CURRICULUM VITAE

Prof. Eduard Eitelberg   פרופ' אדוארד אייטלברג

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ORT Braude College, Department of Electrical & Electronic Engineering,
P.O. Box 78, Karmiel 2161002, Israel
Telephone: +972-4-990-1905
Email: Eitelberg@braude.ac.il

EDUCATION

LL.D. (*Doctor Legum*) 2004, Commercial Law. University of KwaZulu-Natal, South Africa.

LL.M. 2001 (*cum laude*), International Commercial Law. University of Durban-Westville, South Africa.

Professional Engineer 1986 – present, South Africa.

Habilitation (Dr.-Ing. habil.) 1982, Control Engineering. Universität Karlsruhe, Germany.

Dr.-Ing. 1979 (with distinction), Control Engineering. Universität Karlsruhe, Germany.

Dipl.-Ing. 1976 (with distinction), Electrical Engineering. Universität Karlsruhe, Germany.

RESEARCH INTERESTS

- Power plant modelling, simulation and control
- Numerical simulation methods
- Electrochemical phenomena at living cell membranes
- Kalman filter applications
- Quantitative feedback design
- Non-linear control
- Digital control
- Interaction in multi-loop systems
- Load sharing control
- Complex system design and operation
- Interface and transfer specifications from functional specifications
- Legal aspects of money, value, banking and international payments
- Monetary policy and regulation
- Macro-economic dynamics

ACADEMIC APPOINTMENTS

2012 – present	Head of Department, ORT Braude College, Department of Electrical & Electronic Engineering
2011 – present	Full Professor, ORT Braude College, Department of Electrical & Electronic Engineering
2010 – 2011	Post-retirement research and teaching contracts, University of KwaZulu-Natal, Department of Electrical, Electronic & Computer Engineering
2010 – present	Professor Emeritus, University of KwaZulu-Natal
2009 – 2009	Dean (acting), Faculty of Engineering, University of KwaZulu-Natal
2005 – 2009	Deputy Dean, Faculty of Engineering, University of KwaZulu-Natal
1993 – 2004	Professor of Electrical & Control Engineering (at the level of Full Professor), University of Durban-Westville
1993 – 2004	Director of Research & Development Laboratory, University of Durban-Westville
1987 – 1993	Professor and Head of Department (at the level of Full Professor), University of Durban-Westville, Department of Electrical Engineering
1983 – 1987	AECI Professor of Control (at the level of Full Professor), University of Natal, Department of Electrical Engineering
1983 (declined)	Professor of Simulation in Control, University of Hamburg-Harburg
1978 – 1983	Senior Researcher, University of Karlsruhe, Institute of Control Systems
1976 – 1978	Researcher, University of Karlsruhe, Institute of Control Systems
1974 – 1976	Tutor of Information Processing Systems, University of Karlsruhe, Faculty of Electrical Engineering
1973 – 1974	Laboratory Assistant, Technion, Faculty of Electrical Engineering

TEACHING EXPERIENCE

ORT Braude College

Post-graduate Courses:
Nil

Undergraduate Courses:
Signals and Systems
Thermodynamics
Digital Control Systems
Instrumentation

University of KwaZulu-Natal

Post-graduate Courses:
International Business Law
International Trade and Banking

Undergraduate Courses:
Modelling and Simulation
Control Systems 1
Control Systems 2
Microcontroller Programming
Digital Signal Processing
Design Project 1
Design Project 2

University of Durban-Westville

Post-graduate Courses:
International Business Law
International Trade and Banking
Optimal estimation and Kalman filtering

Undergraduate Courses:
Modelling and Simulation
Control Systems 1
Control Systems 2
Introduction to Computer Programming
Digital Electronics
Electromagnetic Field Theory
Electro-Mechanical Laboratory
Computer Interfacing Laboratory
Dynamics
Design Project 1
Design Project 2

University of Natal

Post-graduate Courses:
Optimal estimation and Kalman filtering

Undergraduate Courses:
Control Systems 1
Control Systems 2
Design Project 1
Design Project 2

University of Karlsruhe

Post-graduate Courses:
Nil

Undergraduate Courses:
Distributed Parameter Systems
Design Project

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Industry

  Post-graduate Courses:
    Kalman Filtering
    Quantitative Feedback Design
    Feedback Control Principles
    Linear Control
    Digital and Nonlinear Control

  Undergraduate Courses:
    Nil

AWARDS, HONOURS AND GRANTS

2007	Invited plenary talk at the 8th International Symposium on Quantitative Feedback Theory and Robust Frequency Domain Methods, Weizmann Institute, Rehovot, Israel.
2006	Invited plenary talk at the Control Engineering CEA/IFAC Meeting, the Public University of Navarra, Pamplona, Spain.
2005 – 2009	National Research Foundation Support Grant, South Africa.
2005	Negretti Medal of the South African Institute of Measurement and Control for the best paper (*Water circulation control during once-through boiler start-up*).
2001	Invited keynote address at the 5th International Symposium on Quantitative Feedback Theory, Public University of Navarra, Pamplona, Spain.
1994	Negretti Medal of the South African Institute of Measurement and Control for the best paper (*PID Controller Application In Frequency Domain*).
1994	Invited keynote speech at the 1994 R.O.C. Automatic Control Conference, CSIST, Lung-Tan, Taiwan R.O.C.
1992	Invited bankuet speech at the Quantitative Feedback Theory Symposium, Wright-Patterson Air Force Base, Dayton, USA.
1985 – 1994	Foundation for Research and Development Comprehensive Support Grant, South Africa.

PROFESSIONAL ACTIVITIES

ORT Braude College

2012 – present	Chairman, Electrical & Electronic Engineering Departmental Forum, ORT Braude College
2011 – present	Member, Academic Council of ORT Braude College

Government of South Africa

2008	Member of Higher Education South Africa Task Team on 'Building … High Level Skills in Local Government'

University of KwaZulu-Natal

2009	Chairman of the Engineering Faculty Board
2007	Manager of the National Innovation Competition
2005 – 2009	Chairman of the Senate Committee on Faculty and University Rules
2005 – 2009	Chairman of Staff Disciplinary Committees
2004 – 2009	Member of Senate
2004 – 2009	Member of the Academic Affairs Board, College of Agriculture Science and Engineering
2004 – 2009	Member of the Engineering Faculty Board
2004 – 2009	Chairman of the Engineering Faculty Higher Degrees Committee
2004 – 2005	Author of the Constitution of, and the Academic Rules in, the Faculty of Engineering
2004 – 2005	Member of the Academic Board of the UKZN Centre of Leadership and Innovation

University of Durban-Westville

2002 – 2003	Chairman of the Engineering Faculty Post Graduate and Research Committee
2001 – 2003	Commercial Law Project Leader, University of Durban-Westville Centre of International Law
1987 – 2003	Member of Senate
1987 – 2003	Member of the Engineering Faculty Board
1987 – 1993	Senate representative on the Buildings and Grounds Subcommittee
1987 – 1993	Senate representative on the Research Subcommittee
1987 – 1993	Engineering Board representative on the Computer Committee
1987 – 1993	Engineering Board representative on the Science, Law and Management Sciences Faculty Boards

University of Natal

1983 – 1987	Member of Senate
1983 – 1987	Member of the Engineering Faculty Board

INDUSTRY

2007	CSIR, South Africa: system audit.
2002 – 2004	ESKOM, South Africa: analysis and design of competitive energy markets and exchanges.

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2001 – 2010	ESKOM, South Africa: control of hot and warm start-up of Benson^{TM} boilers.
2001 – 2009	ESKOM, South Africa: Benson^{TM} boiler pressure, flow and thermal simulation, analysis and estimation.
1998	Control Techniques, South Africa: control and instrumentation in textiles industry.
1997	T&N Holdings, South Africa: production process design for profit (throughput, quality, constraint identification and utilisation, scheduling and regulation) and management consulting.
1997	FHE, South Africa: brazing furnace dynamic simulation program, modification of the brazing furnace control system and other contributions to a proprietary heat transfer technology project.
1997	BVQI, South Africa: ISO9001 certification of a defence equipment manufacturer.
1996 – 1997	ABB and Carlton, South Africa: process steam generation and load sharing control with multiple boilers.
1996	UEC Projects, South Africa: reverse engineering of an electro-hydraulic stabilisation system.
1995 – 1996	ABB, Sappi, and Carlton, South Africa: plantwide process functional specification.
1993 – 1996	UEC Projects and ADS, South Africa: error propagation modelling, platform and sub-system tolerance budgeting, probability design.
1993 – 1994	UEC Projects, South Africa: Naval systems engineering and integration, signal interface database design, project management.
1992	Wright Laboratories, USA: control engineering consulting.
1991 – 2011	NOY Business^{TM}, South Africa: publication and marketing of books.
1991	Sappi, South Africa: control engineering consulting.
1989 – 2000	Ultimate Instrument Contractors, ABB, Sappi, and Carlton, South Africa: design of process control systems.
1989 – 1996	Ultimate Instrument Contractors and Sappi, South Africa: instrumentation design, interlocking system design (for start-up, shut-down and safety), project management, process commissioning and tuning in pulp and paper industry.
1989 – 1992	Sappi, South Africa: chemical recovery boiler instrumentation and control.
1987	Siemens, Germany: control engineering consulting.
1986 – 1990	South Africa: creation and marketing of a graphical control system design program.
1986	Zululand Co-operative Sugar Mill, South Africa: process steam generation and load sharing control with multiple boilers.
1985 – 1996	UEC Projects, South Africa: Kalman filter application in passive sonar ranging, target motion analysis, and other algorithm and

	operator interface development projects in acoustic and sonar applications.
1984 – 1985	South Africa: translation of technical and scientific literature from various languages.
1984	Sezela Sugar Mill, South Africa: balancing of an electro-mechanical power transmission chain to avoid frequent and expensive damage to final drive.
1984	South Africa: creation and marketing of a financial book-keeping program for legal firms.
1976 – 1983	Kraftwerk Union and Siemens, Germany: Benson^{TM} boiler pressure, flow and thermal dynamics simulation.

Conferences:

2007	Member of the international organising committee, 8th International Symposium on Quantitative Feedback Theory and Robust Frequency Domain Methods, Weizmann Institute, Rehovot, Israel.
2003	Member of the local organising committee, 6th International Symposium on Quantitative Feedback Theory (in conjunction with the First African Control Conference), University of Cape Town, South Africa.
1999	Member of the local organising committee, 4th International Symposium on Quantitative Feedback Theory, University of Natal, Durban, South Africa.
1998	Member of the SAIMC Control Application Symposium organising committee, Durban, South Africa.
1996	Member of the SAIMC Control Application Symposium organising committee, Durban, South Africa.
1994	Chairman of the first bi-annual SAIMC Control Application Symposium organising committee, Durban, South Africa.
1985	Member of the organising committee, Third SACAC Symposium on 'Control Theory and Applications', University of Natal, Durban, South Africa.

Industrial Experience:

1993 – 1994	Full-time contract for naval systems engineering and integration with UEC Projects, renamed as Altech Defence Systems (ADS), South Africa.
1989 – 1990	Full-time consultant in process instrumentation and control with Ultimate Instrument Contractors (UIC), South Africa.

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1976 – 1983	Full-time contract with KWU/Siemens for power plant modelling and simulation, Germany.

LIST OF PUBLICATIONS

Refereed Papers

1   Ed. Eitelberg and Ed. Boje: (2007)
     Implicit Quasi Steady State Approximation and Application to a Power Plant Evaporator.
     ASME Journal of Dynamic Systems, Measurement and Control. Jan. 2007, Vol. 129/1, pp. 66–71.

2   Ed. Eitelberg: (2007)
     Macro dynamic feedback interaction between trade and production.
     Int. J. Robust and Nonlinear Control. Volume 17, Issue 2-3, pp. 203–224.

3   Ed. Eitelberg and C.H. Houpis: (2007)
     Isaac M. Horowitz: An essential singularity in the complex domain of control theory (1920–2005).
     Int. J. Robust and Nonlinear Control. Volume 17, Issue 2-3, pp. 95–105.

4   Ed. Eitelberg: (2006)
     On multi-loop interaction and relative and Bristol gains.
     ASME Journal of Dynamic Systems, Measurement and Control. Dec. 2006, Vol. 128, pp. 929–937.

5   Ed. Eitelberg: (2006)
     Convolution Invariance and Corrected Impulse Invariance.
     Signal Processing, Vol. 86, Issue 5, pp. 1116–1120.

6   Ed. Eitelberg and Ed. Boje: (2004)
     Water circulation control during once-through boiler start-up.
     Control Engineering Practice, Vol. 12, No. 6, pp. 677–685.
     SAIMC Negretti Medal for the best paper in 2005.

7   Ed. Boje and Ed. Eitelberg: (2003)
     Augmented Kalman filtering for a superheated steam header system.
     IEEE Transactions on Control Systems Technology. (Special Issue on Control of Industrial Spatially Distributed Processes.) Vol. 11, No. 5, pp. 773–781.

8   Ed. Eitelberg: (2003)
     Some Peculiarities of Load Sharing Control.
     Int. J. Robust and Nonlinear Control, Vol. 13, Issue 7, pp. 607–618.

9   Ed. Eitelberg: (2002)
     Autonomy of documentary credit undertakings in South African Law?
     The South African Law Journal, Vol. 119. Part 1, pp. 120–137.

10   Ed. Eitelberg (guest editor): (2001/2002)
     Editorial for the Isaac Horowitz Special Issue.
     Int. J. Robust and Nonlinear Control, Part 1: Vol. 11, Issue. 10, pp. 883–886; Part 2: Vol. 12, Issue. 4, pp. 287–288.

11   Ed. Eitelberg: (2000)
     The slope of a transfer function.
     Int. J. Control, Vol. 73, No. 13, pp. 1249–1254.

12   Ed. Eitelberg: (2000)
     Quantitative feedback design for tracking error tolerance.
     Automatica, Vol. 36, No. 2, pp. 319–326.

13   Ed. Eitelberg: (1999)
     Load sharing in a multivariable temperature control system.
     Control Engineering Practice, Vol. 7, No. 11, pp. 1369–1377.

14   Ed. Eitelberg: (1999)
     Performance of unstable control loops with limits.
     Control Engineering Practice, Vol. 7, pp. 517–522.

15   Ed. Eitelberg: (1998)
     mc2 from Newton's second law.
     Galilean Electrodynamics, Vol. 9, No. 5, p. 93.

16   Ed. Eitelberg, E. S. Boje: (1991)
     Feedback controller design for plants with modes and disturbances above the
          sampling frequency.
     Int. J. Systems Sci., Vol. 22, No. 9, pp. 1553–1562.

17   Ed. Eitelberg: (1991)
     Correspondence on 'Water-arc explosions'.
     Galilean Electrodynamics, Vol. 2, No. 4, pp. 76–77.

18   Ed. Eitelberg: (1991)
     What is the amount of matter?
     Galilean Electrodynamics, Vol. 2, No. 4, p. 75.

19   Ed. Eitelberg: (1991)
     Feed forward into local loops of plant modifying cascaded feedback systems.
     Int. J. Control, Vol. 51, No. 6, pp. 1467–1481.

20   Ed. Eitelberg, L. Heystek: (1990)
     The reduction of bias in passive range estimation.
     The Transactions of the SAIEE, Vol. 81, No. 2, pp. 13–17.

21   E. S. Boje, Ed. Eitelberg: (1989)
     On Non-Minimum Phase Behaviour in D.C. Servo Systems.
     The Transactions of the SAIEE (Special Issue on Power Drives), Vol. 80,
          No. 1, pp. 43–46.

22   J. Samuel, Ed. Eitelberg: (1989)
     Tuning Forks: The Problem of Striking.
     The Journal of Laryngology and Otology, Vol. 103, No. 1, pp. 1–6.

23   Ed. Eitelberg: (1988)
     Sampling rate design based on (1-sT/2).
     Int. J. Control, Vol. 48, No. 4, pp. 1423–1432.

24   Ed. Eitelberg: (1988)
     Continuous-time system representation with exact macro difference
          expressions.
     Int. J. Control, Vol. 47, No. 5, pp. 1207-1212.

25   Ed. Eitelberg, J. C. Balda, E. S. Boje, R. G. Harley: (1988)
     Stabilizing SSR Oscillations with a Shunt Reactor Controller for Uncertain
           Levels of Series Compensation.
     IEEE Transactions on Power Systems, Vol. PS-3, No. 3, pp. 936–943.

26   Ed. Eitelberg: (1987)
     Pole-Zero Cancellation in Discrete-Time Transfer Functions.
     Int. J. Control, Vol. 46, No. 4, pp. 1481–1483.

27   Ed. Eitelberg, J. C. Balda, R. G. Harley: (1987)
     A Model Reduction Technique Suitable for Optimal Controller Design in
           High-Order Power Systems.
     Electric Power Systems Research, No. 12, pp. 51–62.

28   Ed. Eitelberg: (1987)
     A Regulating and Tracking PI(D) Controller.
     Int. J. Control, Vol. 45, No. 1, pp. 91–95.

29   J.C.Balda, R.E.Fairbairn, R.G.Harley, J.L.Rodgerson, Ed.Eitelberg: (1987)
     Measurement of Synchronous Machine Parameters by a Modified Frequency
           Response Method - Part II: Measured Results.
     IEEE Transactions on Energy Conversion, Vol. EC-2, No. 4, pp. 652–656.

30   J.C.Balda, M.F.Hadingham, R.E.Fairbairn, R.G.Harley, Ed.Eitelberg: (1987)
     Measurement of Synchronous Machine Parameters by a Modified Frequency
           Response Method - Part I: Theory.
     IEEE Transactions on Energy Conversion, Vol. EC-2, No. 4, pp. 646–651.

31   J. C. Balda, R. G. Harley, Ed. Eitelberg: (1987)
     Damping of Torsional Shaft Oscillations in Two Interacting Neighbouring
           Turbogenerators.
     IEEE Transactions on Energy Conversion, Vol. EC-2, No. 1, pp. 108–114.

32   Ed. Eitelberg, R. G. Harley: (1987)
     Estimating Synchronous Machine Electrical Parameters from Frequency
           Response Tests.
     IEEE Transactions on Energy Conversion, Vol. EC-2, No. 1, pp. 132–136.

33   E. S. Boje, I. Horowitz, Ed. Eitelberg: (1986)
     The Application of Quantitative Feedback Theory to a Practical Plant with
           Time Delay and Parameter Uncertainty.
     The Transactions of the SAIEE, November 1986, pp. 179–185.

34   Ed. Eitelberg: (1986)
     Deterministic Optimal State Estimation.
     Automatisierungstechnik 34, No. 10, pp. 394–397.

35   J. C. Balda, Ed. Eitelberg, R. G. Harley: (1986)
     Optimal Output Feedback Design of a Shunt Reactor Controller for Damping
           Torsional Oscillations.
     Electric Power Systems Research, No. 10, pp. 25–33.

36   Ed. Eitelberg, J. C. Balda, R. G. Harley: (1986)
     Optimization of Physical Parameters in Linear Turbogenerator Controllers.
     The Transactions of the SAIEE, January 1986, pp. 12–19.

37   Ed. Eitelberg: (1985)
Comments on: 'A Method for Auto-tuning of PID Control Parameters'.
Automatica, Vol. 21, No. 4, p. 505.

38   Ed. Eitelberg: (1985)
Transformation of Nonlinear Dynamical Systems with a Single Singular
Singularly-Perturbed Differential Equation.
Int. J. Control, Vol. 41, No. 5, pp. 1301–1316.

39   Ed. Eitelberg: (1983)
A simple A2-Stable Numerical Method for State Space Models with Stiff
Oscillations.
Math. Comput. Simulation, Vol. XXV, No. 4, pp. 346–355.

40   Ed. Eitelberg, G. Roppenecker: (1983)
Comments on 'A necessary condition for optimization in the frequency
domain' and on 'Optimization and pole placement for a single input
controllable system'.
Int. J. Control, Vol. 38, No. 2, pp. 493–494.

41   Ed. Eitelberg: (1983)
State-Space for Nonlinear Algebraically Constrained Dynamical Systems.
Int. J. Control, Vol. 37, No. 6, pp. 1433–1447.

42   Ed. Eitelberg: (1982)
Model Reduction and Perturbation Structures.
Int. J. Control, Vol. 35, No. 6, pp. 1029–1050.

43   Ed. Eitelberg: (1982)
Comments on Model Reduction by Minimizing the Equation Error.
IEEE Transactions on Automatic Control, Vol. AC-27, No. 4, pp. 1000–1002.

44   Ed. Eitelberg: (1982)
Lineare optimale Regelung mit Struktureinschränkungen.
Regelungstechnik 30, Heft 5, pp. 175–180.

45   Ed. Eitelberg, M. Rode: (1982)
On model reduction and iterative calculation of optimal output feedback gains.
Int. J. Control, Vol. 35, No. 3, pp. 561–571.

46   Ed. Eitelberg: (1982)
A comment on 'The Phenomenon of Homeopatic Instability in Dynamical
Systems'.
Int. J. Control, Vol. 35, No. 1, p. 193.

47   Ed. Eitelberg: (1981)
Model Reduction by Minimizing the Equation Error.
Int. J. Control, Vol. 34, No. 6, pp. 1113–1123.

48   Ed. Eitelberg: (1981)
Eine deterministische Interpretation für die lineare optimale Regelung.
Regelungstechnik 29, Heft 6, pp. 195–197.

49   Ed. Eitelberg: (1980)
Modellreduktion für ein Tiefseeförderrohr.
Regelungstechnik 28, Heft 12, pp. 409–419.

55   Ed. Eitelberg: (1981)
Modular Simulation of Large Stiff Systems.
International Journal of Modelling & Simulation, Vol. 1, No. 1, pp. 32–36.

51   Ed. Eitelberg: (1979)
Optimale Regelung mit Hilfe der Ljapunov - statt der Riccati-Gleichung.
Regelungstechnik 27, Heft 11, pp. 370–371.

52   Ed. Eitelberg: (1979)
Numerical Simulation of Stiff Systems with a Diagonal Splitting Method.
Mathematics and Computers in Simulation XXI. pp. 109–115.

53   J. Franke, Ed. Eitelberg, G. Kallina, H. Weber, U. Witte: (1979)
Vorausberechnung des dynamischen Verhaltens eines Kraftwerksblockes.
VGB Kraftwerkstechnik 59, Heft 2, pp. 124–128.

54   Ed. Eitelberg: (1978)
Modellreduktion durch Minimieren des Gleichungsfehlers.
Regelungstechnik 26, Heft 10, pp. 320–322.

55   Ed. Eitelberg, H. Hanselmann: (1978)
Comments 'On System Realization by Matrix Generalized Inverses'.
Int. J. Control, Vol. 27, No. 4, pp. 651–652.

Books

1   Ed. Eitelberg: (2003)
Trading with Expectations: Natural and Positive Law Foundations of Monetary Value.
NOYB Press, Durban, 228 pages, ISBN 0-620-31529-6.

2   Ed. Boje and Ed. Eitelberg (editors): (2003)
Quantitative Feedback Theory and Robust Frequency Domain Methods.
Proceedings of the 6th International QFT Symposium: December 2003, University of Cape Town, South Africa, ISBN 0-620-31552-0.

3   Ed. Eitelberg: (2000)
Control Engineering.
NOYB Press, Durban, 437 pages ISBN 0-620-26359-8.

4   Ed. Boje and Ed. Eitelberg (editors): (1999)
Quantitative Feedback Theory and Robust Frequency Domain Methods.
Proceedings of the 4th International QFT Symposium: August 1999, University of Natal, Durban, South Africa, 239 pages, ISBN 1-86840-330-0.

5   Ed. Eitelberg: (1999)
Load Sharing Control.
NOYB Press, Durban, 240 pages, ISBN 0-620-23537-3.

6   Ed. Eitelberg: (1991)
Optimal Estimation for Engineers.
NOYB Press, Durban ISBN 0-620-13189-6.

7 Ed. Eitelberg: (1983)
Perturbationstechniken bei der Optimierung grosser linearer Regelungssysteme.
VDI Verlag, Duesseldorf, 222 pages, ISSN 0341-1672. (Habilitationsschrift)

8 Ed. Eitelberg: (1979)
Modellreduktion linearer zeitinvarianter Systeme durch Minimieren des Gleichungsfehlers.
HochschulVerlag, Freiburg, 94 pages. ISBN 3-8107-2117-4. (Dissertation)

Book Chapters

1 Ed. Eitelberg: (1982)
Chapter XV: Modular Simulation of Large Stiff Systems.
In 'Progress in Modelling and Simulation' (ed. F. E. Cellier). Academic Press, London, pp. 281–292.

2 G. Lausterer, Ed. Eitelberg: (1982)
Chapter 11: Experimental Applications of Distributed-Parameter Control Theory.
In 'Distributed-Parameter Control Systems: Theory and Application' (ed. S. G. Tzafestas). Pergamon Press, Oxford, New York, pp. 329–366.

3 J.Franke, G.Kallina, G.Lausterer, Ed.Eitelberg, U.Witte, H.Weber: (1980)
Kapitel VIII: Simulation des Betriebsverhaltens von Dampferzeugern.
In 'Jahrbuch der Dampferzeugertechnik'. Vol. IX, Vulkan-Verlag, Essen, pp. 541–555.

4 Ed. Eitelberg: (1978)
Numerical Simulation of Stiff Systems with a Diagonal Splitting Method.
In 'Simulation of Control Systems' (ed. I. Troch). IMACS, North Holland, pp. 95–96.

Patents

1 Ed. Eitelberg: (2010)
Method of and System for Determining Proportional and Integral Control Parameter Values for a Feedback Control System.
South African Patent No. 2010/05422, ceded to UKZN. Duration: 29 July 2010-2030

2 Ed. Eitelberg: (1990)
Electronic tuning apparatus.
RSA Patent No. 89/9392, 26 September 1990.

3 Ed. Eitelberg: (1987)
Tuning forks.
RSA Patent No. 87/0556, 30 September 1987.

Refereed Conference Papers

1   Ed. Eitelberg: (2007)
     Counsel and Command in a University.
     Invited plenary paper at the 8th International Symposium on Quantitative
          Feedback Theory and Robust Frequency Domain Methods, Weizmann
          Institute, Rehovot, Israel, July 2007.

2   Ed. Eitelberg and Resham Singh: (2007)
     Balancing an inertial wheel on a fixed-pivot inverted pendulum.
     8th International Symposium on Quantitative Feedback Theory and Robust
          Frequency Domain Methods, Weizmann Institute, Rehovot, Israel, July
          2007.

3   D. Mukosa, Ed. Boje and Ed. Eitelberg: (2006)
     Gain scheduled control of a once-through boiler during hot start up.
     SACAC Control Conference 2006, 6–7 July 2006, University of KwaZulu-
          Natal, Durban, South Africa, pp. 13–18.

4   Ed. Eitelberg: (2006)
     Macro dynamic price and production cycles.
     SACAC Control Conference 2006, 6–7 July 2006, University of KwaZulu-
          Natal, Durban, South Africa, pp. 116–119.

5   Ed. Eitelberg: (2006)
     Macro dynamic feedback interaction between trade and production.
     Invited plenary talk at the Control Engineering CEA/IFAC Meeting, 14–15
          March 2006, the Public University of Navarra, Pamplona, Spain.

6   R. F. Chidzonga and Ed. Eitelberg: (2003)
     Controlling velocity and steering for bicycle stabilisation.
     First African Control Conference, University of Cape Town, South Africa,
          December 2003, pp. 181–186.

7   Ed. Eitelberg and Ed. Boje: (2003)
     Quasi steady state modelling of an evaporator.
     First African Control Conference, University of Cape Town, South Africa,
          December 2003, pp. 169–174.

8   Ed. Eitelberg: (2003)
     On multivariable tracking.
     6th International Symposium on Quantitative Feedback Theory (in conjunction
          with the First African Control Conference), University of Cape Town,
          South Africa, December 2003, (Vol. 2) pp. 514–519.

9   Ed. Eitelberg: (2001)
     Digital Implementation of Controllers.
     5th International Symposium on Quantitative Feedback Theory, Public
          University of Navarra, Pamplona, Spain, August 2001, pp. 141–150.

10   Ed. Eitelberg: (2001)
     Some Peculiarities of Load Sharing Control.
     Invited keynote address at the 5th International Symposium on Quantitative
          Feedback Theory, Public University of Navarra, Pamplona, Spain,
          August 2001, pp. 1–7.

11   Ed. Eitelberg: (1999)
Cascaded control from the perspective of Load Sharing Control.
4th International Symposium on Quantitative Feedback Theory, University of Natal, Durban, South Africa, August 1999. Proceedings pp. 149–160, ISBN 1-86840-330-0.

12   Ed. Eitelberg: (1994)
PID Controller Application In Frequency Domain.
Invited keynote speech at the 1994 R.O.C. Automatic Control Conference, CSIST, Lung-Tan, Taiwan R.O.C., March 1994. Proceedings pp. 1–29.
The South African Institute of Measurement and Control Application Symposium, Durban, South Africa, June 1994.
SAIMC Negretti Medal for the best paper in 1994.

13   Ed. Eitelberg: (1992)
Storage size from process control bandwidth specification and the other way around.
Quantitative Feedback Theory Symposium, Wright-Patterson Air Force Base, Dayton, USA, August 1992. Proceedings pp. 264–274.

14   Ed. Eitelberg: (1992)
QFT industrial applications: past, present and future.
Invited banquet speech at the Quantitative Feedback Theory Symposium, Wright-Patterson Air Force Base, Dayton, USA, August 1992. Proceedings pp. 15–18.

15   Ed. Eitelberg: (1991)
Some neglected aspects of industrial instrumentation.
Sastech Process Control and Instrumentation Symposium, Secunda, South Africa, October 1991.

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