# **PROGRAM**

## PLENARY SESSIONS Ho-O-no-Ma, Tokyo Prince Hotel 2F

### June 1 (Monday)

10:00 - 12:00 Opening Session

#### Greetings

Tadashi Sekizawa President of ICOT Hidehiko Tanaka Conference Chairperson

#### Opening Address

Kozo Watanabe Minister of International Trade and Industry

#### **Keynote Speeches**

Perspective on Information Technology Policy
Hideaki kumano Director General of Machinery and Information Industries Bureau, MITI

Launching the New Era

Kazuhiro Fuchi Director of ICOT Research Center

#### Report from the Program Committee

Hozumi Tanaka Program Chairperson

#### 13:30 - 14:30 Invited Lecture

Chairperson: Hidehiko Tanaka, Univ. of Tokyo, Japan

Algorithmic & Knowledge Based Methods

Do They "Unify"?

—With Some Programme Remarks for UNU / IIST—

Dines Bjørner, Director of International Institute for Software

Technology, The United Nations University, Macau

#### 15:00 - 17:30 General Report on ICOT Research and Development

Chairperson: Kazuhiro Fuchi, ICOT, Japan

Overview of the Ten Years of the FGCS Project
Takashi Kurozumi, Deputy Director(General), ICOT Research Center

Summary of Basic Research Activities of the FGCS Project Koichi Furukawa, Deputy Director(Research), ICOT Research Center

Summary of the Parallel Inference Machine and its Basic Software Shunichi Uchida, Manager, Research Department, ICOT Research Center

### June 2 (Tuesday)

9:00 - 10:00 Invited Lecture

Chairperson: Koichi Furukawa, ICOT, Japan

The Role of Logic in Computer Science and Artificial Intelligence J.A.Robinson *Professor*, *Syracuse University*, U.S.A.

#### 10:30 - 12:00 Report on ICOT Research Results

Chairperson: Shunichi Uchida, ICOT, Japan Koichi Furukawa, ICOT, Japan

Parallel Inference Machine PIM
Kazuo Taki, First Research Laboratory, ICOT

Operating System PIMOS and Kernel Language KL1
Takashi Chikayama, Second Research Laboratory, ICOT

#### 13:30 - 17:20 Report on ICOT Research Results (Continued)

Towards an Integrated Knowledge-Base Management System
-Overview of R&D on Databases and Knowledge Bases in the FGCS Project-Kazumasa Yokota and Hideki Yasukawa, *Third Research Laboratory, ICOT* 

Constraint Logic Programming System
-CAL, GDCC and Their Constraint SolversAkira Aiba and Ryuzo Hasegawa, Fourth Research Laboratory, ICOT

Parallel Theorem Provers and Their Applications
Ryuzo Hasegawa and Masayuki Fujita, Fith Research Laboratory, ICOT

Natural Language Processing Software
Yuichi Tanaka, Sixth Research Laboratory, ICOT

Experimental Parallel Inference Software
Katsumi Nitta, Kazuo Taki and Nobuyuki Ichiyoshi, Seventh Research Laboratory,
ICOT

# TECHNICAL PLENARY SESSIONS Ho-O-no-Ma (Room B, C)

### June 5 (Friday) [Afternoon]

14:00 - 15:00

Invited Lecture

Chairperson: Hozumi Tanaka, Tokyo Institute of Technology, Japan

Programs are Predicates

C.A.R. Hoare Professor, Oxford University, U.K.

15:30 - 18:00

**Panel Discussion** 

A Springboard for Information Processing in the 21st Century

Chairperson: Robert A. Kowalski Professor, Imperial College, U.k.

Panelists: Hervé Gallaire G.S.I., France

Ross Overbeek Argonne National Laboratory, U.S.A.
Peter Wegner Professor, Brown University, U.S.A.

Koichi Furukawa ICOT, Japan Shunichi Uchida ICOT, Japan

# **CLOSING ADDRESS**

Hiroichi Hiroshige Executive Director of ICOT, Japan

Table of Technical Sessions

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June 5 (Friday)	ICOT SESSIONS	Room D	Paratiel Interence Machine	Break		Lunch			Ž.		
	APPLICATIONS & SOCIAL IMPACTS	Room C	Parallel Applications		invlind Paper		Invited Lecture Break		ssion for Informatio he 21st Centu	Closing Address	
	ARCHITECTURES & SOFTWARE	Room B	Programming Environment		Production Systems		Invited		Panel Discussion A Springboard for Information Processing in the 21st Century		
	FOUNDATIONS	Room A	Functional Programming and Constructive Logic		Temporal Reasoning				0 40		
June 4 (Thursday)	ICOT SESSIONS	Room D	Genealic Information Processing		-		Constraint Logicamming Programming Theorem Proving	Break	Natural Language Processing		
	APPLICATIONS & SOCIAL IMPACTS	Room C	Knowkedge- Based Systems		Legis Personing		Natural Linguage Processing		Knowledge Support Sysiems		
	ARCHITECTURES & SOFTWARE	Room B	Extension of Logic Programming		Task Scheduling and Load Analysis (Room A)		Сопситепсу		Delabases and Distributed Systems		
	FOUNDATIONS	Room A	Semantos of Logic Programs		britted Paper (Room B)		Machine	1	Пвосет Рюуга		
June 3 (Wednesday)	ICOT SESSIONS	Room D	Parallei VLSI-CAD and KBM Systems		.		Parallel Operaling System, PINKOS				
	APPLICATIONS & SOCIAL IMPACTS	Room C	Constraint Logic Programming		Qualitative Responing		Knowledge Representation		Partel Discussion Fature Discloss of Next Generation	Applications	
	ARCHITECTURES & SOFTWARE	Room B	Hardware Architecture and Evaluation		invlied Paper		AND Parallelism and OR-Parallelism		Implementation Techniques		
	FOUNDATIONS	Room A	Reasoning about Programs		Amiogy		Abduction (1)		Abduction (2)		
		9	000	9	-99-	230	0.34	2230	16:00	17:30	