

CURRICULUM VITAE

KOK LAY TEO

John Curtin Distinguished Professor
Department of Mathematics and Statistics
Curtin University
Perth, W.A., Australia

EDUCATION AND QUALIFICATIONS:

- PhD in Electrical Engineering, the University of Ottawa, Canada, 1974.
- MASc in Electrical Engineering, the University of Ottawa, Canada, 1971
- BSc in Telecommunications Engineering, Ngee Ann Technical College, 1968.

Employment History:

- John Curtin Distinguished Professor, Curtin University, Australia (From January 2011).
- Professor and Head, Department of Mathematics and Statistics, Curtin University, Australia (January 2005-December 2010).
- Chair Professor and Head, Department of Applied Mathematics, The Hong Kong Polytechnic University (December 1998 – December 2004).
- Adjunct Professor, University of Waterloo, Canada (2001-2007).
- Adjunct Professor and External PhD Supervisor, Harbin Institute of Technology, China (2004-2012).
- Adjunct Professor and External PhD Supervisor, Shanghai University, China (2009-2011).
- Adjunct Professor, Zhongnan University, China (2007-2010).
- Adjunct Professor and External PhD Supervisor, Zhongshan University, China (2004-2006).
- Adjunct Professor and External PhD Supervisor, Zhejiang University, China (2003-2005).
- Adjunct Professor, Huazhong University of Science and Technology, China (2004-2007).
- Adjunct Professor, Northeastern University of Technology, China (2003-2005).
- Adjunct Professor, Chongqing Normal University, China (from 1999).
- Professor of Applied Mathematics, School of Mathematics and Statistics, and Australian Telecommunications Research Institute, Curtin University of

Technology, Perth, Western Australia, Australia, December 1996 - November 1998.

- Associate Professor, Department of Mathematics, The University of Western Australia, Australia, November 1988 - November 1996.
- Associate Professor, Department of Industrial and Systems Engineering, National University of Singapore, Republic of Singapore, December 1984 - October 1987.
- Lecturer and Senior Lecturer, School of Mathematics, University of New South Wales, Australia, July 1974 - December 1984.

RESEARCH GRANTS

From Australian Research Council (won each year from 1994 to 1998):

1994: A\$131,474; **1995:** A\$161,478; **1996:** A\$177,826;
1997: A\$188,000; **1998:** A\$174,000;
1998: A\$210,000 (equipment grant)
1999-2004: (I was with The Hong Kong Polytechnic University)
2006-2008: A\$300,000
2008-2010: A\$240,000
2010-2012: A\$240,000
2011-2013: A\$315,000

From Research Grants Council of Hong Kong Competitive Earmarked Grants:

2000-2003: HK\$635,817
2001-2004: HK\$782,762
2002-2005: HK\$890,404
2003-2006: HK\$565,723

From The Hong Kong Polytechnic University

2001-2003: HK1,200,000 (Project Leader of Optimum Filter Design within the Centre for Multimedia Signal Processing of the Department of Electronics and Information Engineering)
2003-2004: HK\$600,000 (Project Leader of Hands-free Mobile Phone Design via Optimization Techniques within the Centre for Multimedia Signal Processing of the Department of Electronics and Information Engineering)

AWARDS AND RECOGNITION

- John Curtin Distinguished Professor from January 2011, Curtin University.
- Senior Researcher Award of the Year of 2010, Faculty of Science and Technology, Curtin University.

- A member of the Australian Research Council's Mathematical, Information and Computing Sciences Panel for the 2010 Excellence in Research for Australia (ERA) Exercise.
- A Lecturer in Mathematics of the 2010-2011 Texas A&M University at Qatar Distinguished lecture Series.
- The International Conference on Optimization and Control (ICOCO 2010) was held in Guiyang, China during July 18-23, 2010, dedicated to Professors Kok Lay Teo and Jie Sun for our fundamental contributions to optimization, optimal control and their computational methods and applications. There are over 100 participants attending the conference. For further details, please see the conference homepage at
<http://sci.gzu.edu.cn/a/icoco..html>
- Two special issues, one for Discrete and Continuous Dynamical Systems - Series B (A journal according to ERA journal list), and one for International Journal of Innovational Computing and Information Control (B journal according to ERA journal list), are being dedicated to Professor Kok Lay Teo and Professor Jie Sun for their fundamental contributions in optimal control and optimization and their applications. They will be published in 2011 or early 2012.

KEY ROLE IN MAJOR CONFERENCE ORGANIZATION COMMITTEES - FROM 2007

- Co-Chair of the International Scientific Committee, The 8th International Conference on Optimization Techniques and Applications (ICOTA8), Shanghai, China, 10-13 December, 2010.
- Co-Chair of the International Scientific Committee, The 4th International Conference on Optimization and Control with Applications (4th OCA2009), Harbin, China, 6-11 June, 2009.
- Co-Chair of the International Scientific Program Committee, The 7th International Conference on Optimization: Techniques and Applications (ICOTA7) Kobe International Conference Centre, Japan, 12-15 December, 2007.

KEYNOTE, PLENARY AND INVITED CONFERENCE PRESENTATIONS: 2005 -2010 : Over 15

SOFTWARE DEVELOPMENT:

The software package, MISER3.3, for constrained optimal control problems was developed by a Research Group under my leadership.

EDITORIAL POSITIONS:

- **Editorial Board**

Editor-in-Chief: (i) Industrial and Management Optimization (from 2005); (ii) Dynamics of Continuous, Discrete and Impulsive Systems, Series B (from September 2007); and (iii) Numerical Algebra, Control and Optimization (from 2010).

Regional Editor: Nonlinear Dynamics and Systems Theory

Member of editorial Board: (i) Automatica; (ii) Journal of Global Optimization; (iii) Journal of optimization Theory and Applications; (iv) Journal of ANIZIAM; (v) Discrete and Continuous Dynamic Systems, Series A; (vi) Discrete and Continuous Dynamic Systems, Series B; (vii) Dynamics of Continuous, Discrete and Impulsive Systems, Series A; (viii) Journal of Inequalities and Applications; (ix) Optimization and Engineering; (x) International Journal of Innovational Computing & Information Control; (xi) Pacific Journal of Optimization; (xii) Express letters; and (xiii) Optimization Letters.

POSTDOCTORIAL FELLOWS AND POST-GRADUATE STUDENTS: Have successfully supervised over 25 post-doctoral fellows and 27 PhD students. Currently, I am involved in the supervision of 7 PhD students and 3 postdoctoral fellows.

RESEARCH INTERESTS

- Computational optimal control and optimization and their applications.
- Financial portfolio optimization, and signal processing in telecommunications engineering.

PUBLICATIONS:

(A) Books

1. Ahmed, and K.L Teo, Optimal Control of Distributed Parameter Systems, North Holland, 1981, 430pp.
2. K.L. Teo and Z.S. Wu, Computational Methods for Optimizing Distributed Systems, Academic Press, 1984, 317pp.
3. K.L. Teo, C.J. Goh, and K.H. Wong, A Unified Computational Approach to Optimal Control Problems, Longman Scientific and Technical, 1991, 350pp.
4. R. Martin, and K.L. Teo, Optimal Control of Drug Administration in Cancer Chemotherapy, World Scientific, 1994, 185pp.
5. B. Vo, A. Cantoni, and K.L. Teo, Filter Design with Time Domain Mask Constraints: Theory and Applications, Kluwer Academic Publishers, 2001.

(B) Special Issues, Edited Books and Software Manuals

1. L.S. Jennings, K.L. Teo, and C.J. Goh, MISER3.2 Optimal Control Software: Theory and User Manual, Department of Mathematics, the University of Western Australia, Australia, 1997.

2. "Dynamics and Optimization" - a special issue for Dynamics of Continuous, Discrete and Impulsive Systems, Vol. 4, No.4, 1998, (with L. Caccetta);
3. A special issue for The Australian Mathematics, Series B, Vol. 40, Part 3, 1999, (with V. Jeyakumar);
4. "Optimization Theory and Applications - Part I" - a special volume for Annals of Operations Research, Vol. 98, 2000 (with L. Caccetta);
5. "Nonconvex Optimization in Control" a special issue for the Journal of Global Optimization, Vol. 23, Nos 3-4, 2002 (with D. Li and W.Y. Yan);
6. X.Q Yang, K.L. Teo and L. Caccetta, (editors), Optimization Methods and Applications, Kluwer Academic Publishers, 2001.
7. "Control and Optimization", a special issue for Dynamics of Continuous, Discrete and Impulsive Systems, Number 1, Vol. 9, 2002 (with P.K.C. Wang and X.Q. Cai);
8. A special issue for Communications in Information and Systems, Number 4, Volume 2, 2002 (with Peter Tam);
9. "Control and Optimization", a special issue for Dynamics of Continuous, Discrete and Impulsive Systems, Number 1, Vol. 9, 2002 (with P.K.C. Wang and X.Q. Cai);
10. "Optimization with High Technology Applications" - a special issue for Journal of Global Optimization, Nos. 2-3, Vol. 27, 2003 (with T.C.E. Cheng and X.Q. Cai);
11. "Optimization and Control with Applications" - a special issue for Journal of Global Optimization, Vol. 29, No.2 – June 2004 (with D. Gao);
12. A special issue for J. Comput. Appl. Math., Vol. 163, pp. 1-350, 2004 (with R. Wang).
13. A special issue for Journal of Global Optimization, Vol. 28, No. 2, 2004 (with L. Qi, and X.Q. Yang).
14. "Optimization Theory and Its Application - Part II" - a special volume for Annals of Operations Research, Vol. 133, 2005 (with T.C.E. Cheng, X.Q. Cai, and X.Q. Yang).
15. "Optimization and Control with Applications, an edited book by L.Qi, K.L. Teo and X.Q. Yang, Springer, 2005. (561pp).
16. A special issue for Optimization and Engineering, Vol. 10, Number 2, June 2009 (with W.Y. Yue).
17. A special issue for Nonlinear Dynamics and Systems Theory, Vol. 10, issue 2, 2010 (with B.S. Goh)
18. A special issue for Dynamics of Continuous, Discrete and Impulsive Systems – Series B, to be published in 2011 (with B.S. Goh).
19. A special issue for Journal of Global Optimization, to be published in 2011 (with S.Wang).

(C) Research Papers

(I) Selected Journal Papers and Chapters of Books

- Teo, An Existence Theorem on Optimal Control of Partially Observable Diffusions, SIAM J. Control, Vol. 12, pp. 351-355, 1974.
- N.U. Ahmed, and K.L. Teo, Stochastic Bang Bang Control, IEEE Trans. AC-19, pp.73-75, 1974.
- N.U. Ahmed, and K.L. Teo, Optimal Feedback Control of Stochastic McShane Differential Systems, J. Applied Probability, Vol. 11, No. 2, pp. 302-309, 1974.
- K.L. Teo, K.W. Wong, and N.U. Ahmed, On Optimal Parameter Selection for Parabolic Differential Systems, IEEE Trans., AC-19, pp. 286-287, 1974.
- N.U. Ahmed, and K.L. Teo, Optimal Control of Stochastic Ito Differential Systems with Fixed Terminal Time, Advances in Applied Probability, Vol. 7, pp. 154-178, 1975.
- N.U. Ahmed, and K.L. Teo, Necessary Conditions for Optimality of Cauchy Problem for Parabolic Partial Differential Systems, SIAM Journal on Control, Vol. 13, pp. 981-993, 1975.
- N.U. Ahmed, and K.L. Teo, Comments on "A Selector Theorem in Banach Spaces", J. Optimization Theory and Applications, Vol. 19, pp. 117-118, 1976.
- K.L. Teo, Optimal Control of Systems Governed by Stochastic McShane Differential Equation with Fixed Terminal Time, Int. J. Systems Science, Vol. 7, pp. 107-119, 1976.
- K.L. Teo, and N.U. Ahmed, On the Optimal Control of Systems Governed by Quasilinear Integro-Partial Differential Equations of Parabolic Type, Journal of Mathematical Analysis and Applications, Vol. 59, pp. 33-59, 1977.
- K.L. Teo, and N.U. Ahmed, $L_p(R)(p \geq 1)$ Stability in the Mean m ($m \geq 1$) of a Class of Stochastic Volterra Integral Equations, Information Sc., Vol. 12, pp.129-150, 1977.
- K.L. Teo, and E.J. Moore, Necessary Conditions for Optimality for Control Problems with Time Delays Appearing in Both State and Control Variables, J. Optimization Theory and Applications, Vol. 23, pp. 413-428, 1977.
- D.W. Reid and K.L. Teo, Optimal Feedback Control of a Class of Stochastic Systems Permitting Jumps on the Diffusion Processes, Int. J. Systems Science, Vol. 8, pp. 497-511, 1977.
- N.U. Ahmed and K.L. Teo, Optimal Control of Systems Governed by a Class of Nonlinear Evolution Equations in a Reflexive Banach Space, J. Optimization Theory and Applications, Vol. 25, pp. 57-81, 1978.
- K.L. Teo, Optimal Control of Systems Governed by Time Delayed Second Order Linear Parabolic Partial Differential Equations with a First Boundary Condition, J. Optimization Theory and Applications, Vol. 29, pp. 437-481, 1979.

- K.L. Teo, First Boundary Value Problems for Quasilinear Integro-Partial Differential Equations of Parabolic Type Involving Discrete Time Delayed Arguments, *Mathematica Japonicae*, Vol. 24, pp. 1-15, 1979.
- K.L. Teo, Existence and Uniqueness of Solutions of Systems Governed by Second Order Quasilinear Integro-Partial Differential Equation of Parabolic Type, *Aequationes Mathematicae*, Vol. 20, pp. 133-148, 1980.
- D.W. Reid and K.L. Teo, Optimal Parameter Selection of Parabolic Systems, *Mathematics of Operations Research*, Vol. 5, pp. 467- 474, 1980.
- D.W. Reid and K.L. Teo, Hitting a Target with Maximum Probability, *Int. J. Systems Science*, Vol. 11, pp. 1075-1081, 1980.
- S. Nababan and K.L. Teo, Necessary Conditions for Optimality of Cauchy Problems for Parabolic Partial Delay-Differential Equations, *J. Optimization Theory and Applications*, Vol. 34, pp. 117-155, 1981.
- E.S. Noussair, S. Nababan and K.L. Teo, On the Existence of Optimal Controls for Quasi Linear Parabolic Partial Differential Equations, *J. Optimization Theory and Applications*, Vol. 34, pp. 99-115, 1981.
- S. Nababan and K.L. Teo, Necessary Conditions for Optimal Controls for Systems Governed by Parabolic Partial Delay-Differential Equations in Divergence Form with First Boundary Conditions, *J. Optimization Theory and Applications*, Vol. 36, pp.565-613, 1982.
- K.G. Choo, K.L. Teo and Z.S. Wu, On an Optimal Control Problem Involving First Order Hyperbolic Systems with Boundary Controls, *Numerical Functional Analysis and Optimization*, Vol. 4, pp. 171-190, 1981-1982.
- K.L. Teo and D.W. Reid, First-Order Strong Variational Algorithm for Optimal Control Problems Involving Parabolic Systems, *Numerical Functional Analysis and Optimization*, Vol. 5, pp. 141-171, 1982.
- Z.S. Wu and K.L. Teo, First Order Strong Variation Algorithm for Optimal Control Problems Involving Hyperbolic Systems, *J. Optimization Theory and Applications*, Vol. 39, pp. 561-587, 1983.
- Z.S. Wu and K.L. Teo, A Convex Optimal Control Problem Involving a Class of Linear Hyperbolic Systems, *J. Optimization Theory and Applications*, Vol. 39, pp. 541-560, 1983.
- Z.S. Wu and K.L. Teo, A Conditional Gradient Method for an Optimal Control Problem Involving a Class of Nonlinear Second Order Hyperbolic Partial Differential Equations, *Journal of Mathematical Analysis and Applications*, Vol. 91, pp. 376-393, 1983.
- Z.S. Wu and K.L. Teo, Optimal Control Problems Involving Second Boundary Value Problems of Parabolic Type, *SIAM J. on Control and Optimization*, Vol. 21, pp. 729-757, 1983.
- K.L. Teo, Convergence of a Conditional Gradient Algorithm for Relaxed Controls Involving First Boundary Value Problems of Parabolic Type, *Numerical Functional Analysis and Optimization*, Vol. 6, pp. 457-491, 1983.

- K.H. Wong and K.L. Teo, A Conditional Gradient Method for a Class of Time-Lag Optimal Control Problems, *Journal of the Australian Mathematical Society, Series B*, Vol. 25, pp. 518-537, 1984.
- K.L. Teo, D.J. Clements, Z.S. Wu and K.G. Choo, Convergence of a Strong Variational Algorithm for Relaxed Controls Involving a Class of Hyperbolic Systems, *J. Optimization Theory and Applications*, Vol. 42, pp. 467-485, 1984.
- Z.S. Wu and K.L. Teo, Computational Algorithm for a Distributed Optimal Control Problem of a Parabolic Type with Terminal Inequality Constraints, *J. Optimization Theory and Applications*, Vol. 43, pp. 457-476, 1984.
- K.L. Teo, K.H. Wong, D.J. Clements, Optimal Control Computation for Linear Time-Lag Systems with Linear Terminal Constraints, *J. Optimization Theory and Applications*, Vol. 44, pp. 509-526, 1984.
- K.L. Teo, Convergence of a Strong Variational Algorithm for Relaxed Controls Involving a Distributed Optimal Control Problem of a Parabolic Type, *Numerical Functional Analysis and Optimization*, Vol. 7, pp. 125-144, 1984-1985.
- K.L. Teo, K.H. Wong and D.J. Clements, A Feasible Directions Algorithm for Time-Lag Optimal Control Problems, *J. Optimization Theory and Applications*, Vol. 46, pp. 295-317, 1985.
- K.H. Wong, D.J. Clements and K.L. Teo, Optimal Control Computation for Nonlinear Time-Lag Systems, *J. Optimization Theory and Applications*, Vol. 47, pp. 91-107, 1985.
- R.K. Bole, K.L. Teo and J.B. Moore, Convergence in Mean for ELS-Based Adaptive Control, *Systems and Control Letters*, Vol. 5, pp. 389-396, 1985.
- K.L. Teo and D.J. Clements, Control Parameterization Algorithm for Convex Optimal Control Problems with Linear Constraints, *Numerical Functional Analysis and Optimization*, Vol. 8, pp. 515-540, 1985-1986.
- K.L. Teo and S.J. Wilson, Convergence of a Feasible Directions Algorithm for a Distributed Optimal Control Problem of Parabolic Type with Terminal Inequality Constraints, *J. Optimization Theory and Applications*, Vol. 49, pp. 463-476, 1986.
- K.L. Teo, K.H. Wong and Z.S. Wu, An Optimal Control Problem Involving a Class of Linear Time-Lag Systems, *Journal of Australian Mathematical Society, Series B*, Vol. 28, pp. 93-113, 1986.
- J.B. Moore and K.L. Teo, Smoothing as an Improvement on Filtering in High Noise, *Systems and Control Letters*, Vol. 7, No. 5, pp. 51-54, 1986.
- K.L. Teo and K.H. Wong, A Computational Method for Time-Lag Control Problems with Control and Terminal Inequality Constraints, *Optimal Control Applications and Methods*, Vol. 8, pp. 377-395, 1987.
- K.L. Teo and C.J. Goh, A Simple Computational Procedure for Optimization problems with Functional Inequality Constraints, *IEEE Trans. on Automatic Control*, Vol. AC-32, pp. 940-941, 1987.

- C.J. Goh, C.M. Wang and K.L. Teo, Optimal Design of Multispan Continuous Cables with General Support Conditions, *Engineering Optimization*, Vol. 12, pp. 299-314, 1987.
- K.L. Teo and C.C. Lim, Time Optimal Control Computation with Application to Ship Steering, *Journal of Optimization Theory and Applications*, Vol. 56, pp.145-156, 1988.
- C.J. Goh and K.L. Teo, Control Parameterization: A Unified Approach to Optimal Control Problem with General Constraints, *Automatica*, Vol. 24, pp. 3-18, 1988.
- K.L. Teo and C.J. Goh, On Constrained Optimization Problems with Nonsmooth Cost Functionals, *Applied Mathematics and Optimization*, Vol. 18, pp. 181-190, 1988.
- K.L. Teo, B.W. Ang and C.M. Wang, Optimal Layout of Arches under Bending and Axial Compression, *Journal of Engineering Mechanics*, ASCE, Vol. 114, pp. 898-905, 1988.
- D. Williamson, K.L. Teo and P.C. Musumeci, Optimum FIR Array Filters, *IEEE Transactions on Acoustics, Speech and Signal Processing*, Vol. 36, pp. 1211-1222, 1988.
- M.E. Fisher and K.L. Teo, Optimal Insulin Infusion Resulting from a Mathematical Model of Blood Glucose Dynamics, *IEEE Transactions on Biomedical Engineering*, Vol. 36, pp. 479-486, 1988.
- K.L. Teo and C.J. Goh, A Computational Method for Combined Optimal Parameter Selection and Optimal Control Problems with General Constraints, *Journal of Australian Mathematical Society, Series B*, Vol. 30, pp. 350-364, 1989.
- K.L. Teo, N.U. Ahmed and M.F. Fisher, Optimal Feedback Control for Linear Stochastic Systems Driven by Counting Processes, *Engineering Optimization*, Vol. 15, pp. 1-16, 1989.
- C.J. Goh and K.L. Teo, Species Preservation in an Optimal Harvest Model with Random Prices, *Mathematical Biosciences*, Vol. 95, pp. 125-138, 1989.
- K.L. Teo and L.S. Jennings, Nonlinear Optimal Control Problems with Continuous State Inequality Constraints, *Journal of Optimization Theory and Applications*, Vol. 63, pp. 1-22, 1989.
- K.L. Teo, K.H. Wong and C.J. Goh, Optimal Maintenance of a System of Machines with Weakest Link Dependence Performance, *Optimal Control Methods and Applications*, Vol. 10, pp. 113-127, 1989.
- K.H. Wong and K.L. Teo, An Exact Penalty Function for Time-lag Control Problems with Control and Terminal Equality Constraints, *Computers and Mathematics with Applications*, Vol. 12, pp. 79-94, 1990.
- K.L. Teo, Y. Liu and C.J. Goh, Nonlinearly Constrained Discrete Time Optimal Control Problems, *Applied Mathematics and Computation*, Vol. 38, pp. 227-248, 1990.

- L.S. Jennings and K.L. Teo, A Computational Algorithm for Functional Inequality Constrained Optimization Problems, *Automatica*, Vol. 26, pp. 371-375, 1990.
- R.B. Martin, M.E. Fisher, R.F. Minchin and K.L. Teo, A Mathematical Model of Cancer Chemotherapy with an Optimal Selection of Parameters, *Mathematical Biosciences*, Vol. 90, pp. 205-230, 1990.
- M.E. Fisher, J.B. Moore and K.L. Teo, A Constrained H Infinity Smooth Optimization Technique, *Optimal Control Applications and Methods*, Vol. 11, pp. 327-343, 1990.
- K.L. Teo and L.S. Jennings, Optimal Control with a Cost on Changing Control, *Journal of Optimization Theory and Applications*, Vol. 68, pp. 335-357, 1991. L.S. Jennings, M.E. Fisher, K.L. Teo and C.J. Goh, MISER3: Solving Optimal Control Problems - An Update, *Advances in Engineering Software*, Vol. 13, pp. 190-196, 1991.
- C.J. Goh and K.L. Teo, Alternative Algorithms for Solving Nonlinear Function and Functional Inequalities, *Applied Mathematics and Computation*, Vol. 41, pp. 159-177, 1991.
- M.A. Lukas and K.L. Teo, A Computational Method for a General Class of Optimal Control Problems Involving Integro-Differential Equations, *Optimal Control Applications and Methods*, Vol. 12, pp. 141-162, 1991.
- C.J. Goh, C.M. Wang and K.L. Teo, Unified Approach to Structural Optimization II: Variable Segment Boundaries and Variable Interior Point Constraints, *Structural Optimization*, Vol. 3, pp. 133-140, 1991.
- K.L. Teo and K.H. Wong, Nonlinearly Constrained Optimal Control Problems, *Journal of Australian Mathematical Society, Series B*, Vol. 33, pp. 507-530, 1992.
- Y. Liu and K.L. Teo, Convergence Rate for an Approximation Approach to H-Infinity Norm Optimization Problems with an Application to Controller Order Reduction, *Automatica*, Vol. 28, pp. 617-621, 1992.
- V. Rehbock, K.L. Teo, and L.S. Jennings, A Computational Procedure for Suboptimal Robust Controls, *Dynamics and Control*, Vol. 2, pp. 331-348, 1992.
- V. Rehbock, K.L. Teo, L.S. Jennings and C.S. Lee, An Exact Penalty Function Approach to All-Time-Step Constrained Discrete-Time Optimal Control Problems, *Applied Mathematics and Computation*, Vol. 49, pp. 215-230, 1992.
- T.L. Vincent, B.S. Goh, and K.L. Teo, Trajectory-Following Algorithms for Min-Max Optimization Problems, *Journal of Optimization Theory and Applications*, Vol. 75, pp. 501-519, 1992.
- R.B. Martin, and K.L. Teo, A Worst-Case Optimal Parameter Selection Model of Cancer Chemotherapy, *IEEE Transactions on Biomedical Engineering*, Vol. 39, pp. 1081-1085, 1992.
- R.B. Martin, M.E. Fisher, R.F. Minchin, and K.L. Teo, Lower Intensity Combination Chemotherapy Maximizes Host Survival Time for Tumours

Containing Drug Resistant Cells, *Mathematical Biosciences*, Vol. 110, pp. 221-252, 1992.

- R.B. Martin, M.E. Fisher, R.F. Minchin, and K.L. Teo, Optimal Control of Tumour Size Used to Maximize Survival Time When Cells Are Resistant to Chemotherapy, *Mathematical Biosciences*, Vol. 110, pp. 201-219, 1992.
- K.L. Teo, A. Cantoni and X.G. Lin, Non-Smooth Optimization Problems in Envelope Constrained Filtering, *Applied Mathematics Letters*, Vol. 5, pp. 79-82, 1992.
- W.X. Zheng, K.L. Teo, and A. Cantoni, Robust Pole Placement: An Efficient Method, *Electronics Letters*, Vol. 28, pp. 1978-1980, 1992.
- K.L. Teo, V. Rehbock and L.S. Jennings A New Computational Algorithm for Functional Inequality Constrained Optimization Problems, *Automatica*, Vol. 29, pp. 789-792, 1993,
- K.H. Wong, K. Kaji, and K.L. Teo, The Sequential Gradient Restoration Algorithm for a Class of Optimal Control Problems: Convergence Analysis, *World Scientific Series in Applicable Analysis*, (editor: R.P. Agarwal), pp. 435-475, 1993.
- K.H. Wong, L.S. Jennings, and K.L. Teo, A Class of Nonsmooth Discrete-Time Constrained Optimal Control Problems with Application to Hydrothermal Power Systems, *Cybernetics and Systems*, Vol. 24, pp. 339-352, 1993.
- K.L. Teo, A. Cantoni and X.G. Lin, A New Approach to the Optimization of Robust Antenna Array Processors, *IEEE Transactions on Antennas and Propagation*, Vol. 41, pp. 403-411, 1993.
- V. Rehbock K.L. Teo, and L.S. Jennings, A Linear Programming Approach to On-Line Constrained Optimal Terrain Tracking Systems, *Optimal Control Applications and Methods*, Vol. 14, pp. 229-241, 1993.
- K.T. Lee, and K.L. Teo, A Game with Distorted Information, *Naval Research Logistics*, Vol. 40, pp. 993-1001, 1993.
- W.Y. Yan, K.L. Teo, and J.B. Moore, A Gradient Flow Approach to Computing LQ Optimal Output Feedback Gains, *Optimal Control Applications and Methods*, Vol. 14, 1993.
- K.L. Teo, A. Cantoni, and X.G. Lin, A New Approach to the Optimization of Envelope-Constrained Filters with Uncertain Input, *IEEE Transactions on Acoustics, Speech and Signal Processing*, Vol. SP-42, 1994.
- M. Paskota, V. Sreeram, K.L. Teo, and A.I. Mees, Optimal Simultaneous Stabilization of Linear Single-Input Systems via Linear State Feedback Control, *International Journal of Control*, Vol. 60, pp. 483-498, 1994.
- M. Paskota, A.I. Mees, and K.L. Teo, Stabilizing Higher Periodic Orbits, *International Journal of Bifurcation and Chaos*, Vol. 4, pp. 457-460. 1994.
- M.E. Fisher, W.J. Grantham, and K.L. Teo, Neighbouring Extremals for Nonlinear Systems with Control Constraints, *Dynamics and Control*, Vol. 5, pp. 225-240, 1995.

- M. Cantoni, K.L. Teo, and V. Rehbock, Suboptimal Stabilizing Control for a Class of Nonlinear Systems, *Journal of Mathematical Control and Information*, Vol. 11, pp. 311-319, 1994.
- V. Rehbock, C.C. Lim, and K.L. Teo, A Stable Constrained Optimal Model Following Controller for a Class of Nonlinear Systems, *Control - Theory and Advanced Technology*, Vol. 10, pp. 793-814, 1994.
- K.L. Teo, K.H. Wong, and W.Y. Yan, A Gradient Flow Approach to Computing Quadratic Optimal Feedback Gain Matrix, *Journal of Optimization Theory and Applications*, Vol. 85, pp. 75-96, 1995
- M. Paskota, A.I. Mees, and K.L. Teo, On Control of Chaos: Higher Periodic Orbits, *Dynamics and Control*, Vol. 5, pp. 365-387, 1995.
- L.S. Jennings, K.L. Teo, F.Y. Wang, and Q. Yu, Optimal Protein Separation, *Computers and Chemical Engineering*, *Computers and Chemical Engineering*, Vol. 19, pp. 567-573, 1995.
- M. Paskota, A.I. Mees, and K.L. Teo, Directing Orbits of Chaotic Dynamical Systems, *Bifurcation and Chaos*, Vol. 5, pp. 573-583, 1995.
- M. Paskota, A. Mees, and K.L. Teo, Geometry of Targeting of Chaotic Systems, *International Journal of Bifurcation and Chaos*, Vol. 5, pp. 1167-1173, 1995.
- W.X. Zheng, A. Cantoni, and K.L. Teo, The Sensitivity of Envelope-Constrained Filters with Uncertain Input, *IEEE Trans. Circuits and Systems*, Vol. 42, pp. 509-516, 1995.
- B. Vo, Z. Zang, A. Cantoni, and K.L. Teo, Continuous-Time Envelope Constrained filter Design Via Orthonormal Filters, *IEEE Proceedings: Vision, Image and Signal Processing*, Vol. 142, pp. 389-394, 1995.
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(D) Patent

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