

# International Federation of Automatic Control

Secretariat: Schlossplatz 12, A-2361 Laxenburg, Austria - Phone (+43 2236) 71 4 47, Fax (+43 2236) 72 8 59, e-mail ifaca @serv.univie.ac.at

1995 No. 3 June

# May 1915 May 19

Contents:

Council- and Related Meetings in conjunction with the Symposium on Automation in Mining, Mineral and Metal Processing

Sun City, South Africa, August 1995

Informal Meeting of the IFAC Officers Austria, May 1995

Control Engineering Practice Volume 3, Nos 5, 6 & 7 Previews

Forthcoming Events

Papers from the Next Issues of Automatica – Issues 6 & 7 1995

No-Show Authors - An Update

IFAC Goes Electronic

## **Council- and Related Meetings**

Sun City, South Africa 25 – 28 August 1995

in conjunction with the

IFAC International Symposium on Automation in Mining, Mineral and Metal Processing 29 – 31 August 1995



Welcome to Sun City

As already briefly indicated in the last issue of the IFAC Newsletter, the IFAC Council will hold its annual meeting on August 28.

The meeting schedule provides for meetings of Technical Committees and of Coordinating Committees as well as of the Publications Managing Board, the Publications Committee and the Automatica Editorial Board on August 25, to be followed by the meetings of the Policy Committee and of the Administrative and Finance Committee on August 26. This day will also be the time for the San Francisco Congress IPC to meet, as well as for the Technical Board. The meeting of the Technical Board will be continued the subsequent day, followed by the meeting of the Executive Board. It is important to note that a large part of the meeting time is dedicated to the discussion of technical issues and of publications-related matters. It can already be stated at this point that the new structure of the Technical Board has proven itself well.

The IFAC Officials are all looking forward to going to Sun City, South Africa, to enjoy the hospitality, to exchange opinions and to decide, among others, on the Congress venue for the year 2005.

## Informal Meeting of the IFAC Officers Laxenburg, Austria May 18 – 19, 1995

On the occasion of this annual informal meeting, the IFAC Officers had the opportunity to meet the Austrian hosts of the IFAC Secretariat, i.e. representatives from the Ministry of Science and Research, from the Academy of Sciences, the Austrian NMO and the IFAC Beirat. In addition, the IFAC Officers were invited to visit the newly established premises of the IFIP Secretariat.

The fact that an increasing number of international organizations of a similar nature as IFAC are moving to Austria shows that IFAC has made a wise choice many years ago which is also illustrated by the flexibility, continuity and stability IFAC enjoys in the way the administrative workload is handled. We should like to ask our subscribers to make use of all the services provided by the Secretariat.

## **Control Engineering Practice** Volume 3 Number 5 May 1995

### Preview:

Keynote Paper: Fault Diagnosis and Neural Networks: A Power Plant Applications (G. Guglielmi, T. Parisini and G. Rossi) Specification Framework for Robust Control of a Run-of-Mine Ore Milling Circuit (I.K. Craig and I.M. MacLeod) Nonlinear Vortex Flow Control for High-Angleof-Attack Manoeuvering (J.M. Buffington and R.J. Adams) Improvement of Pyrometric Sensing in Rapid Thermal Processing via Adaptive Cancellation of Lamplight Interference (Young Man Cho and T. Kailath) Response Time Prediction for Distributed Processes Specified in CaRT-Spec (L.R. Welch, A.D. Stoyenko and T.J. Marlow) Electronic Control of a Wheelchair Guided by Voice Commands (M. Mazo, F.J. Rodriguez, J.L. Lázaro, J. Ureña, J.C. García, E. Santiso and P.A. Revenga)

Experimental Evaluations of a Kinematic

Compensation Control Method for Hydraulic Robot Manipulators (Jianjun Zhou)

Papers from the IFAC Conference on Manoeuvring and Control of Marine Craft (Guest Editor: G.N. Roberts)

Preface to the Papers from the IFAC Conference on Manoeuvring and Control of Marine Craft (MCMC '94) (G.N. Roberts)

Wave Feedforward Control of Floating Production Systems

(B.T. Linfoot and V.J.C. Wright)

The Development of a Ride Control System for Fast Ferries

(A.J. Haywood, A.J. Duncan, K.P. Klaka and J. Bennett)

Sea-Trial Experimental Results of Fin/Rudder Roll Stabilisation

(M.T. Sharif, G.N. Roberts and R. Sutton)

Special Section on Advances in Control Education (Guest Editor: K. Furuta)

Preface to the Special Section on Advances in Control Education and and series of oals if

Controls, Risk and Educational Responsibility: The Ethical/Professional Links (M.J. Rabins and C.E. Harris, Jr.)

A Strategy for Industry's Continuing Education Needs

(M.K. Masten)

Continuing Education for Applying Control Theory to Automobiles at Toyota

The National Technological University (K.N. Reid)

IFAC Meeting Papers - Keyword Listing Fault Development, Supervision and Safety for Technical Processes, June 1994, Espoo, Finland Computer Software Structures Integrating AI/KBS Systems in Process Control, August 1994, Lund, Sweden

Index of IFAC Meeting Papers **Book Reviews** Conference Calendar

## **Control Engineering Practice** Volume 3 Number 6 June 1995

## Preview:

Sensor Signal Validation Using Analytical Redundancy for an Aluminum Rolling Mill (N.D. Walker, Jr. and G.F. Wyatt-Mair) Synthesis of an Overall Boiler-Turbine Control System by a Single-Loop Auto-Tuning Technique (V. Bolis, C. Maffezzoni and L. Ferrarini)
Robust Disturbance Cancellation in an Active
Dynamic Vibration Absorber System
(T. Mizuno, M. Moriya and K. Araki)
A Knowledge Base for an Expert Identification

(K. Szafnicki and S. Gentil)

State and Parameter Estimation for Wastewater Treatment Processes Using a Stochastic Model (R, Tenno and P, Uronen)
Intelligent Sensor: Object Approach (D. Luttenbacher, S. Roth, M. Robert and

C. Humbert)
A Nonlinear Flight Controller Design for Aircraft (Jianling Wang and N. Sundararajan)

Papers from the IFAC/IFIP Workshop on Real-Time Programming (Guest Editor: W.A. Halang)

Preface to the Papers from WRTP'94: The IFAC/ IFIP Workshop on Real-Time Programming (W.A. Halang) Hierarchical Correctness Verification in Multiphase

Real-Time Software Design (T. Szmuc, P. Szwed, J.-J. Schwarz and J. Skubich) Visual Methods in Real-Time Software Design (M.G. Hinchey)

Task-Configuration of a Pearl-Based Programmable

Controller for Process Automation (G. Thiele, H.J. Beestermöller, L. Renner, M. Dorno

and D. Popovic)
Mapping PEARL'S High-Level Real-Time
Constructs to a C Run-Time Library Under Real-

(R. Belschner and C.E. Pereira)

Mechanism Requirements for a Real-Time Image-

Processing Language (P. Laplante, T. Marlowe and A. Stoyenko) An Architecture Supporting Hard Real-Time Computing (S. Mostert, H.-P. Meske and W. Halang)

An Environment for Distributed Prototyping of

Real-Time Systems (A. Alonso, J.C. Dueñas, G. León and J.A. de la

Synchronized Universal Time Coordinated for Distributed Real-Time Systems (U. Schmid)

IFAC Meeting Papers - Keyword Listing New Trends in Design of Control Systems, September 1994, Smolenice, Slovak Republic Robot Control (SYROCO '94), September 1994, Capri, Italy

Index of IFAC Meeting Papers Book Reviews Conference Calendar

## 1 Ampressum: 2 phoral linguage amount (2 3 A VI and 1

(H. Kousaka, M. Yamashita, Y. Hirano, A. Ohata Medieninhaber und Herausgeber: International Federation of Automatic Control (IFAC), Schlossplatz 12, A-2361 Laxenburg, Austria

> Verlagsort und Redaktion: Dipl.Ing. Dr. Gusztáv Hencsey Schlossplatz 12, A-2361 Laxenburg

> > Hersteller:

Artur Schefczik & Sohn August-Reuss-Gasse, A-1130 Wien

Editor: Gusztáv Hencsey Layout: Ernestine Rudas published bimonthly

## **Control Engineering Practice** Volume 3 Number 7 July 1995

#### Preview.

Keynote Paper: Hardware Compilation - A New Technique for Rapid Prototyping of Digital Systems Applied to Sensor Validation (M.P. Henry)

Self-Sensing Magnetic Bearing Control System Design using the Geometric Approach

(T. Mizuno and H. Bleuler)

Design of a Gyroscope with Minimum Error

(I. Kim, T. Kang and J.G. Lee)

Optimal Adaptive Control of Fed-Batch Fermentation Processes

(J.F. Van Impe and G. Bastin)

Towards an All-Terrain Identification Method for Models of Industrial Processes

(L. Boillereaux and J.M. Flaus)

Knowledge-Based Systems and Neural Networks for Clinical Decision-Making

(N.B. Bones, J.T. Wang, A.S. Sehmi and D.P. de Bono)

Advisor-Enhanced Real-Time System Control (D.W. Russell)

Application of Algebraic Methods to the Calculation of Steady States in Continuous Culture (C. Posten and B. Tibken)

Fault Seeding for Software Reliability Model Validation

(A. Pasquini and E. De Agostino)

Papers from the IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes (SAFEPROCESS'94) (Guest Editor: T. Ruokonen)

Preface to the Papers from the IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes (SAFEPROCESS'94) (T. Ruokonen)

(Real-Time Supervision for Diesel Engine Injection (S. Leonhardt, C. Ludwig and R. Schwarz)
Long-Term Wear Monitoring and Wear Prediction

by Means of Wear Models (P. Neuenschwander, D.E. Maurer and L. Rychlicki) Condition Monitoring and Diagnosis in a Solid Fuel Gasification Process

(Y. Majanne, P. Lautala and R. Lappalainen) An Expert-System-Based Machine Monitoring and Maintenance Management System

(M. Streichfuss and P. Burgwinkel) Application of Reliability Centred Maintenance in

the Foundry Sector (D. Richet, N. Cotaina, M. Gabriel and K. O'Reilly)

IFAC Meeting Papers - Keyword Listing System Identification (SYSID'94), Espoo, Finland

Index of IFAC Meeting Papers **Book Reviews** Conference Calendar

This Newsletter may be reproduced in whole or in part. We encourage reprinting in national and local automatic control periodicals. Acknowledgement to IFAC would be appreciated.



# FORTHCOMING EVENTS

C.old STATE (ctd.)

State of the control of the ctd.)

State of the ctd.)

		MM		Karlandhe	Sapa	PINUC Workshop
Title	contration-Stream 14 469 Sturgar, Germany	D-70	Place	Deadline	Further	Information Projects noting to the last of
Modelling and and Regional E	DRS/SEDC Symposium Control of National Conomies	July 2 - 5	Brisbane Australia	Victoria	POB E18 Queen Vi	on Manager (IFAC 95) 1 ctoria Terrace, ACT 2600, Australia /6/273 2918
System Structu	alous Pilipi II planta de la corre and Control Pi Pilipi II planta de la corre de la correda la corre de la corre	10:5 - 7 min.1 08-0 XXII	Nantes France	Munich Ostmany	F-44072 1 FAX +33	oiseau, IFAC CSSC, N, URA CNRS 823, 1, Rue de la Noe Nantes Cedex 03, France //40 372522 iseau@lan.ec-nantes.fr
System Modell Optimization	DRS Conference (17th) ling and	731-10 - 14 10311 10311 10311	Prague Czech Rep.	Beijing China, P.R.	CZ-18208 FAX +42	ezal  of Information Theory and  on, UTIA, POB 18  a Prague, Czech Rep.  1/2/824755  ip@utia.cas.cz
Large Scale Sy and Applicatio	MACS Symp. (7th)  stems: Theory  ns  machine GR create Colored  machine GR	11-13 21/1 1.Jq2	London UK	Raminia Raminia	Northamp FAX +44	ecretariat Ingineering Centre, City University Inton Square, London EC1V 0HB, UK 1/71/477 8568 895@city.ac.uk
AS-CHRS	nce tion YAC 195		Beijing China. P.R.	Theilinear Francis	Chinese A 22 Baiwa Beijing 10	Secretariat, Mr. Bin Zhang Assoc. of Automation, CAST Co nzhuang Street 00037. China, P.R. /1/832 6042
in Aerospace L	united Salewild Dept. of Cir.		Beijing China, P.R.	Daytona Reac	Ms. Li Jir Chinese A POB 2729	CA Conference Secretariating, Beijing Inst. of Control Eng. Academy of Space Technology 9, Beijing 100080, China, P.R. WAATI/1/254 3110
Recent Advance	FAC Intl. Conf. ces in Mechatronics	Dr. P	Istanbul Turkey	Fl. Lauderlak USA	Bogazici UNESCO 80815 Be	ay Kaynak University, Dept. of EE Chair on Mechatronics bek - Istanbul, Turkey /212/257 50 30 uynak@vs6410.cc.boun.edu.tr
and Metal Proc	ium (8th) Mining, Mineral ressing	29-31	Sun City South Africa	ileron Minde	MINTEK Randburg	Conference Secretariat , Private Bag X3015, 2125, RSA /11 793 2413 mod among DAGINIEU
1995 European (in cooperation	a Control Conference with IFAC) CONTROL CONTRO	Sept. 5 - 8	Rome Italy	QCD, Austrilli	"La Sapie I-00184 R FAX 39/6	ecr., D I S, Univ. degli Studi di Roma enza", Via Eudossiana 18 tome, Italy 6/44585367 ec95@itcaspur.caspur.it
Model Based E	Conference 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 - 9	Stará Lesná Slovak Rep.	Bled	IMEKO M Institute o Slovak Ad Dubravsk SK-842 1	MBB'95 Secretariat of Measurement Science cademy of Sciences a cesta 9 9 Bratislava, Slovak Rep. 7 375 943, e-mail: imeko@savba.sk
Control Educat Transfer Issues	il Sifac@itevms1.itecuer.un. Yosef Shinar	Sept. 11-12 XA 3011	Curitiba Brazil	Medica	do Paraná 80230-90 FAX +55	5 Secretariat deral de Educacao Tecnologica , Av. 7 de Setembro 3165 1 Curitiba, Paraná, Brazil /41/224-5170 ETT195@cefet.anpr.br
Low Cost Auto	tum (1/2 Acrossor Carlos Carlo	13-13	Buenos Aires Argentina	1986 AM	1022 Bue	A 95, Eng. A. T. Casucci A. Av. Callao 220 10B nos Aires, Argentina /1/374 3780
IFAC Worksho Human-Oriento Advanced Rob	ed Design of	19 - 20	Austria	Place Tel-Avisi	Floragass FAX +43 e-mail: kc	opacek, Technical University /E 318   e 7 a, A-1040 Vienna, Austria /1/504 18 359 opacek@ihrtl.ihrt.tuwien.ac.at
Automated Sys Human Skills -	stems Based on "Joint Design of d Organization"	Sept. 25 - 28	Berlin Germany	isant	D-40239 FAX +49	E GMA, Graf Recke Strasse 84 Düsseldorf, Germany /211/6214-161
	op (13th) and the state of the	AP 27 - 29	Toulouse France	California	F-31077 7 FAX+33/	NRS, 7, Avenue Colonel Roche Foulouse, France

# FORTHCOMING EVENTS (ctd.)

TEAC	DATI						
AVAIL	( ) A'H I			. 2	- 25"		7
	. JAH 1	187	ъ.		3.1		- 11
						м	

Title	1995	Place	Deadlines	Further Information
GI/GMA/IFIP/IFAC Workshop Experience with the Management of Software Projects	Sept. 27-29	Karlsruhe Germany	Pince	MSP '95, Att. Dr. R. Richter Landesamt f. Strassenwesen Krailenshalden-Strasse 44 D-70469 Stuttgart, Germany FAX +49/711/8910-502
IFAC Conference Supplemental Ways for Improving International Stability - SWIIS	Oct. 1		enderes	Dr. Alois Frotschnig Technical University, IHRT Floragasse 7 a, A-1040 Vienna, Austria FAX +43/1/504 18 359 e-mail: alois@ihrtl.ihrt.tuwien.ac.at
IFAC Workshop  Motion Control and to repeat the second of	Oct. 9 - 11	Munich Germany	Names Proper	Prof. Dr.Ing, F. Pfeiffer Lehrstuhl B f. Mechanik, TU Munich D-80290 Munich, Germany FAX +49/89/2105 3209 e-mail:ifacmoco@lbm.mw.tu-muenchen.de
IFAC/IFORS/IMACS/ISPE Symp. Information Control Problems in Manufacturing - INCOM 95	Oct. 11-13	Beijing China, P.R.	Prague Cateli I	INCOM '95 Secretariat Institute of Manufacturing Systems /720) Beijing University of Aero-Astro, POB 85 Beijing 100083, China, P.R. FAX 86/1/201 5347
IFAC Workshop Intelligent Manufacturing Systems - IMS 95	InoX NAT	Bucharest Romania	London UK Beling China	University Politehnica Bucharest Faculty of Control & Computers IMS'95, corp. ED Automatica Spl. Independentei 313, sector 6 R-77206 Bucharest, Romania FAX +40/1/3126 335 e-mail: ims95@ulise.cs.pub.ro
IFAC Workshop Intelligent Components for Autonomous and Semi-Autonomous Vehicles	A Oct.	Toulouse France	Beijing Chua.	M. Marie Thérèse Ippolito Secretariat IFAC -ICSAV'95, LAAS-CNRS 7, Ave. du Colonel Roche F-31077 Toulouse, France FAX +33/61 553577 e-mail: icasav@laas.laas.fr
IFAC Workshop Safety and Reliability in Ermerging Control Technologies	Nov.	Daytona Beach, FL USA	15 June 1995	Dr. Janusz Zalewski, Dept. of Computer Science Embry-Riddle Aeronautical Univ. Daytona Beach, FL 32114-3900, USA FAX +1/904/226 6678 e-mail:zalewski@db-erau.edu
IFAC Workshop Real Time Programming Indianasa & Society and Indianasa & Indian	Nov. 6-10		1 July 1995	Dr. Phil Laplante Dept. of Math and Computer Science Fairleigh Dickinson University 285 Madison Avenue, Madison, NJ 07940, US. FAX+1/201 593 8886 e-mail: laplante@fdu.edu
FIP/IFAC Working Conference Models and Methodologies for Enterprise Integration	Nov. 8 - 11	Heron Islands QLD, Australia	Rosne	Angela Laffey, Conference Secretary Australian Computer Society POB 135 Aspley (Brisbane) Queensland 4034, Australia FAX +61/7/263 7020 e-mail: ei95@cit.gu.edu.au
IFAC Workshop Artificial Intelligence in Real-Time Control	Nov. 29 - Dec. 1		Stari La Slovak	Dr. Jus Kocijan Faculty of El. & Computer Engg. Univ. of Ljubljana, Trzaska 25, SL-61000 Ljubljana, Slovenia FAX +386/61/264 991 e-mail:Jus.Kocijan@fer.uni-lj.si
IFAC Symposium Control of Power Plants and Power Systems	Dec. 6 - 8	Cancun Mexico	Carifolis Brazil	Dr. Roberto Canales/SIPOWER'95 Instituto de Investigaciones Electricas AP 475, Cuernavaca, Mor. 62000, Mexico FAX +52/73/189 535 e-mail: Sifac@iievms1.iiecuer.unam.mx
FAC Workshop Control Applications of Optimization	Dec. 19 - 21		incono. Arterni	Prof. Yosef Shinar Faculty of Aerospace Engineering Technion, Technion City, Haifa 32000, Israel FAX +972/4 231848 e-mail: aer4301@technion.technion.ac.il
P. Kopacek, Technical University /E SItiT		Place	Deadline	Further Information
FAC Workshop (4th) Artificial Intelligence in Economics and Management	January 8 - 10	Tel-Aviv Israel	Bortin Germu	Prof. Phillip Ein-Dor Faculty of Management Tel-Aviv University, Tel-Aviv 69978, Israel FAX +972/3/6409560 e-mail: eindor@taunivm.bitnet
IFAC WORLD CONGRESS  Indicated Supplies of the Congress of the		SAN FRANCISCO California USA	30 June 1995	IFAC '96 POB 111, Mabelton GA 30059 USA Phone +1/708/491-3641 FAX +1/708/491-4455 e-mail: ifac96@nwu.edu

# FORTHCOMING EVENTS (ctd.)

Title	1997	Place	Deadline	Further Information
IFAC Symposium (3rd) Modelling and Control of Biomedical Systems		Warwick Van	Sept. 1996	Prof. K. Godfrey, Dept. of Engineering University of Warwick Coventry CV4 7AL, UK FAX +44/1203/418922
FAC/IEEE Symposium Computer-Aided Control Systems Jesign - CACSD 97			1 Oct. 1996	Prof. Luc Boullart University of Ghent, Campus Ardoyen Technologiepark - Zwijnaarde, 9 B-9052 Zwijnaarde, Belgium FAX +32/9/264 5839 e-mail: boullart@autoctrl.rug.ac.be
MEKO/IFAC Congress lew Measurements - Challenges and Visions	June 2 - 6	Tampere Finland	A Carried Carriers (L. P. L. Carriers)	Prof. O. Aumala, TTKK/MIT POB 692, SF-33101 Tampere, Finland FAX +358/31 316 2171
997 American Control Conference in cooperation with IFAC)	June 4-6	Albuquerque, NM USA	15 Sept. 1996	Prof. A. Haddad AACC Secretariat, Dept. of EECS Northwestern University 2145 Sheridan Road Evanston, IL 60208-3118, USA FAX +1/708/491-4455 e-mail: ahaddad@chair.eecs.new.edu
FAC Symposium (3rd) Itelligent Components and Instruments for Control Instruments for Control Instruments for SICICA '97	June 9 - 11	Annecy France	1 Sept. 401101/1	Prof. Laurent Foulloy LAMII/CESALP, BP 806 F-74016 Annecy, France FAX +33/50 66 60 20 e-mail: foulloy@univ-savoie.fr
FAC Symposium obust Control Design	molifi June singui 25-27 tallis a	Budapest Hungary	30 Sept. 1996	Ms. Csilla Banyasz Computer and Automation Res. Inst. POB 63, H-1518 Budapest, Hungary FAX +361/1667 503 e-mail: h10kev@huella.bitnet
997 European Control Conference n cooperation with IFAC)		Brussels Belgium	1Sept. 1996	M. Gevers/G. Bastin CESAME, Batiment Euler B-1348 Louvain la Neuve, Belgium FAX +32/10/472 180 e-mail: gevers@auto.ucl.ac.be
FAC/(IFORS) Symposium (11th) ystem Identification - SYSID '97	July 8 - 11	Fukuoka Japan 104444 WOT	1 Sept. 1996	Prof. N. Suda Dept. of Systems Engineering Osaka University 1-3 Machikaneyama-cho, Toyonaka 560 Japan FAX +81/6/857 7664
FAC Symposium (4th) dvances in Control Education CE 97	arty but every a	Istanbul Turkey		Gümüssuyü 80191, İstanbul Turkey FAX +90/212-245 0795 e-mail: mkdnib@tritu.bitnet
997 Asian Control Conference n cooperation with IFAC)	July 22-25	Seoul Korea, Rep.	1 Sept. 1996	Prof. Dong-il Cho 1997 ASCC Secretariat Automation and Systems Res. Institute Seoul National University, Bldg. 133 Kwanak-ku, Shinrim-dong, San 56-1 Seoul 151-742, Korea, Rep. FAX +82/2/889-4239 e-mail: ascc@asri.snu.ac.kr
FAC/(CIGRE) Symposium Control of Power Plants and Power systems	August 18 - 21	Beijing China, P.R.	31 May 1996	Chinese Association of Automation POB 2728, Beijing 100080, China FAX +861/25 45 229
FAC Symposium ault Detection, Supervision and afety for Technical Processes - AFEPROCESS '97	August 25 - 28	Hull More to UK as a separate set of the control of	30 Sept. 1996	Hull University Hull HU6 7RX, UK FAX +44/482/466664 e-mail: r.j.patton@e-eng.hull.ac.uk
deadline not yet known deadline past				ning of Estrockening Stanton Linux WO  zarkaning under Ego-gair Cheftyndon w  Verl Er Drawning Er Er Gwilson w  zarkaning



A Journal of IFAC the International Federation of Automatic Control

Papers From the June 1995 Issue

#### Papers

Output Feedback Variable Structure Control Design (R. El-Khazali, R. Decarlo) Comparison of Linear, Nonlinear and Neuralnetwork-based Adaptive Controllers for a Class of Fed-batch Fermentation Process (J.D. Boskovic, K.S. Narendra) Nonlinear Controller for an Inverted Pendulum Having Restricted Travel (O.F. Wie, W.P. Dayawansa, W.S. Levine) Nonlinear Control of a Swinging Pendulum (C.C. Chung, J. Hauser) Feasibility and Stability Results for Constrained Stable Generalized Predictive Control (J.A. Rossiter, B. Kouvaritakis, J.R. Gossner A Formula for Computation of the Real Stability (Li Qiu, B. Bernhardsson, A. Rantzer, E.J. Davison, P.M. Young, J.C. Doyle)

#### **Brief Papers**

Ouantitative Robust Performance Design with Minimal Cost of Feedback (Chih-Yuan Chen, Ming-Hwei Perng) Geometric Minimization under External Equivalence for Implicit Descriptions (M.E. Bonilla, M. Malabre) Fast Subspace-based System Identification; An Instrumental Variable Approach (Young Man Cho, T. Kailath) Pole-Zero Representation of Descriptor Systems (P. Misra, P. van Doren, V. Syrmos) On the Use of an SPSA-based Model-free Controller in Quality Improvement (F. Rezayat)

## Technical Communiques

Memoryless H∞ Controller Design for Linear Systems with Delayed State and Control (Han Ho Choi, Myung Jin Chung) Comments on 'On the Stability of Discrete-time Linear Interval Systems' (T. Mori, H. Kokame)

## Book Reviews

Computations Optimal Control, by R. Bulirsch and D. Kraft (J. Fidler) Solving Control Engineering Problems with MATLAB, by K. Ogata (P. Nedoma)

Papers from the July 1995 Issue

## Papers

Gap Metric Problem for MIMO Delay Systems: Parametrization of All Suboptimal Controllers (O. Toker, H. Özbay) Global Tracking Controllers for Flexible-joint Manipulators: A Comparative Study (B. Brogliato, R. Ortega, R. Lozano) Consistent Parameter Bounding Identification for Linearly Parametrized Model Sets (R.G. Hakvoort, P.M.J. van den Hof) Stability of Polymerization Reactors Using I/O Linearization and a High-gain Observer (F. Viel, E. Busvelle, J.P. Gauthier)

## Brief Papers

Parallel Algorithms for Optimal Control of Weakly Coupled and Singularly Perturbed Jump Linear Systems

(I. Borno, Z. Gajic)

Position Tracking Control of an Induction Motor via Partial State Feedback

(J. Hu, D.M. Dawson, Y. Qian)

Automatic Tuning of Decentralized PID Controllers for TITO Processes

(Z.J. Palmor, Y. Halevi, N. Krasney)

Structural Properties of Large-scale Systems Possessing Similar Structures

(Guang-Hong Yang, S-Ying Zhang)

A Bias-correction Method of Indirect Identification of Closed-loop Systems

W.X. Zheng, C.B. Feng)

Multiple-criterion Control: A Convex Programming

(J.R.H. Carvalho, P.A.V. Ferreira)

Variable Structure Control of Time-delay Systems with a Simulation Study on Stabilizing Combustion in Liquid Propellant Rocket Motors

(Feng Zheng, Mian Cheng, Wei-Bing Gao) Fault Detection and Isolation by a Continuous Parity Space Method

(A. Medvedev)

A Unified Loop Transfer Recovery Approach to Robust Control Using Ho -Optimization Methods (L. Turan, D. Lewis Mingori) Nonlinear Adaptive Control of Feedback Passive

Systems

(M.M. Seron, D.J. Hill, A.L. Fradkov)

## Technical Communiques

Popov Criterion for Uncertain Linear Multivariable Systems (D.S. Bernstein, W.M. Haddad, A.G. Sparks)

#### **Book Reviews**

Digital Simulation of Dynamic Systems: A Control Theory Approach, by T.T. Hartely, G.O. Beale, S. Chicatelli (J. Böhm)

## No-Show Authors An Update

In our Newsletter issue No. 6/1994 (December 1994) we published a message from the President dealing with problems organizers have with noshow authors. The article has been cause of numerous comments and letters to the editor which were published in the AACC Newsletter.

Below find a summary of the comments and responses that have been received and the reaction to them by Professor Stephen Kahne.

The original article set out from the following premise: No-show authors are unethical and their unacceptable behaviour should be stopped. There was a number of thoughtful suggestions to improve on this basic proposal. It was suggested that explicit correspondence with the offender be initiated before any 'blackball list' or other drastic action is taken. The assertion was that what may appear to be a noshow situation may in fact have been something

One writer described his attempts to act responsibly when he found himself in the conference city after a long trip but having fallen seriously ill. He tried from his sickbed to call the organizers at the conference site but in his state of health in a foreign city he was unable to inform the organizers of his problem. Surely he should not be classified as a

Another writer described his attempts to contact the organizers about one week before the conference in a distant land. Email attempts failed even though email addresses were published by the organizers. In this case it was the organizers who failed to follow through with useable communications

Still another writer explained that he is physically disabled and unable to get to conferences even though, with substantial local help, he can continue to contribute to the field. He thought that conference papers submitted but not presented represented one means of getting his work exposed. This is a particularly interesting case and one which deserves attention. According to Professor Kahne, special arrangements should indeed be made for such individuals. These arrangements could consist of having others present his work at the conference, or, in deference to the person's complicated situation, he should request special treatment by the organizers and ask that his paper be included in the Postprint volume with a note that the paper would not be presented because of special circumstances. Clearly, this is not the source of most of the occurring no-show problems.

One author complained that he was forced into a no-show situation because the conference organizers insisted that the actual authors must make the presentation. This is a harsh rule but one which, if stated at the outset of the paper solicitation process, is certainly ethical. No-show responses are still not appropriate in such cases. But the burden is on the organizers to state the rules up front. Of course there was also a number of commentators who proposed solutions such as up-front deposits at the time of submission. The President of IFAC, after having given this much thought states that in his opinion this would be unfair to authors from certain countries and organizations in which such practice is either illegal or otherwise prohibited. It would be unfair to do this for all authors just to ferret out the few potential offenders.

Finally, the President urges caution when contemplating black lists or other measures. The situation must be understood completely in all cases. The rules for the meeting must be stated explicitly in the Call for Papers and other announcements and organizers must insist on feedback from apparent offenders before taking draconian measures. To the authors, the President states that ethical standards are of supreme importance in any professional field, not the least in automatic control.

In conclusion, the President states: 'Our professional integrity is the most important attribute we have and the potential impact of unethical behaviour may destroy a career'

## **IFAC Goes Electronic**

In IFAC, discussions are under way to extend electronic services. Currently already, most of the information provided in this still paper-based Newsletter is available on our Information Server in Spain which is accessible with the following user commands:

gopher gopher.eunet.es or, if you are using mosaic mosaic gopher://gopher.eunet.es

In the not too distant future it is planned to alternatively offer the Newsletter in electronic form, where it can then be obtained by the user directly from a server, or, if no other possibility exists, to continue with the paper-based version.

It would be assured, however, that all services to IFAC Affiliates would remain untouched by going electronic.

We should be pleased to have your input, suggestions and comments on these plans.