

News and Announcements

3rd IFAC/IFORS Conference on Dynamic Modelling and Control of National Economies, Warsaw, June 16—19, 1980.

The Conference has gathered some 180 scholars from 27 countries. During it 63 formal papers were presented. Lectures and discussions were organized into plenary and parallel sessions. The first included invited papers by J. Bray, B. Martos, P. Nepomiatshy and K. K. Valtukh, devoted to the fundamental aspects of modelling the national economies. The parallel sessions were set up according to the following themes: National Models (2 sessions), Sectoral Models (2), Regional Models (2), Monetary and Fiscal Models (1), and, more on the methodological side, Theory of Modelling (2), Econometric Forecasting and Estimation (2), Optimization Methods (1), and Software Tools (1). Besides that two Round Table discussions took place, one devoted to Dynamic and Control Aspects of Economic Modelling, and the other to Interaction Between Decision Makers and Model Builders.

It could be noticed during the Conference that the focus of analyses has moved further away from the classical methodological modelling considerations towards the problems of adequacy for the real-life decision-making and debate applications. In fact, there were just about 15 models presented out of the total of 63 in which theoretical dynamic optimization and identification problems were given priority. Most of the papers and discussions stressed the necessity of compliance with the decision-making reality, even at the cost of some loss in sophistication. In this search for adequacy, however, the emphasis has switched from the estimation and testing methods, analysis of systems with time-delays or with distributed parameters, nonlinear differential equations, and — more recently — stochastic phenomena, towards the interaction between model builders and decision makers. Thus, there has been increasing attention to interactive modelling, softness in description, multi-criterial methods and gaming applications. The number of papers devoted to these subjects at the Conference has just surpassed the number of those concerned with the classical methodological problems. Similarly, the round table discussion on model builders vs. decision makers turned into a lively debate over attitudes, models' credibility and their possible roles. In such discussions it has also been repeatedly emphasized that besides the current of custom-modelling, which may end up with policy applications but hinder scientific value, there should be a current of mutual model-based learning of the system's mechanisms and optimality

rules. Hence, there was a call for maintenance of the scientific rigour while facilitating the application conditions. Intuitive and counterintuitive features of the model structures and results do play here an important role.

It is hoped that the problems mentioned can be solved over time via elaboration of operative, well-tested control theoretic or other formal models, be it of particular subsystems or of the whole of economy whose results, even though perhaps not fully reflecting the economic systems, can be effectively compared to real performances. Such models, theoretically justified and integrating appropriate relevant elements of reality, still, however, come from a rare species.

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**2nd National Conference on Automatization of Discrete
Industrial Processes, Kozubnik k/Porąbki, April 24—26, 1980.**

Organized by: Institute of Automatic Control of the Silesian Technical University and the Committee of Automatic Control and Cybernetics of the Polish Academy of Sciences.

Topics:

- theoretical aspects of automatization of discrete industrial processes;
- optimal scheduling;
- economic effects analysis;
- implementation of computerized techniques;
- robots applications.

**Conference on Modelling and Optimization Methods of Energy Systems
in Conditions of Uncertainty, Jabłonna, June 2—7, 1980.**

Organized by: Department of Energetics Problems of the Institute of Fundamental Technological Research of the Polish Academy of Sciences, in cooperation with the Office of Scientific Personnel and Personal Affairs of the Polish Academy of Sciences.

**5th Polish-Italian Symposium on Applications of Systems
Theory to Economics, Management and Technology,
Toruń, June 11-16, 1980**

The symposium was organized by the Centre of Systems Theory and Automatic Control (C.S.S.C.A.) of the National Research Council (C.N.R.) — from the Italian side, and by the Systems Research Institute of the Polish Academy of Sciences in cooperation with the Ministry of chemical Industry and with the Institute of Economics of Chemical Industry — from the Polish side.

The Symposium was attended by about 60 scientists representing both countries, between them leading representatives working in control theory, optimization methods, systems analysis and various branches of economics. The Italian scientists represented several universities and research institutes in Rome, Milan, Turin and Genoa. The group of the Polish participants consisted of representatives of many research institutes, technical universities and economic academies in Warsaw, Cracow, Wrocław, Katowice and Poznań.

The debates were chaired by Prof. Władysław Findeisen (Technical University of Warsaw, Institute of Automatic Control), Prof. Roman Kulikowski (Polish Academy of Sciences, Systems Research Institute, Warsaw), Prof. Siro Lombardini (Institute of Political Economy, Turin) and Prof. Antonio Ruberti (University of Rome, Institute of Automatic Control).

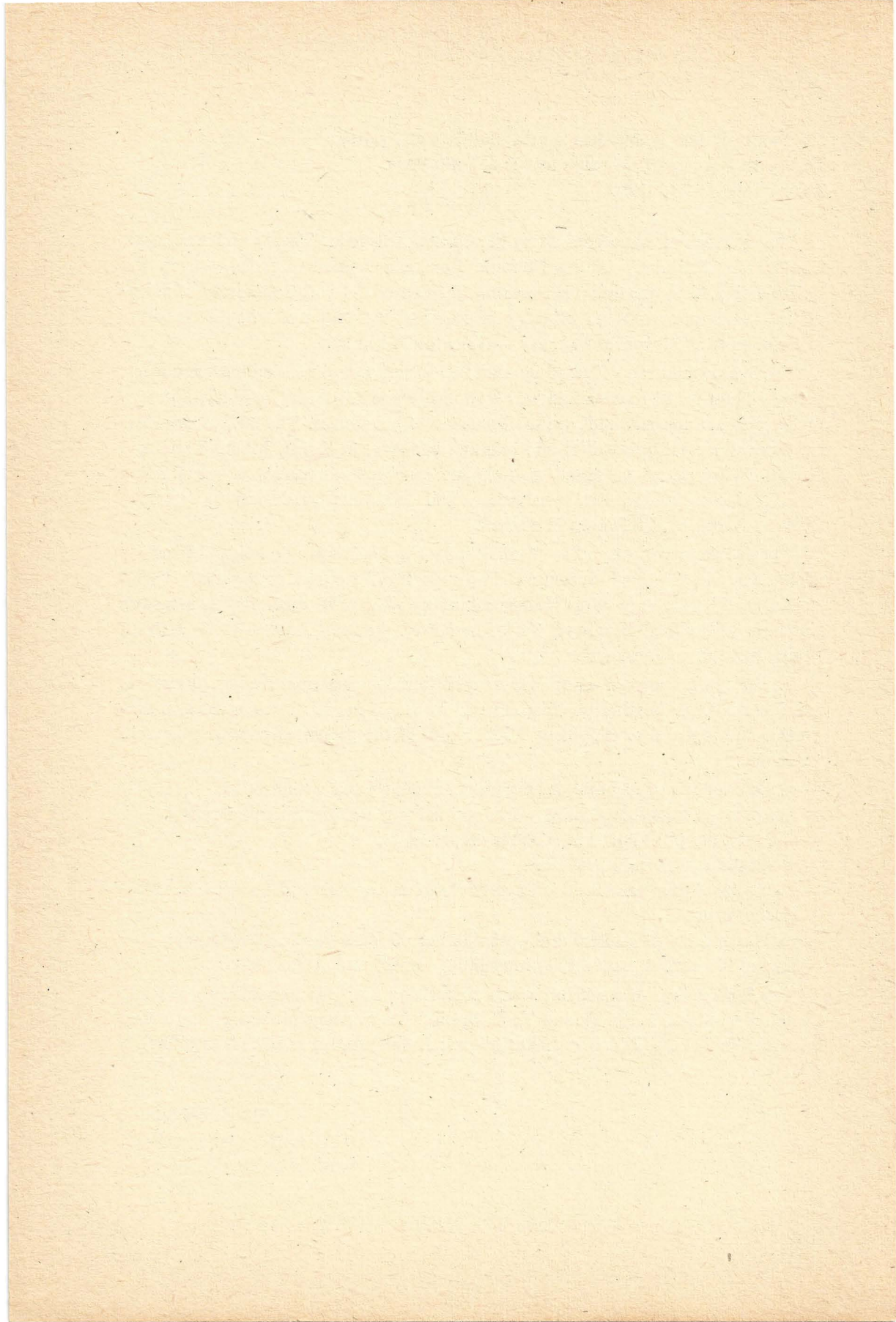
The scientific program comprised 45 contributions presented during 10 sessions and Round Table Session on "Experiences in use of models in economics, management and regional development". The topics of the presented papers covered in particular:

- various aspects of regional development modelling and optimization,
- a number of questions arising in decision making and planning problems,
- discontinuity phenomena in economical processes,
- economic equilibrium problems,
- various problems associated with control and management of complex technological systems,
- various aspects of control and optimization of water resources systems,
- several theoretical problems of modelling, control and optimization.

The Proceedings of the Symposium comprising both the presented papers and the panel addresses at the Round Table Session have been published by the Polish Scientific Publishers (PWN) in 1980 (Editors: J. Gutenbaum and M. Niezgódka).*

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*) See also the short paper of S. Lombardini, published in this volume (pp. 219-223).



Recommendations for the Authors

“Control and Cybernetics” publishes original papers which have not previously appeared in other journals. The publications of the papers in English is recommended. No paper should exceed in length 20 type written pages (210×297 mm) with lines spaced and a 50 mm margin on the lefthand side. Papers should be submitted in duplicate. The plan and form of the paper should be as follows:

1. The heading should include the title, the full names and surnames of the authors in alphabetic order, the name of the institution he represents and the name of the city or town. This heading should be followed by a brief summary (about 15 typewritten lines).

2. Figures, photographs, tables, diagrams should be enclosed to the manuscript. The texts related to the figures should be typed on a separate page.

3. Of possible all mathematical expressions should be typewritten. Particular attention should be paid to differentiation between capital and small letters. Greek letters should as a rule be defined. Indices and exponents should be written with particular case. Round brackets should not be replaced by an inclined fraction line.

4. References should be put on the separate page. Numbers in the text identified by references should be enclosed in brackets. This should contain the surname and the initial of Christian names, of the author (or authors), the complete title of the work (in the original language) and, in addition:

- a) for books — the place and the year of publication and the publisher's name;
- b) for journals—the name of the journal, the number of the volume, the year of the publication, and the ordinal number.

Wskazówki dla autorów

W wydawnictwie „Control and Cybernetics” drukuje się prace oryginalne nie publikowane w innych czasopismach. Zalecane jest nadsyłanie artykułów w języku angielskim. W przypadku nadesłania artykułu w języku polskim Redakcja może zalecić przetłumaczenie na język angielski. Objętość artykułu nie powinna przekraczać 1 arkusza wydawniczego, czyli ok. 20 stron maszynopisu formatu A4 z zachowaniem interlinii i marginesu szerokości 5 cm z lewej strony. Prace należy składać w 2 egzemplarzach. Układ pracy i forma powinny być dostosowane do niżej podanych wskazówek.

1. W nagłówku należy podać tytuł pracy, następnie imię (imiona) i nazwisko (nazwiska) autora (autorów) w porządku alfabetycznym oraz nazwę reprezentowanej instytucji i nazwę miasta. Po tytule należy umieścić krótkie streszczenie pracy (do 15 wierszy maszynopisu). Autorów polskich obowiązuje załączenie tekstu streszczenia i tytułu pracy w języku polskim i w razie możliwości w języku rosyjskim.

2. Materiał ilustracyjny powinien być dołączony na oddzielnych stronach. Podpisy pod rysunki należy podać oddzielnie.

3. Wzory i symbole powinny być wpisane na maszynie bardzo starannie.

Szczególną uwagę należy zwrócić na wyraźne zróżnicowanie małych i dużych liter. Litery greckie powinny być objaśniane na marginesie. Szczególnie dokładnie powinny być pisane indeksy (wskaźniki) i oznaczenia potęgowe. Należy stosować nawiasy okrągłe.

4. Spis literatury powinien być podany na końcu artykułu. Numery pozycji literatury w tekście zaopatruje się w nawiasy kwadratowe. Pozycje literatury powinny zawierać nazwisko autora (autorów) i pierwsze litery imion oraz dokładny tytuł pracy (w języku oryginału), a ponadto:

a) przy wydawnictwach zwartych (książki) — miejsce i rok wydania oraz wydawcę;

b) przy artykułach z czasopism: nazwę czasopisma, numer tomu, rok wydania i numer bieżący.

Pozycje literatury radzieckiej należy pisać alfabetem oryginalnym, czyli tzw. grażdanką.