. Revised version in *Proceedings of SEAS*, Heidelberg, 1986, pp. 1-13. Also in *Knowledge Base Management Systems*, (eds. C. Thanos and J. W. Schmidt), Springer-Verlag, pp. 477-489.
- 37 Sergot, M., Cory, T., Hammond, P., Kowalski, R., Kriwaczek, F. and Sadri, F., "Formalisation of the British Nationality Act", in *Yearbook of Law, Computers and Technology*, Butterworth, London, 1986, pp. 40-52.
- 38 Sergot, M., Sadri, F., Kowalski, R., Kriwaczek, F., Hammond, P., and Cory, T., "The British Nationality Act as a Logic Program", in *CACM*, Vol. 29, No. 5, 1986, pp. 370-386.
- 39 Hogger, C. and Kowalski, R., "Logic Programming" in *Encyclopedia of Artificial Intelligence*, John Wiley and Sons Inc., 1987, pp. 544-558. Also revised article in second edition, 1992, pp. 873-891.

- 40 Kowalski, R., Sadri, F. and Soper, P., "Integrity Checking in Deductive Databases", in *Proceedings of VLDB*, Morgan Kaufmann, Los Altos, Ca., 1987, pp. 61-69.
- 41 Kowalski, R., "Belief Revision Without Constraints", in *Computational Intelligence*, 1987, pp. 194-196.
- 42 Kowalski, R. and Sergot, M., "Directions for Computer Logic Applied to Law", in *The Journal of the Law and Computers Association of Japan*, July, 1987, No. 5, pp. 224-232.
- 43 Kowalski, R., "The Early Years of Logic Programming", in *CACM*, 1988, Vol. 31, No. 1, pp. 38-43.
- 44 Sadri, F. and Kowalski, R., "A Theorem-Proving approach to Database Integrity", in *Deductive Databases and Logic Programming*, (ed. J. Minker), Morgan Kaufman, Los Altos, Ca., 1988, pp. 313-362.
- 42 Kowalski, R. and Sergot, M., "The Use of Logical Models in Legal Problem Solving" in *Proceedings of 2nd Annual Conference of BILETA* (British and Irish Legal Education Technology Association). Also in *Law, Computer Science and Artificial Intelligence*, (eds. Bennun and Narayanan), Ablex Publishing Company, pp 99-117. Also in *Ratio Juris*, Vol. 3, No. 2, pp. 201-218.
- 46 Kowalski, R., "Is Logic Programming Possible?", in *First National Conference on Knowledge Based Computer Systems*, Computer Society of India, Bangalore, India, June 1988.
- 47 Eshghi, K., and Kowalski, R., "Abduction through Deduction". *Department of Computing, Imperial College*, 1988.
- 48 Eshghi, K. and Kowalski, R., "Abduction Compared with Negation by Failure", in *Sixth International Conference on Logic Programming*, (eds. G. Levi and M. Martelli) MIT Press, 1989, pp. 234-254.
- 49 Kowalski, R., "The Treatment of Negation in Logic Programs for Representing Legislation", in *Proceedings of Second International Conference on AI and Law*, (ed. E. Rissland) Vancouver, Canada, ACM Press, 1989, pp. 11-15.
- 50 Bajaj, K.K., Dubash, R.K. and Kowalski, R., 1989, December. Central government pension rules as a logic program. In *International Conference on Knowledge Based Computer Systems* (pp. 19-28). Berlin, Heidelberg: Springer Berlin Heidelberg.
- 51 Bajaj, K.K., Dubash, R.R., Kamble, A.S., Kowalski, R., Murthy, B.K. and Rajagopalan, D., "Indian Import-Export Policy and procedures as a logic program", in *Proceedings of Third International Conference on Logic, Computing and Law*. Also in *Expert Systems in Law*, (A. Martino, ed.), North-Holland, Amsterdam, 1992, pp. 87-98.
- 52 Kim, J.S. and Kowalski, R., "An application of amalgamated logic to multi-agent belief", in *Proceedings of Meta 90*, (ed. M. Bruynmooghe) Leuven, Belgium, 1990, pp. 272-283.
- 53 Kowalski, R. and Sadri, F., "Logic Programming with Exceptions", in *Seventh International Conference on Logic Programming*, (eds. D. H. D. Warren and P. Szeredi), MIT Press, 1990, pp. 598-613. Also in *New Generation Computing*, Vol. 9, Nos. 3,4, pp. 387-400, 1991.
- 54 Kowalski, R., "A proposal for an undergraduate degree in uses of logic", in *Proceedings of the Prague Unesco Symposium on Artificial Intelligence and Higher Education*. (eds. V. Marik, O. Stepankova, and Z. Zdahal), Springer-Verlag, 1990, pp. 94-97.
- 55 Kowalski, R., "English as a logic programming language", in *New Generation Computing*, Vol. 8, No. 2, 1990, pp. 91-93.
- 56 Kowalski, R., "Computational Logic", in *Proceedings of ESPRIT Conference*, 1990, Kluwer Academic Publishers (ed. by Commissions of the European Communities, Directorate-General Telecommunications, Information Industries and Innovation), pp. 768-773.
- 57 Kowalski, R., "Problems and Promises of Computational Logic", in *Proceedings Symposium on Computational Logic*, (ed. J. W. Lloyd), Springer-Verlag, 1990, pp. 1-36.

- 58 Kowalski, R., "The Event Calculus: A Logic-Based Computational Formalism for Reasoning about Change", in *Proceedings of 13th IMACS World Congress on Computation and Applied Mathematics*, (ed. E. N. Houstas), 1991, Vol. 3, pp. 964-965.
- 59 Kowalski, R., "AI and Software Engineering", in *Artificial Intelligence and Software Engineering*, (ed. Derek Partridge), Ablex Publishers, 1991, pp. 339-351.
- 60 Kowalski, R. and Kim, J. S. "A Metalogic Programming Approach to Multi-Agent Knowledge and Belief", in *Artificial Intelligence and Mathematical Theory of Computation* (ed. V. Lifschitz), Academic Press, 1991, pp. 231-246.
- 61 Kowalski, R., "Logic Programming in Artificial Intelligence", in *Proceedings of International Joint Conference on Artificial Intelligence*, (eds. J. Mylopoulos and R. Reiter), Morgan Kaufman, Menlo Park, Ca., 1991, pp. 596-603.
- 62 Kowalski, R., "Database Updates in the Event Calculus", in *Journal of Logic Programming*, 1992, Vol. 12, No. 162, pp. 121-146.
- 63 Kakas, T., Kowalski, K. and Toni, F., "Abductive Logic Programming". *Journal of Logic and Computation*, 1992, Vol. 2 No. 6, pp. 719-770.
- 64 Kowalski, R., "Legislation as Logic Programs", in *Logic Programming in Action* (eds. G. Comyn, N. E. Fuchs, M. J. Ratcliffe), Springer-Verlag, 1992, pp.203-230.
- 65 Kowalski, R., "Theory and Practice in Logic Programming", in *Logic Programming in Action* (eds. G. Comyn, N. E. Fuchs and M. J. Ratcliffe) Springer-Verlag, 1992, pp.1-2.
- 66 Kowalski, R., "Panel: A Springboard for Information Processing in the 21st Century", in *Proceedings of International Conference Fifth Generation Computer Systems 1992*, Oshma, Ltd., 1992, P. 219.
- 67 Kowalski, R., "The Fifth Generation Project in the Global Context" (translated into Japanese), MITI Journal, Vol. 25, No. 7, July 1992, pp. 33-35.
- 68 Kowalski, R., "Logic Programming Principles", in *Encyclopedia of Computer Science and Engineering*, Revised Edition, (eds. A. Ralston and E. Reilly), Van Nostrand Reinhold Company Inc., 1993 pp. 778-783. Fourth edition (eds. A Ralston , D Hemmendinger , E. Reilly) 2000.
- 69 Kowalski, R., "The Fifth Generation Project, a Personal Perspective", in *Comm. A.C.M*, 1993, Vol. 36, No. 3, pp. 54-60.
- 70 Bondarenko, A., Toni, F. and Kowalski, R., "An Assumption-Based Framework for Non-Monotonic Reasoning", in *Proceedings of 2nd International Workshop on Logic Programming and Non-Monotonic Reasoning*, MIT Press, 1993, pp. 171-189. #Kowalski, R., "Logic without Model Theory", in *What is a logical system?*, 1995 (ed. D. Gabbay), Oxford University Press.
- 71 Kakas, T., Kowalski, R. and Toni, F., "The Role of Logic Programming in Abduction", *Handbook of Logic in Artificial Intelligence and Programming 5*, 1998 (eds. D. Gabbay, C.J. Hogger, J.A. Robinson) Oxford University Press, pp 235-324.
- 72 Kowalski, R. and Sadri, F., "The Situation Calculus and Event Calculus Compared". *Proceedings of ILPS 94*, MIT Press.
- 73 Kowalski, R., Toni F. and Wetzel G., "Towards a declarative and efficient glass-box CLP," in *Proc. of Logic Programming Workshop WLP'94*, October 1994, ifi-Report Nr. 94-10, Zurich.
- 74 Kowalski, R., "An Undergraduate Degree in Practical Reasoning", Editorial, *Journal of Logic and Computation*, Vol. 3, No. 3, 1993, pp. 227-229.
- 75 Sripada, S., Rosser, B., Bedford, J., Kowalski, R., "Temporal Database Technology for Air Traffic Flow Management", in *Proc. First International Conference on Applications of Databases, ADB-94*, Vadstena, Sweden, June 1994, Witold Litwin, Tore Risch (eds.), *Lecture Notes in Computer Science*, 819, Springer-Verlag.

- 76 Kowalski, R, and Toni, F., "Argument and Reconciliation" in Proceedings of Workshop on Applications of Logic Programming to Legal Reasoning, International Symposium on Fifth Generation Computer Systems, Tokyo, December 1994, ICOT Press pp 9-16.
- 77 Kowalski, R., "Using Metalogic to Reconcile Reactive with Rational Agents" In Meta-Logics and Logic Programming (K. Apt and F. Turini, eds,) MIT Press, 1995. (Revised version in Proc. PAAM96).
- 78 Sadri F and Kowalski R, "Variants of the Event Calculus", in the Proceedings of the International Conference on Logic Programming, MIT Press, 1995.
- 79 Toni, F. and Kowalski, R., "Reduction of Abductive Logic Programs to Normal Logic Programs", in the Proceedings of the International Conference on Logic Programming, MIT Press, 1995., pp 367-381.
- 80 Wetzel, G., Kowalski, R, and Toni, F., " A Theorem-Proving Approach to CLP" in Proc. of Logic Programming Workshop WLP'95 ,Vienna, 1995, GMD-Studien Nr. 270, Sankt Augustin, Germany.
- 81 Kowalski, R. and Sadri, F., "Towards a Unified Agent Architecture that Combines Rationality with Reactivity" , Proceedings of International Workshop on Logic in Databases, San Miniato, Italy, Springer-Verlag, LNCS 1154, 1996 pp 131-150.
- 82 Toni, F. and Kowalski, R., "An Argumentation-theoretic Approach to Transformation of Logic Programs ," Proceedings of LOPSTR Springer-Verlag, LNCS 1048, 1996, pp 61-75.
- 83 Kowalski, R, and Toni, F., "Abstract Argumentation", Journal of Artificial Intelligence and Law, Vol. 4, pp. 275-296, 1996. Also in *Logical Models of Legal Argumentation*, (eds, H. Prakken and G. Sartor), Kluwer Academic Publishers, 1997.
- 84 Dung, P. M., Kowalski, R., and Toni, F. " Synthesis of Proof Procedures for Default Reasoning" , Proceedings of LOPSTR, Springer-Verlag, LNCS 1207, 1996, pp 313-324.
- 85 Kowalski, R. and Sadri, F., "Reconciling the Situation Calculus and Event Calculus". *Journal of Logic Programming*, 1997, Vol. 31, pp. 39-58.
- 86 Bondarenko, A., Dung, P. M., Kowalski, R., and Toni, F. " An Abstract Argumentation-theoretic Approach to Default Reasoning". *Journal of Artificial Intelligence* 93 (1-2), 1997, pp 63-101.
- 87 Fung, T.H. and Kowalski, R. "The IFF Proof Procedure for Abductive Logic Programming". *Journal of Logic Programming*, 1997.
- 87 Dung, P. M., Kowalski, R., and Toni, F. " Argumentation-theoretic Proof Procedures for Non-monotonic Reasoning" , Department of Computing, Imperial College, 1996.
- 88 Kowalski, R. and Sadri, F., " An Agent Architecture that Unifies Rationality with Reactivity" , Department of Computing, Imperial College, 1997.
- 89 Kowalski, R. A., Wetzel, G. and Toni, F. "Executing Suspended Logic Programs", *Fundamenta Informatica* 34 (3) 1998.
- 91 Kowalski, R.A., "Logic Programming", MIT Encyclopaedia of Cognitive Science (eds. R A Wilson and F C Keil) MIT Press, 1999, pp. 484-486.
- 92 Kowalski, R. and Sadri, F., " From Logic Programming towards Multi-agent Systems, *Annals of Mathematics and Artificial Intelligence* , Volume 25 (1999), pp. 391-419.
- 93 Kowalski, R. and Satoh, K. "Repairing speculative execution in the light of contrary information". Meme Media Laboratory, Hokkaido University ,October 2000.
- 94 Kowalski, R. and Satoh, K. "Goals in information seeking and assimilation". Meme Media Laboratory, Hokkaido University ,October 2000.
- 95 Kowalski, R.A., "Logic Programming and the Real World". *Logic Programming Newsletter*. January 2001.

- 96 Kowalski, R. "Goal Change". Meme Media Laboratory, Hokkaido University, November 2001.
- 97 Kowalski, R. "Artificial intelligence and the natural world" *Cognitive Processing*, 4 (2001), pp. 547-573.
- 98 Kowalski, R.A., "Directions for Logic Programming", *Computational Logic: Logic Programming and Beyond* (eds. A C Kakas and F Sadri) Springer, 2002, pp. 26-32
- 99 Kowalski, R.A., "A logic-based model for conflict resolution", Department of Computing, Imperial College, April 2003
- 100 Kowalski, R.A., "Logic and Modularity", Department of Computing, Imperial College, April 2005
- 101 Dung, P. M., Kowalski, R., and Toni, F. "Dialectic proof procedures for assumption-based, admissible argumentation". *Journal of Artificial Intelligence* 170(2), February 2006, pp. 114-159.
- 102 Kowalski, R. "The Logical Way to be Artificially Intelligent". *Proceedings of CLIMA VI* (eds. F. Toni and P. Torroni) Springer Verlag, LNAI, 2006, pp. 1-22.
- 103 Kowalski, R. "Computational Logic in an Object-Oriented World" In *Reasoning, Action and Interaction in AI Theories and Systems – Essays Dedicated to Luigia Carlucci Aiello* (eds. O. Stock, M. Schaerf) Springer Verlag, Lecture Notes in Computer Science, Vol 4155, LNAI, 2006.
- 104 Kowalski, R. "Computational Logic as a Dual Process Model of Thought", Department of Computing, Imperial College, February 2006
- 105 Kowalski, R. "Reasoning with Conditionals in Artificial Intelligence" *Cognition and Conditionals" Probability and Logic in Human Thinking*. (eds. Mike Oaksford and Nick Chater). Oxford University Press, 2010.
- 106 Dung, P. M., Kowalski, R., and Toni, F. "Assumption-Based Argumentation" In *Argumentation in Artificial Intelligence* edited by I. Rahwan and G. Simari) Springer, 2009. 199-218.
- 107 Kowalski, R. and Sadri, F., "Integrating Logic Programming and Production Systems in Abductive Logic Programming Agents" In *Web Reasoning and Rule Systems* (eds. A. Polleres and T. Swift) Springer, LNCS 5837. 2009.
- 108 Kowalski, R. and Sadri, F., "An Agent Language with Destructive Assignment and Model-theoretic Semantics" In *CLIMA XI - Computational Logic in Multi- Agent Systems* (eds. J. Dix, G. Governatori, W. Jamroga and J. Leite) Springer, 2010.
- 109 Kowalski, R. and Sadri, F., "Abductive Logic Programming Agents with Destructive Databases" *Annals of Mathematics and Artificial Intelligence*, 2011, Volume 62, Numbers 1-2, 129-158 .
- 110 Kowalski, R. "Artificial Intelligence and Human Thinking" *Proceedings of the Twenty-Second International Joint Conference on Artificial Intelligence*. AAAI Press/International Joint Conferences on Artificial Intelligence, 2011, Vol 1, 11-16.
- 111 Burton A., Kowalski, R., Gacic-Dobo M., Karimov R. and Brown, D. "A formal representation of the WHO and UNICEF estimates of national immunization coverage: a computational logic approach" in *PLOS ONE*, October 25, 2012, Online at <http://dx.plos.org/10.1371/journal.pone.0047806>
- 112 Kowalski, R. "Time to Think Like a Computer" *New Scientist*, 3 Dec. 2011, 36-37.
- 113 Kowalski, R. and Burton A., "WUENIC – A Case Study in Rule-based Knowledge Representation and Reasoning" *Post-proceedings International Workshop on Juris-informatics*, Springer-Verlag. 2012.
- 114 Kowalski, R. and Sadri, F., "Teleo-Reactive Abductive Logic Programs". *Essays in Honour of Marek Sergot: Computational Logic for Normative Systems*. Springer-Verlag. 2012.
- 115 Kowalski, R. and Sadri, F., "A Logic-Based Framework for Reactive Systems" *RuleML 2012*,

- A. Bikakis and A. Giurca (Eds.), LNCS 7438, pp. 1-15. Springer, Heidelberg. 2012.
- 116 Kowalski, R. Logic Programming in the 1970s. Proceedings of LPNMR-2013. Springer, Heidelberg. 2013.
- 117 Kowalski, R. and Sadri, F., "A Logical Characterization of a Reactive System Language" In Proceedings of RuleML 2014.
- 118 Kowalski, R. History of Logic Programming. In Volume 9, Logic and Computation (D. Gabbay, J. Siekmann and J. Woods, editors). In the History of Logic series, Elsevier, 2014, pp 523-569
- 119 Kowalski, R. and Sadri, F., Reactive Computing as Model Generation. *New Generation Computing*, 2015, Volume 33, Issue 1, pp 33-67
- 120 Kowalski, R. and Sadri, F., 2016. Programming in logic without logic programming. *Theory and Practice of Logic Programming*, 16(03), pp.269-295.
- 121 Kowalski, R. Review of "Programming Machine Ethics" by Luís Moniz Pereira and Ari Saptawijaya, AI & SOCIETY, May 2017, Volume 32, Issue 2, pp 299-300
- 122 Kowalski, R. and Satoh, K., 2018. "Obligations as Optimal Goal Satisfaction", *Journal of Philosophical Logic*, 47(4), 579-609.
- 123 Kowalski, R. 2017. "Satisfiability for First-order Logic as a Non-Modal Deontic Logic", Workshop on Bridging the Gap: Is Logic and Automated Reasoning a Foundation for Human Reasoning? CogSci 2017, London.
- 124 Wielemaker, J., Riguzzi, F., Kowalski, R. A., Lager, T., Sadri, F., & Calejo, M. 2019. "Using SWISH to realize interactive web-based tutorials for logic-based languages", *Theory and Practice of Logic Programming*, 19(2), 229-261.
- 125 Kowalski, Robert. 2020. Logical English. Paper presented at the Logic and Practice of Programming (LPOP) Workshop.
- 126 Kowalski, R. and Dato, A., 2021. Logical English Meets Legal English for Swaps and Derivatives. *Artificial Intelligence and Law*, Online 12 August 2021, <https://doi.org/10.1007/s10506-021-09295-3>.
- 127 Kowalski, R., Davila, J. and Calejo, M. 2021. Logical English for Legal Applications. XAIF, Virtual Workshop on XAI in Finance, 3 November 2021.
- 128 Sartor, G., Dávila, J., Billi, M., Contissa, G., Pisano, G. and Kowalski, R., 2022, August. Integration of Logical English and s(CASP). In *2nd Workshop on Goal-directed Execution of Answer Set Programs (GDE'22)*.
- 129 Kowalski, R., Dávila, J., Sartor, G. and Calejo, M., 2022. Logical English for law. *On Methodologies for Translating Legal Norms into Formal Representations (LN2FR 2022)*, arXiv:2305.12203.
- 130 Kowalski, R., Sadri, F., Calejo, M. and Dávila, J., 2023. Combining logic programming and imperative programming in LPS. In *Prolog: The Next 50 Years* (pp. 210-223). Cham: Springer Nature Switzerland.
- 131 Kowalski, R., Dávila, J., Sartor, G. and Calejo, M., 2023. Logical English for law and education. In *Prolog: The Next 50 Years* (pp. 287-299). Cham: Springer Nature Switzerland.
- 132 Kowalski, R., Davila, J. 2023. Logical English Demonstration. Proceedings 39th International Conference on Logic Programming, EPTCS 385, <https://arxiv.org/abs/2308.14898v1>
- 133 Kowalski, R. 2024. The Marseille-Edinburgh Connection. In *Revue Ouverte d'Intelligence Artificielle*, Volume 5, no 2-3 (2024), p. 31-37.

- 134 John Cummins, Jacinto Davila, Robert Kowalski, David Ovenden. 2024. Computable Contracts for Insurance - Establishing an Insurance-Specific Controlled Natural Language InsurLE.. In The British Insurance Law Association Journal, Issue Number: 136, Publication date: 15/10/2024.
- 135 May Myo Zin, Georg Borges, Robert Kowalski, Ken Satoh, Wachara Fungwacharakorn, 2025. Towards Machine-Readable Traffic Laws: Formalizing Traffic Rules into PROLOG Using LLMs

ONLINE EXECUTABLE NOTEBOOKS:

Logical English: (with Miguel Calejo and Jacinto Davila)

The British Nationality Act and other examples

<https://logicalenglish.logicalcontracts.com/example/LogicalEnglish.swinb>

Logic Production System (LPS) (with Miguel Calejo)

First steps with LPS

<https://demo.logicalcontracts.com/example/FirstStepswithLPS.swinb>

Overview of example LPS programs

<https://demo.logicalcontracts.com/example/lpsExamples.swinb>

BOOKS:

Kowalski, R., "Logic for Problem Solving", North Holland Elsevier, 1979.

Available at <http://www.doc.ic.ac.uk/~rak/>

Kowalski, R., "Computational Logic and Human Thinking: How to be Artificially Intelligent",

Cambridge University Press. 2011. Available at <http://www.doc.ic.ac.uk/~rak/papers/newbook.pdf>.

Kowalski, R., "Logic for Problem Solving, Revisited", Edited by Thom Frühwirth, Hersteilung und Verlag, Books on Demand GmbH, Norderstedt, ISBN 9783734715853. 2014.

EDITED BOOKS:

Bibel, W. and Kowalski, R., [1980], "Fifth Conference on Automated Deduction," *Lecture Notes in Computer Science*, 87, Springer Verlag, Berlin.

Ehrig, H., Kowalski, R., Levi, G. and Montanari, H., [1987], "TAPSOFT'87, Proceedings of the International Joint Conference on Theory and Practice of Software Development", *Lecture Notes in Computer Science*, 249 and 250, Springer Verlag, Berlin.

Kowalski, R. and Bowen, K., [1988], *Logic Programming: Proceedings of the Fifth International Conference and Symposium*, (Vols 1 and 2), The MIT Press, Cambridge, Mass.

David S. Warren, Veronica Dahl, Thomas Eiter, Manuel V. Hermenegildo, Robert Kowalski, Francesca Rossi 2023, Prolog: The Next 50 Years. LNCS, volume 13900. Springer Cham.

<https://doi.org/10.1007/978-3-031-35254-6>

OTHER:

Kowalski, R. and Sergot, M., "Logic Programming", Video in the Alvey IKBS Series, Open University, 1984.

Kowalski, R. and Kriwaczek, F., "Logic Programming - PROLOG and its Applications", (Video + 122 page handbook), Addison Wesley, 1986.

Kowalski, R., Hogger, C., and Kriwaczek, F., "PROLOG, Logic Programming and Expert Systems", (A 20 hour video course, broadcast by satellite to the PACE consortium, March-June 1988 and October-December 1989).

Kowalski, R. "Computational Logic and Legal Reasoning" (Multi-cast Internet Lecture, European Rector's Conference, September 1998)

Kowalski, R. "Computational Logic and the Real World" (Multi-cast Internet Lecture, National Autonomous University of Mexico, November 2002)

David, A. and Kowalski, R., 2019. New Mesolithic finds from the Lower Greensand near Petworth, West Sussex, and their wider affiliations. *Sussex Archaeological Collections*, 157, pp.1-29.