



# international bibliographies

(Listing of selected articles in current literatures, compiled by A. G. Corbett, M. Masubuchi, K. Fujii, W. Düchting, D. Debeljkovic, Y. Thomas, S. Johnson, and J. C. Wang, editor.)

## BIOENGINEERING

"A Model for Automatic Gain Control Observed in the Firings of Primary Auditory Neurons," Y. Ono and Y. Sujaku, *Trans. Inst. Electronics Comm. Engrs. (Japan)*, Vol. 58-D, No. 6, 1975, pp. 352-359.

"Recognition of Vowel in Connected Speech by Use of Psychological Auditory Space," Y. Kanamori and K. Kido, *Ibid.*, No. 8, 1975, pp. 465-472.

"A Method of a Speech Segments Generation in the Speech Synthesis of Monosyllables Edition," A. Ichikawa and K. Nakata, *Ibid.*, No. 9, 1975, pp. 522-529.

"A Computerized System for Optimal Filtering of Left Ventricular Pressure Data," H. Broman, J. Kvasnička, B. Liander, and E. Varnauskas, (USA), *IEEE Tran. on Biomedical Engineering*, Vol. BME-22, No. 4, July 1975, pp. 287-292.

"Automatic Focusing of a Computer-Controlled Microscope," D. C. Mason and D. K. Green, *Ibid.*, pp. 312-317.

"Limitations of Frequency Dependence as a Measure of Airway Obstruction," T. H. Shaffer, *Ibid.*, pp. 317-321.

"A Self-Contained Hydraulic Power Source for Artificial Upper Limbs," J. F. D. Marsh and R. D. McLeish, *Ibid.*, pp. 322-326.

"The Electrical Response of the Human Eye to Sinusoidal Light Stimulation," A. Troelstra and C. A. Garcia, *Ibid.*, Vol. BME-22, No. 5, Sept. 1975, pp. 369-378.

"Analog Simulation of Left Ventricular Bypass Mode Control," C. M. Anderson and W. Clark, Jr., *Ibid.*, pp. 384-392.

"Analysis and Simulation of an Adaptive System for Forced Ventilation of the Lungs," J. L. Woo and J. Rootenberg, *Ibid.*, pp. 400-411.

"A New Approach to Manipulator Control: The Cerebellar Model Articulation Controller," J. S. Albus, *Journal of Dynamic Systems, Measurement, and Control*, Trans. ASME, (USA), Vol. 97, Series G, No. 3, Sept. 1975, pp. 220-227.

"Data Storage in the Cerebellar Model Articulation Controller," J. S. Albus, *Journal of Dynamic Systems, Measurement, and Control*, Trans. ASME, (JSA), Vol. 97, Series G, No. 3, Sept. 1975, pp. 228-233.

"A Gas-Bearing Mechanism for Stable Electrical Recording from Individual Neurons in Pulsating Human Cerebral Cortex," S. R. Goldstein, E. M. Schmidt, F. L. Bierley and M. Bak, *Journal of Dynamic Systems, Measurement, and Control*, Trans. ASME, (USA), Vol. 97, Series G, No. 3, Sept. 1975, pp. 234-242.

"Automated Analysis of the Electrical Activity of the Human Brain (EEG): A Progress Report," A. S. Gevins, C. L. Yeager, S. L. Diamond, J. P. Spire, G. M. Zeitlin, and A. H. Gebins, (USA), *IEEE Proceedings*, Vol. 63, No. 10, Oct. 1975, pp. 1382-1399.

"Computer Automation of Blood-Pressure Measurements," M. J. Randall, J. P. Dejean, and J. W. Frazer, *Ibid.*, pp. 1399-1403.

"Computerized Data Acquisition and Analysis for Real-Time Electromyography in Clinical Dentistry," D. E. Geister, W. D. McCall, Jr., and M. M. Ash, Jr., *Ibid.*, pp. 1404-1414.

"Prediction of Dynamic Temperature Distributions in the Human Body," C. E. Huckaba, H. Tam, etc., (USA), *AICH Journal*, Vol. 21, No. 5, Sept. 1975, pp. 1006-1012.

"On Modelling of a Physiological System," N. G. Nath, P. Ghash and P. Kapur, *International Journal of Systems Science*, Vol. 6, No. 8, Aug. 1975, pp. 755-763.

"Simulation of Cell-Cycle Kinetics Based on a Multicompartment Model," B. Jansson, (USA), *Simulation*, Vol. 25, No. 4, Oct. 1975, pp. 99-108.

"Models of Hearing," M. R. Schroeder, (USA), *IEEE Proceedings*, Vol. 63, No. 9, Sept. 1975, pp. 1332-1350.

"Application des techniques de modelisation dans les domaines biologique et medical," J. F. Boisveix, *Congres AFCET 1975*, Toulouse, 4-6 novembre 1975, AFCET publ.

"Automatisation de prothese," P. Rabischong, A. Benzaken, *Ibid.*

"Projet Spartacus, J. Guittet, *Ibid.*"

## COMPUTER TECHNIQUES

"Least Square Approximation with Data Given at Lattice Points in Multi-dimensional Hypercube—An Algorithm Based on Random Sampling with Control Variate Method," H. Akashi and H. Kumamoto, *Trans. of the Soc. of Inst. and Control Engrs. (Japan)*, Vol. 11, No. 4, 1975, pp. 411-417.

"Hybrid Computer Method for Direct Functional Optimization," M. Andrew and G. A. Korn, (USA), *IEEE Tran. on Computer*, Oct. 1975, Vol. C-24, No. 10, pp. 958-965.

"Computer Analysis of Moving Polygonal Images," J. K. Aggarwal and R. O. Duda, *Ibid.*, pp. 966-976.

"An Experimental System for Computer Controlled Mechanical Assembly," P. M. Will and D. D. Grossman, *Ibid.*, No. 9, Sept. 1975, pp. 879-888.

"Design of Recursive Digital Filters with Optimized Word Length Coefficients," J. W. Bandler and B. L. Bardakjian, *Computer Aided Design*, Vol. 7, No. 3, July 1975, pp. 151-156.

"A Computer-Aided Design Procedure for Radial and Mixed Flow Compressors," F. J. Wallace and R. Atkey, *Ibid.*, pp. 163-170.

"Some General Remarks About Pattern Recognition: Its Definition; Its Relation with Other Disciplines; A Literature Survey," C.J.D.M. Verhagen, (USA), *Pattern Recognition*, Vol. 7, No. 3, Sept. 1975, pp. 109-116.

"Recent Progress to a Formal Approach of Pattern Recognition and Scene Analysis," J. C. Simon, *Ibid.*, pp. 117-124.

"A Feasible Computer System for Grey-Level, Pictorial Pattern Recognition," A.D.C. Holden and T. H. Morrin, II, *Ibid.*, pp. 147-156.

"On the Realization of Linear Sequential Machines from the Given Delay Transfer-function Matrix," A. K. Kamal, Harpreet Singh, S. C. Puri and N. K. Nanda, *International Journal of Systems Science*, Vol. 6, No. 8, Aug. 1975, pp. 733-740.

"Learning Pattern Recognition Techniques Applied to Stock Market Forecasting," J. Felsen, (USA), *IEEE Tran. Systems, Man and Cybern.*, Vol. SMC-5, No. 6, Nov. 1975, pp. 583-594.

"Computer Recognition of Handwritten Numerals by Polygonal Approximations," T. Pavlidis and F. Ali, *Ibid.*, pp. 610-614.

"TACL—A Timeshared Hybrid System for Control Laboratories," R. A. Volz and J. Aravens, (USA), *Simulation*, Vol. 25, No. 2, Aug. 1975, pp. 42-48.

"Using Pseudo-Linearization in Simulating the Dynamics of a Multi-component Distillation Column," H. Ju and S. Finkestein, *Ibid.*, pp. 49-54.

"Bayesian Discrimination—A Method for Choosing Among Competing Digital Simulation Models," M. B. Garman, (USA), *Simulation*, Vol. 25, No. 4, Oct. 1975, pp. 109-113.

"An Interactive Digital Simulation and Optimization Package: FORTRAN Programs MINISIM and OPTSIM," J. R. Roach and E. P. Chow, *Ibid.*, pp. 115-126.

"A Minicomputer-Controlled All-Digital Tensile Test System," J. L. Dorritt and B. E. Gilliland, (USA), *IEEE Proceedings*, Vol. 63, No. 10, Oct. 1975, pp. 1451-1459.

"A Digital Technique for Analyzing a Class of Multicomponent Signals," S. Cohn-Sfectu, M. R. Smith, S. T. Nichols, and D. L. Henry, *Ibid.*, pp. 1460-1467.

"Linear Digital Filtering for Laboratory Automation," T. A. Brubaker, F. N. Cornett, and C. L. Pomernaoki, *Ibid.*, pp. 1475-1486.

"A Computer-Automated Laboratory System in a University Environment," J. H. Tracey, H. J. Pottinger, and R. D. Rechtien, *Ibid.*, pp. 1486-1495.

"Cost Effectiveness of Computerized Laboratory Automation," R. H. Key, H. D. Ploetzener, and R. J. Gritter, *Ibid.*, pp. 1495-1502.

## CONTROL SYSTEM COMPONENTS

"A Pneumatic Function Generator," I. Yamamoto, *Trans. of the Soc. of Inst. and Control Engrs. (Japan)*, Vol. 11, No. 4, 1975, pp. 437-443.

"Output Control by Pulsewidth Adjustment of Single-phase Bridge Inverter," S. Mizuno, *Ibid.*, pp. 485-490.

"Détection à distance d'un polluant gazeux à l'aide d'un Lidar Ramaz," J. B. Mantion, G. Mauvilet, D. Perino, *Mesures (France)*, No. 4, Apr. 1975, pp. 68-72.

"Stability Criteria for Time-Varying Systems in Hilbert Space," A. Acker, *SIAM J. on Control (USA)*, Vol. 13, No. 6, Nov. 1975, pp. 1156-1171.

"Coprime Factorizations and Stability of Multivariable Distributed Feedback Systems," M. Vidyasagar, *SIAM J. on Control (USA)*, Vol. 13, No. 6, Nov. 1975, pp. 1144-1155.

"A New View of the Modal Control Technique," H. Ju, M. J. Rabins, C. D. Han, *Journal of Dynamic Systems, Measurement, and Control*, Trans. ASME, (USA), Vol. 97, Series G, No. 3, Sept. 1975, pp. 300-308.

"Anwendung der Sägezählmessung zur Messung von Wechsellspannungen," Melik-Schachnazarov, A. M., *Archiv für technisches Messen (ATM)*, (W. Germany), No. 9, S. 153 - 156, 1975.

"Les convertisseurs analogique/numérique et numérique/analogique," B. Loriferne, *Mesures (France)*, No. 9, Sept. 1975, pp. 46-55.

"Microprocesseurs, mesures, régulation, automatisme," A. Sabatier, *Ibid.*, pp. 61-69.

## ENVIRONMENTAL CONTROL

"Sequential Filter for the Distributed-Delay Model with Serially Connected Structure and Its Application to State Estimation of the Water Quality in a River," H. Tamura and N. Ueno, *Trans. of the Soc. of Inst. and Control Engrs. (Japan)*, Vol. 11, No. 4, 1975, pp. 377-383.

Downloaded from http://asmedigitalcollection.asme.org/dynamicsystems/article-pdf/98/1/104/5601723/104\_1.pdf by guest on 18 July 2024

- "Simulation of Water Quality Management Policies," J. W. Hyden, H. H. Macaulay, (USA) *Journal of the Environmental Engineering Division*, Vol. 101, No. EE4, Aug. 1975, pp. 623-641.
- "Dynamic Response of Settling Basins," S. Shiba, Y. Inour, (USA), *Ibid.*, Vol. 101, No. EE5, Oct. 1975, pp. 741-757.
- "Multiple-Criteria Optimization of Pollution Control Model," Masatoshi Sakawa and Yoshikazu, Sawaragi, *International Journal of System Science*, Vol. 6, No. 8, Aug. 1975, pp. 741-748.
- "Continuous Emission Monitoring: Objectives and Requirements," E. J. Lillis and J. J. Schueheman, *J. Air Poll. Control Assoc.*, (USA), Vol. 25, No. 8, Aug. 1975, pp. 804-809.
- "Current Technology for Continuous Monitoring of Gaseous Emissions," J. B. Homolya, *J. Air Poll. Control Assoc.*, (USA), Vol. 25, No. 8, Aug. 1975, pp. 809-814.
- "Current Technology for Continuous Monitoring of Particulate Emissions," J. S. Nader, *J. Air Poll. Control Assoc.*, (USA), Vol. 25, No. 8, Aug. 1975, pp. 814-821.
- "Rollback Modeling: Basic and Modified," N. deNevers and J. R. Morris, *J. Air Poll. Control Assoc.* (USA), Vol. 25, No. 9, Sept. 1975, pp. 943-947.
- "Generalized Rollback Modeling for Urban Air Pollution Control," T. Y. Chang and B. Weinstock, *J. Air Poll. Control Assoc.*, (USA), Vol. 25, No. 10, Oct. 1975, pp. 1033-1037.
- "Formulation and Use of Practical Models for River Quality Assessment," W. G. Hines, D. A. Rickert, S. W. McKenzie and J. P. Bennett, *J. of the WPC Fed.* (USA), Vol. 47, No. 10, Oct. 1975, pp. 2357-2370.

## FLUIDICS AND FLUID POWER CONTROL

- "Deflection Phenomena of Confined Water Jet," T. Orita, *Trans. of the Soc. of Inst. and Control Engrs.* (Japan), Vol. 11, No. 4, 1975, pp. 451-455.
- "Coanda Effect of Water Jet—The Effects of the Forms of an Element on the Velocity Distribution of the Attached Jet," O. Kinoshita and Y. Oshima, *Ibid.*, pp. 491-496.

## INSTRUMENTATION DYNAMICS

- "Dynamic Characteristics of Induction Motors for Variation of Supply Frequency," K. Nitta, et al., *Systems and Control* (Japan), Vol. 19, No. 8, 1975, pp. 446-453.
- "Infrared Radiation Techniques for Glass Surface and Temperature Distribution Measurement," R. Viskanta, (USA), *IEEE Trans. on Industry Applications*, Vol. 1A-11, No. 5, Sept./Oct. 1975, pp. 494-505.
- "Estimating the Uncertainty of Spatial and Time Average Measurements," J. S. Wyler, *J. of Eng. for Power*, TRANS. ASME, (USA), Vol. 97, Series A, No. 4, Oct. 1975, pp. 473-476.

## MAN-MACHINE SYSTEMS

- "An Algorithm for Searching the Route of the Artificial Hand," K. Kudo, M. Takata and T. Sasaki, *Trans. of the Soc. of Inst. and Control Engrs.*, (Japan), Vol. 11, No. 4, 1975, pp. 405-410.
- "Coordinated Computer Control of a Pair of Manipulators," S. Kurono, *J. of the Japan Soc. of Mech. Engrs.*, Vol. 78, No. 682, pp. 804-810.
- "An Algorithm for Computer Guidance of a Manipulator in Between Obstacles," L. A. Loeff and A. H. Soni, *J. of Eng. for Industry*, TRANS. ASME, (USA), Vol. 97, Series B, No. 3, Aug. 1975, pp. 836-842.
- "A Mathematical Theory of Man-Machine Document Assembly," S. S. Oren, (USA), *IEEE Tran. Systems, Man and Cyber.*, Vol. SMC-5, No. 5, Sept. 1975, pp. 520-526.
- "Aufgaben des Menschen in modernen Prozeßwarten," Zimmermann, R., K., Muckli, W., *Regelungstechnische Praxis*, (W-Germany), Vol. 17, No. 7, 8, 205 - 210, 1975 and Vol. 17, No. 8, S. 252 - 255, 1975.

## OPTIMIZATION TECHNIQUES

- "A Robust Conjugate-Gradient Algorithm Which Minimizes L-Functions," E. J. Davison, P. Wong, *Automatica*, (Britain), Vol. 11, No. 3, 1975, pp. 297-308.
- "On Optimal Stabilization of Linear Control Systems in the Presence of Incessant Disturbances," A. M. Meilakhas, *Avt. Telem.* (USSR), No. 8, 1975, pp. 171-174.
- "Optimal Formation of Queues in Multi-Channel Bulk Systems," A. A. Hazarov, *Ibid.*, No. 8, 1975, pp. 36-40.
- "On the Asymptotics of Trajectories of the Same Class in Optimization Problems," A. I. Pahasyuk, V. I. Panasyuk, *Ibid.*, No. 8, 1975, pp. 5-14.
- "On the Synthesis of Optimal Information Systems," V. V. Kuprianov, *Priboorostroeni*, (USSR), No. 7, 1975, pp. 35-40.
- "On the Nonstationary Problem of Optimal Control," G. E. Kolosov, *Tekhnicheskaya Kibernetika*, (USSR), No. 4, 1975, pp. 201-208.
- "A Decomposition Technique for a Polynomial Geometric Programming," K. Yoehida and K. Hirai, *Systems and Control* (Japan), Vol. 19, No. 7, 1975, pp. 391-401.
- "On a Class of Optimum Information Processing Problem in Decision Problem," K. Uchida and E. Shimemura, *Trans. of the Soc. of Inst. and Control Engrs.* (Japan), Vol. 11, No. 4, 1975, pp. 384-389.
- "A Min-Max Point Seeking Method for an Unknown Multi-Dimensional Function with Several Saddle Points," K. Kubota and T. Kitamori, *Ibid.*, pp. 418-424.
- "Algorithm of Finite Number of Iterations for the Minimum Fuel and Minimum Amplitude Control Problems," L. V. Kolev, *International Journal of Control*, Vol. 22, No. 1, July 1975, pp. 97-102.
- "Minimum Energy and Maximum Accuracy Optimal Control of Linear Stochastic Systems," J. L. Willems, *Ibid.*, pp. 103-112.
- "A Note of the Convergence of Infeasible Dynamical Hierarchical Controllers," Madan G. Singh and Jean Galy, *International Journal of Systems Science*, Vol. 6, No. 8, Aug. 1975, pp. 710-711.

- "Limiting Performance Characteristics of Steady-State Systems," B. P. Wang and W. D. Pilkey, *J. of Applied Mechanics*, TRANS. ASME, (USA), Vol. 42, Series E, No. 3, Sept. 1975, pp. 721-726.
- "Cost Equality and Inequality Results for a Partially Observed Stochastic Optimization Problem," C. C. White, (USA) *IEEE Tran. Systems, Man, and Cyber.*, Vol. SMC-5, No. 6, Nov. 1975, pp. 576-582.
- "Properties of the Random Search in Global Optimization," R. S. Anderssen and P. Bloomfield, *Journal of Optimization Theory and Application*, Vol. 16, Nos. 5/6, Sept. 1975, pp. 383-398.
- "Decomposition of the Convex Simplex Method," W. S. Hsia, *Ibid.*, pp. 399-407.
- "Stability Theorems for Infinitely Constrained Mathematical Programs," H. J. Greeberg and W. P. Pierskalla, *Ibid.*, pp. 409-428.
- "A Class of Quadratically Convergent Algorithms for Constrained Function Minimization," H. Y. Huang and A. K. Aggarwal, *Ibid.*, pp. 447-485.
- "Time-Optimal Control of Multivariable Systems Near the Origin," G. J. Olader, *Ibid.*, pp. 497-517.
- "Min-Max Control of Systems Approximated by Simple Models: Li-Type Cost Functions," M. Milanese and A. Negno, *Ibid.*, pp. 519-537.
- "The Fundamental Continuity Theory of Optimization on a Compact Space," I.M.R. Sertel, *Ibid.*, pp. 549-558.
- "Quasistatic Control Problems," M. R. Hestene, *Ibid.*, Vol. 17, Nos. 1/2, Oct. 1975, pp. 1-42.
- "Second-Order Necessary Conditions for General Problems with State Inequality Constraints," I. B. Russak, *Ibid.*, pp. 43-92.
- "A Controllability Minimum Principle," W. J. Grantham and T. L. Vincent, *Ibid.*, pp. 93-114.
- "A Saddle-Point Criterion for Convex Problems with Infinite-Dimensional Equality Constraints," M. S. Bazaraa and J. J. Goode, *Ibid.*, pp. 115-131.
- "Deterministic Optimal Maneuver Strategy for Multi-Target Missions," N. P. Dvivedi, *Ibid.*, pp. 133-153.
- "A Method of Multipliers for Mathematical Programming Problems with Equality and Inequality Constraints," S. B. Schuldt, *Ibid.*, pp. 155-161.
- "Das Luftspeicher-Gasturbinenkraftwerk Hutorf," Weber, Otto, BBC-Nachrichten (W-Germany), Vol. 57, No. 7, S. 401 - 406, 1975.

## POWER AND ENERGY SYSTEMS

- "Recherche d'optimisation des caractéristiques des transformateurs de fours à arc," X. Henry, *Revue Générale de l'Electricité* (France), t. 84, No. 7/8, July-Aug. 1975, pp. 543-548.
- "Convergence Properties of a Method for State Estimation in Power Systems," L. Ljung and S. Lindahl, *International Journal of Control*, Vol. 22, No. 1, July 1975, pp. 113-118.
- "Computer-Aided Pipe Flexibility Analysis for the Power Plant Pipe Designer," F. M. Thomas, *J. of Eng. for Power*, TRANS. ASME, (USA), Vol. 97, Series A, No. 4, Oct. 1975, pp. 633-639.
- "The Technological Requirements for Power by Fusion," D. Steiner, (USA), *IEEE Proceedings*, Vol. 63, No. 11, Nov. 1975, pp. 1568-1608.
- "Economic-Environmental Power Dispatch," J. Zahavi and L. Eisenberg, (USA) *IEEE Tran. Systems: Man, and Cyber.*, Vol. SMC-5, No. 5, Sept. 1975, pp. 485-489.
- "Comparison of Various Numerical Modelling of a Saturable Magnetic system," C. Jablon, M. Tournaire, *Revue Générale de l'Electricité* (France), t.84, No. 9, Sept. 1975, pp. 615-619.
- "Elaboration of Inter-Activated Data Processing Models in the Design of Induction Machines," P. Rafinejad, J. L. Coulomb, J. C. Sabonnadiere, *Ibid.*, pp. 620-625.
- "Modelling on Analog Computer of Electric Machines Taking Account of Inductor Saturation and Hysteresis," G. Chevallier, R. Goyet, C. Guiraudie, *Ibid.*, pp. 626-631.
- "Theoretical and Experimental Study of the Coupling of a Squirrel Cage Asynchronous Motor With an Inverter," G. Grellet, M. Ivanec, M. Lhenry, *Ibid.*, pp. 632-634.
- "Low-Level Behaviour of Relay Contacts," A. Guyetand, *Ibid.*, pp. 635-642.
- "Applications des techniques de l'automatique aux économies d'énergie," R. Chaussard, R. Perret, J. Richalet, *Congres AFCET 1975*, Toulouse, 4-6 novembre 1975, AFCET publ.
- "Problèmes de stabilité dans un grand système: réseau d'énergie électrique," J. L. Abatut, A. Achaïbou, J. Fantin, G. Mouney, *Ibid.*
- "L'automatique et les aménagements hydroélectriques du Bas-Rhône," J. Senellart, P. Morand, N. Bordie, *Ibid.*

## PROCESS CONTROL

- "An Experimental Evaluation of State Estimation in Multivariable Control Systems," D. E. Seborg, et al., *Automatica* (Britain), Vol. 11, No. 4, 1975, pp. 351-359.
- "Identification of an Electric-Arc Furnace Electrode-Control System," S. A. Billings, H. H. Nicholson, *Proc. I.E.E.* (Britain), Vol. 122, No. 8, 1975, pp. 849-856.
- "The Synthesis of Sampled Data Systems with Limited a Priori Information on the Input Processes," V. P. Perov, *Avt. Telem.* (USSR), No. 8, 1975, pp. 178-183.
- "Optimisation de la conduite des fours à arc par automates programmables ou calculateurs," A. Maitre, *Revue Générale de l'Electricité* (France), t. 84, No. 7/8, July-Aug. 1975, pp. 549-552.
- "Utilisation d'un calculateur pour la conduite d'un procédé de production de polyéthylène," J. M. Lagarrigue, D. Tauszig, A. Tosser, *Mesures* (France), No. 6, June 1975, pp. 39-51.
- "Synthèse de la commande dynamique d'un téléopérateur redondant," M. Benoit, M. Briot, H. Donnarel, A. Liegeois, M. Am Meyer, M. Renaud, R.A.I.R.O. (France), May 1975, J-2, pp. 89-103.
- "Optimum Energy Conservation in a Batch Penicillin Process," R. E. King, *International Journal of Control*, Vol. 22, No. 1, July 1975, pp. 24-38.
- "The New Integrated and Automated Production Line at Pertigalete," C. Meneses, C. Tumang, (USA) *IEEE Tran. on Industry Application*, Vol. 1A-11, No. 5, Sept./Oct. 1975, pp. 685-696.

"Übertragungsverhalten langsam veränderlicher Signale durch selbstschwingende Systeme," Kallina, G., *Regelungstechnik (W-Germany)*, Vol. 23, No. 7, S. 231-236, 1975.

"Identification et régulation numérique optimale en centrale thermique," Y. Thomas, Ph. De Larminat, D. Sarlat, A. Barraud, J. Descusse, J. M. Piasco, *Congres AFCEET 1975*, Toulouse, 4-6 novembre 1975, AFCEET publ.

"La simulation: un outil d'analyse de synthèse et d'aide à la décision," E. Daclin, J. F. Le Maître, *Ibid.*

"Automatisation de la conduite d'une unité de fabrication" J. Erchler, F. Roubellat, J. P. Vernhes, *Ibid.*

"Application de la théorie de la commande décentralisée et de la coordination au problème du refoulement optimal dans un réseau hydraulique," G. Cohen, G. Joalland, *Ibid.*

"Modélisation et optimisation d'un processus dynamique d'allocation de ressources, par application de la commande hiérarchisée," J. M. Adamo, *Ibid.*

"Modélisation des systèmes de commande numérique et leur analyse," R. Valette, J. C. Geffroy, M. Courvoisier, *Ibid.*

"L'ordinateur comme outil de maintenance des automatismes," M. Venard, *Ibid.*

"Programmable Controllers," G. Dureau, *Automatisme*, (France), t. XX, Nos. 6-7, June-July 75, pp. 276-283.

"Computer Aided Design Program for Industrial Automata," F. Prunet, D. Floutier, J. M. Dumas, *Ibid.*

"Solmer, an Important Element of Development of the French Iron and Steel Industry," P. Durand-Rival, *Revue Générale de l'Electricité (France)*, t. 84, No. 9, Sept. 1975, pp. 643-647.

"Automation Contribution to Iron and Steel Industry (as Considered by SOLMER)," P. Durand-Rival, *Ibid.*, pp. 648-649.

"Automation in Hot Rolling Mills. Problems. Developments," P. Chazal, *Ibid.*, pp. 650-658.

"Automation in Cold Rolling Mills," M. Fontaine, Y. Leclercq, *Ibid.*, pp. 659-665.

"Automation of Treatment and Finishing Strands," J. Dhers, *Ibid.*, pp. 666-673.

"Evolution and Philosophy of Industrial Automation," H. G. Rambaud, *Ibid.*, pp. 674-679.

## SPACE SYSTEMS

"The Examination of Dynamic Nonlinear Impulse Systems by Method of Liapunov," B. M. Samrikov, *Tekhnicheskaya Kibernetika*, (USSR), No. 4, 1975, pp. 170-181.

"Choix des capteurs de pression dans les programmes aérospatiaux," M. Lauzely, *Mesures (France)*, No. 6, June 1975, pp. 61-64.

"Digital Automatic Flight Control—An Introduction," B. R. Climie, (USA), *IEEE Tran. on Aerospace and Electronic Systems*, Vol. AES-11, No. 5, Sept. 1975, pp. 814-815.

"Digital Flight Control: An Approach to Efficient Design," J. C. Hall and D. L. Hemmel, *Ibid.*, pp. 816-828.

"Architecture Considerations for Digital Automatic Flight Control Systems," S. Osder, *Ibid.*, pp. 829-840.

"Digital Automatic Flight Control is the Answer—Now, What's The Question?" J. H. Boone and G. R. Flynn, *Ibid.*, pp. 862-883.

## SYSTEMS AND CONTROL THEORY

"Comparisons Practical Hierarchical Control Methods for Inter-Connected Dynamical Systems," M. G. Singh, S.A.W. Drew, J. F. Coates, *Automatica (Britain)*, Vol. 11, No. 4, 1975, pp. 331-350.

"Preservation of Controllability Under Sampling," Y. Bar-Ness, G. Langholz, *Int. J. Control (Britain)*, Vol. 22, No. 1, 1975, pp. 39-47.

"Multivariable System Design by Transfer Function Synthesis," R. V. Patel, *Int. J. Systems Sci.*, (Britain), Vol. 6, No. 9, 1975, pp. 819-832.

"Relationships Between Recent Developments in Linear Control Theory and Classical Design Techniques (Part 4)," A. G. J. MacFarlane, *Jrnl. Inst. Measurement and Control (Britain)*, Vol. 8, No. 8, 1975, pp. 319-323.

"Relationships Between Recent Developments in Linear Control Theory and Classical Design Techniques (Part 5): Conclusion," A. G. J. MacFarlane *Ibid.*, Vol. 8, No. 9, 1975, pp. 371-375.

"On the Results of Modelling Nonlinear Adaptive System," A. I. Ladik, *Priboorostroeni (USSR)*, No. 8, 1975, pp. 45-49.

"The Examination of Stability of Nonstationary Dynamic Systems," B. H. Petrov, N. I. Sokolov, *Tekhnicheskaya Kibernetika (USSR)*, No. 4, 1975, pp. 190-196.

"Comparative Analysis of Adaptive Algorithms for Estimating the Parameters of Nonstationary Plants," D. K. Velev, *Aut. Telem (USSR)*, No. 8, 1975, pp. 40-48.

"On Stability of Composite Systems with Time-Varying Interconnections," T. Mori and M. Kuwahara, *Systems and Control (Japan)*, Vol. 19, No. 8, 1975, pp. 439-445.

"On State Estimation for Linear Systems Under Measurement Noise With Markov Dependent Statistical Properties—An Algorithm Based on Random Sampling Method," H. Akashi and H. Kumamoto, *Ibid.*, No. 9, 1975, pp. 489-496.

"State Determination for Distributed Parameter Systems," T. Kobayashi, *Ibid.*, No. 9, 1975, pp. 497-504.

"An Identification of Time Varying Linear System Without a Priori Information on Variation of System Parameters," T. Okita and H. Takada, *Trans. Inst. Electrical Engrs. (Japan)*, Vol. 95-C, No. 5, 1975, pp. 107-114.

"Optimal Output Feedback Control of Linear Systems in the Presence of Step Disturbances," T. Yahagi, *Ibid.*, pp. 115-122.

"Synthesis of Multivariable Feedback Control System by Using Inverse Frequency Response," P. S. Pak, Y. Suzuki and T. Yoshimura, *Ibid.*, pp. 123-129.

"On Input-Output Structure of Linear Systems," N. Suda, *Trans. of the Soc. of Inst. and Control Engrs. (Japan)*, Vol. 11, No. 4, 1975, pp. 390-397.

"On the Stabilizability of Linear Systems with Delays," H. Mayeda and H. Yamada, *Ibid.*, pp. 444-450.

"Non-Oscillating Condition of a Relay Controlled Composite System," K. Ando and B. Kondo, *Ibid.*, pp. 456-462.

"Estimate of Transfer Functions in Multivariable Feedback Systems," M. Araki, *Ibid.*, pp. 463-468.

"Design of a Dynamic Compensator by Using the Degree of Optimality," J. Furusho, H. Kanoh and M. Masubuchi, *Ibid.*, pp. 479-484.

"Analysis and Experiments of the Torsional Electro-Hydraulic Servo Damper," Y. Okada and T. Nakada, *Trans. of the Japan Soc. of Mech. Engrs.*, Vol. 41, No. 349, 1975, pp. 2582-2590.

"A Numerical Solution for Optimal Control Problem with Discontinuity," K. Ichikawa, *Ibid.*, pp. 2597-2604.

"Use of Some Factorings for NAND-NOR Realization of Conjunctive or Disjunctive Logic Forms (Part One)," A. Tosser, E. Le Moing, *Automatisme (France)*, t. XX, No. 4, Apr. 1975, pp. 127-140.

"Dichotomie et stabilité par méthodes fréquentielles pour une classe de systèmes déterministes et stochastiques à paramètre réparti avec coefficients variables," G. Jumarie, C. R. Acad. Paris, t.280, serie A (March 10, 1975), pp. 685-688.

"Application des fonctions postiennes à la fiabilité des structures à plus de deux types d'état," M. Corazza, C. R. Acad. Paris, t.280, serie A, Mar. 10, 1975, pp. 689-692.

"Séries de Volterra et séries formelles non commutatives," M. Fliess, C. R. Acad. Paris, t.280, série A, April 14, 1975, pp. 965-967.

"Jeux différentiels structurels ou hyperjeux différentiels—Définition - Quelques propriétés - Perspectives," G. Jumarie, *Ibid.*, pp. 969-972.

"Note sur certaines propriétés des matrices de covariance et leur application à la modélisation des signaux stationnaires," G. Gueguen, *Ibid.*, pp. 973-975.

"Sur le régime dynamique d'un système échantillonné non linéaire décrit par un modèle redondant," F. Laurent, M. Romelot, C. R. Acad. Paris, t. 280, série A, April 21, 1975, pp. 1033-1035.

"Sur la stabilité de systèmes interconnectés à interactions variables," G. Bitsoris, C. Burgat, C. R. Acad. Paris, t. 280, série A, May 5, 1975, pp. 1165-1167.

"La condition hamiltonienne d'optimalité," F. H. Clarke, C. R. Acad. Paris, t. 280, serie A, May 12, 1975, pp. 1205-1207.

"Condition nécessaire d'optimalité de Pareto pour un système à commande," P. Michel, C. R. Acad. Paris, t. 280, serie A, May 26, 1975, pp. 1397-1399.

"Composition et réunion d'algorithmes généraux d'optimisation," J. C. Fiorot, P. Huard, C. R. Acad. Paris, t. 280, série A, June 2, 1975, pp. 1455-1458.

"Application de la L méthode des moments à la simulation hybride d'un problème de commande en temps minimal de systèmes à paramètres répartis," J. P. Humeau, M. Grolleau, C. R. Acad. Paris, t. 280, série A, June 16, 1975, pp. 1645-1648.

"Application de la théorie des systèmes à structure variable à la commande de systèmes à paramètres répartis," J. P. Babary, W. Pelczewski, R.A.I.R.O., May 1975, J.2, pp. 43-67.

"Reducing Energy Consumption Through Trajectory Optimization for a Metro Network," H. H. Hoang, M. P. Polis, and A. Haurie, (USA), *IEEE Tran. on Automatic Control*, Vol. AC-20, No. 5, Oct. 1975, pp. 590-595.

"Design of Piecewise Constant Gains for Optimal Control via Walsh Functions," C. F. Chen and C. H. Hsiao, *Ibid.*, pp. 596-603.

"Structure Determination and Parameter Identification for Multivariable Stochastic Linear Systems," E. Tse and H. L. Weinert, *Ibid.*, pp. 603-613.

"Design of Minimal Order Stable Observers for Linear Functions of the State via Realization Theory," J. R. Roman and T. E. Bullock, *Ibid.*, pp. 613-622.

"Minimal Order Observers for Estimating Linear Functions of a State Vector," J. B. Moore and G. F. Ledwich, *Ibid.*, pp. 623-632.

"Cone-Bounded Nonlinearities and Mean-Square Bounds—Estimation Lower Bounds," I. B. Rhodes and A. S. Gilman, *Ibid.*, pp. 632-642.

"Counterexamples to General Convergence of a Commonly Used Recursive Identification Method," L. Ljung, T. Söderström, and I. Gustavsson, *Ibid.*, pp. 642-652.

"On the Stability of the Forced Response of Digital Filter with Overflow Nonlinearities," T.A.C.M. Claasen and J.B.H. Peek, (USA), *IEEE Tran. on Circuit and Systems*, Vol. CAS-22, No. 8, Aug. 1975, pp. 692-696.

"Nonstationary Network Synthesis via State-Space Technique," S. I. Marcus and J. C. Willems, (USA), *IEEE Tran. on Circuit and Systems*, Vol. CAS-22, No. 9, Sept. 1975, pp. 713-720.

"Some Properties and Applications of Matrix Continued Fraction," L. Shieh and F. F. Gaudiano, *Ibid.*, pp. 721-728.

"Complete Identification of a Class of Nonlinear Systems from Steady State Frequency Response," S. L. Baumgartner and W. L. Rugh, (USA), *IEEE Tran. on Circuit and Systems*, Vol. CAS-22, No. 9, Sept. 1975, pp. 753-759.

"Applications of Minimum Variance Reduced State Estimators," C. E. Hutchinson, J. A. D'Appolito and K. J. Roy, (USA) *IEEE Tran. on Aerospace and Electronic Systems*, Vol. AES-11, No. 5, Sept. 1975, pp. 785-794.

"Connective Stability of Large-Scale Stochastic Systems," Gangaram S. Ladde and Dragoslav D. Siliak, *International Journal of System Science*, Vol. 6, No. 8, Aug. 1975, pp. 713-721.

"Observability in Non-Linear Systems with Unmeasurable Inputs," Sadjendra N. Singh, *Ibid.*, pp. 723-732.

"Construction of the Inverse of Linear Time-Invariant Multivariable Systems," Y. Shamash, *Ibid.*, pp. 733-740.

"Multi Person Decision Analysis in Large-Scale Hierarchical Systems—Team Decision Theory," J. D. Cole and A. P. Sage, *International Journal of Control*, Vol. 22, No. 1, July 1975, pp. 1-28.

"Preservation of Controllability Under Sampling," Y. Bar-Ness and G. Langholz, *Ibid.*, pp. 39-48.

"On the Stochastic Observability and Controllability for Non-Linear Systems," Y. Sunahara, S. Aihara and K. Kishino, *Ibid.*, pp. 65-82.

"Observability of Decentralized Discrete-Time Control Systems," T. Yoshikawa and H. Kobayashi, *Ibid.*, pp. 83-96.

"Unattainability of Certain Pole Positions in Single-Input Systems with Output Feedback," H. Seraji, *Ibid.*, pp. 119-124.

"Pole Placement in Output Feedback Control Systems for Minimum Sensitivity to Plant Parameter Variations," H. R. Srisena and S. S. Choi, *Ibid.*, pp. 129-140.

"Periodicity, Detectability and the Matrix Riccati Equation," G. A. Hower, *SIAM J. on Control (USA)*, Vol. 13, No. 6, Nov. 1975, pp. 1235-1251.

"Time-Varying Systems," M. A. Arbib and E. G. Manes, *SIAM J. on Control (USA)*, Vol. 13, No. 6, Nov. 1975, pp. 1252-1270.

"Applications and Techniques of Inners to Stability, Analysis and Synthesis," M. R. Clark, *Journal of Dynamic Systems, Measurement, and Control, TRANS. ASME, (USA)*, Vol. 97, Series G, No. 3, Sept. 1975, pp. 249-256.

"Beschreibung zeitdiskreter Systeme mit reparierbaren Systemfunktionen durch Markov-Parameter," Schwarz, H., *messen-steuern-regeln (E-Germany)*, Vol. 18, No. 9, S. 330-332, 1975.

"The Maximum Principle Under Minimal Hypotheses," F. H. Clarke, *C. R. Acad. Sc. (Paris) t.281, série A, 1er septembre 1975*, pp. 281-283.

"Some Asymptotic Phenomena of Evolution," A. Bensoussan, J. L. Lions, G. Papanicolaou, *Ibid.*, t. 281, série A, 8 septembre 1975, pp. 317-322.

"Minimization of Integral Criteria," J. P. Aubin, I. Ekeland, *C. R. Acad. Sc. (Paris) t. 281, série A, 1er septembre 1975*, pp. 285-288.

"Some Properties of Second Order Conservative Recurrent Cycles," J. L. Abatut, *C.R. Acad. Sc. (Paris) t. 281, série A, pp. 353-356*.

"Théorie de l'Automatique," J. Lagasse, *Congrès AFCET 1975, Toulouse 4-6 novembre 1975, AFCET publ.*

"Obtention de représentations d'état de systèmes multivariables linéaires à partir de réponses impulsionnelles," A. Gagalowicz, *Ibid.*

"Analyse des problèmes d'informatique et de filtrage numérique associés à l'estimation des éléments de trajectoire d'un mobile," C. Bozzo, *Ibid.*

"Comparaison de quelques algorithmes de réalisation stochastique," C. Donatelli, Ph. De Larminat, *Ibid.*

"Sur la stabilité asymptotique des systèmes complexes," C. Burgat, G. Bitar, *Ibid.*

"Contraintes et correction par la technique de poursuite," O. Badr, Z. Binder, D. Rey, *Ibid.*

"Analyse structurale et partition des systèmes complexes," M. Richetin, G. Grateloup, *Ibid.*

#### SYSTEM MODELLING AND IDENTIFICATION

"A Gaussian Sum Approach to the Multi-Target Identification-Tracking Problem," D. L. Alspach, *Automatica (Britain)*, Vol. 11, No. 3, 1975, pp. 285-296.

"Canonical Structures in the Identification of Multivariable Systems," R. Guidorzi, *Automatica (Britain)*, Vol. 11, No. 4, 1975, pp. 361-374.

"Identification of Nonlinear Systems Using Nonparametric Training Method for Threshold Logic Learning Machine," T. Hinamoto and S. Maekawa, *Trans. of the Soc. of Inst. and Control Engrs. (Japan)*, Vol. 11, No. 4, 1975, pp. 398-404.

"Algorithme d'identification récursive utilisant le concept de positivité," I. D. Landau, R.A.I.R.O., May 1975, J.2, pp. 69-87.

"Optimal Input System Identification for Homogeneous and Nonhomogeneous Boundary Conditions," R. E. Kalaba and K. Spingarn, *Journal of Optimization Theory and Application*, Vol. 16, Nos. 5/6, Sept. 1975, pp. 487-496.

"System Identification of the Machining Process," D. A. Milner, *J. of Eng. for Industry, TRANS. ASME, (USA)*, Vol. 97, Series A, No. 4, Oct. 1975, pp. 1143-1148.

"Identification of Multivalued and Memory Nonlinearities in Dynamic Processes," H. Sehitoglu and R. E. Klein, (USA) *Simulation*, Vol. 25, No. 3, Sept. 1975, pp. 86-92.

"Modèle Informatique et modèle Automatique," V. Chaptal De Chanteloup, *Congrès AFCET 1975, Toulouse 4-6 novembre 1975, AFCET publ.*

#### TRANSPORTATION

"Magnetic Suspension Control Systems for the MBB High Speed Train," E. Gottzein, B. Lange, *Automatica (Britain)*, Vol. 11, No. 3, 1975, pp. 241-284.

"Lateral Dynamics Optimization of a Conventional Railcar," N. K. Cooper, J. J. Cox and J. K. Hedrick, *Journal of Dynamic Systems, Measurement, and Control, TRANS. ASME, (USA)*, Vol. 97, Series G, No. 3, Sept. 1975, pp. 293-299.

"Measurement of Driver-Vehicule Multilop Response Properties with a Single Disturbance Input," D. T. McRuer and R. W. Allen, (USA), *IEEE Tran. Systems, Man, and Cyber.*, Vol. SMC-5, No. 5, Sept. 1975, pp. 490-497.

"La sécurité de l'atterrissage automatique," J. Plenier, *Congrès AFCET 1975, Toulouse 4-6 novembre 1975, AFCET publ.*

"Transports collectifs urbains: les systèmes électroniques d'aide à l'exploitation—un cas d'application: la ville de BESANCON," M. Cornil, H. Frey, *Ibid.*

"Automatismes assurant l'exploitation du trafic routier dans les régions, Languedoc-Roussillon, Provence-Côte d'Azur et Corse," M. Liger, C. Goisneau, *Ibid.*

"Système de navigation 4D en zone terminale d'arrivée—Analyse du problème en vue d'une solution hiérarchisée," A. J. Fossard, J. B. Filleau, M. Clique, N. Imbert, *Ibid.*

#### URBAN DYNAMICS AND SOCIAL PROBLEMS

"On the Design of an Optimal Plan for an Economic System with Stocks of Products," I. P. Boglaev, B. V. Savelyev, *Avt. Telem. (USSR)*, No. 8, 1975, pp. 48-57.

"Dynamics of Mixed Populations Having Complementary Metabolism," J. S. Meyer, A. G. Fredrickson, *Biotechnology and Bioengineering*, Vol. XVII, No. 7, July 1975, pp. 1065-1081.

"Optimal Economic Growth Under Uncertainty with Time-Lags," P. K. Rao and K. S. Reddy, *International Journal of System Science*, Vol. 6, No. 8, Aug. 1975, pp. 793-797.

"A Model for Prediction of World Food Production and Allocation," C. B. Dewitt, (USA), *Simulation*, Vol. 25, No. 3, Sept. 1975, pp. 65-85.

#### MANAGEMENT

"Stage Approach for the Evaluation and Selection of R & D Projects," A. Albala, (USA) *IEEE Tran. on Engineering Management*, Vol. EM-22, No. 4, Nov. 1975, pp. 153-164.

#### ACOUSTICS AND NOISE

"Speed Measurement Through Analysis of the Doppler Effect in Vehicular Noise," K. Jakus and D. S. Coe, (USA) *IEEE Trans. on Vehicular Tech.*, Vol. VT-24, No. 3, Aug. 1975, pp. 33-38.

"Gerauschbildung an Axialkolbenpumpen," Nilkoaus, H., *Ölhydraulik und Pneumatik (W-Germany)*, Vol. 10, No. 7, S. 535 - 539, 1975.

"Study of the Signification of a Parametre in Pattern Recognition," Ch. Berger-Vachon, G. Mesnard, *Automatisme (France)*, t. XX, No. 6-7, June-July 1975, pp. 257-267.