THE EARLY YEARS OF CODATA

1966 to 1980

David R. Lide

Presented at 2006 CODATA Conference,
Beijing, China
FOUNDING FATHERS OF CODATA

• Frederick Rossini of the United States
• Boris Vodar of France
• Sir Gordon Sutherland of the United Kingdom
• Wilhelm Klemm of West Germany
• Masao Kotani of Japan
• Mikhail Styrikovich of the Soviet Union
NATIONAL MEMBERS IN 1968

Canada
R. N. Jones

Germany – BRD
W. Klemm

Japan
M. Kotani

U.S.A.
F. D. Rossini

U.S.S.R.
M. A. Styrikovich

U.K.
G. B. B. M. Sutherland

France
B. Vodar
UNION MEMBERS IN 1968

International Union of Biological Sciences (IUBS)  R. I. Currie
International Union of Pure and Applied Biophysics (IUPAB)  J. T. Edsall
International Union of Geodesy and Geophysics (IUGG)  G. Garland
International Geographical Union (IGU)  W. Garrison
International Union of Crystallography (IUCr)  Olga Kennard
International Union of Pure and Applied Chemistry (IUPAC)  W. Klemm
International Union of Theoretical and Applied Mechanics (IUTAM)  F. Odqvist
International Union of Geological Sciences (IUGS)  M. Roubault
International Astronomical Union (IAU)  Charlotte Sitterly
International Union of Pure and Applied Physics (IUPAP)  B. Vodar
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Frederick Rossini
President
CODATA – The Early Years

Boris Vodar
Vice President
CODATA – The Early Years

Sir Gordon Sutherland
Vice President
CODATA – The Early Years

Wilhelm Klemm
Secretary-Treasurer
CODATA – The Early Years

Masao Kotani
Bureau Member
CODATA – The Early Years

Mikhail Styrikovich
Bureau Member
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Guy Waddington
CODATA – The Early Years

Edward L. Brady
CODATA – The Early Years

Lewis M. Branscomb
CODATA – The Early Years

CODATA Secretariat - Paris
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CODATA Conference
Arnoldshain - 1968
THE INITIAL CODATA PROJECTS

- **Task Group on Fundamental Constants** - Produce an internationally agreed set of fundamental physical constants (speed of light, Planck's constant, etc.)

- **Task Group on Key Values for Thermodynamics** - Recommend standard values of the thermodynamic properties of about 150 key chemical substances

- **Task Group on Computer Use** - Promote the use of electronic means for storage, retrieval, and dissemination of data

- **International Compendium of Numerical Data Projects** - Prepare a directory of data centers and other organizations that collect and distribute scientific data
CODATA – The Early Years

THE FIRST SEVEN CODATA INTERNATIONAL CONFERENCES

- 1968 - Arnoldshain, Germany
- 1970 - St. Andrews, Scotland
- 1972 - Le Creusot, France
- 1974 - Tsakhcadsor, USSR
- 1976 - Boulder, Colorado, USA
- 1978 - Santa Flavia, Italy
- 1980 - Kyoto, Japan
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Boulder - 1976
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Santa Flavia - 1978
CODATA – The Early Years

Kyoto - 1980
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CATEGORIES OF CODATA ACTIVITIES

• Projects focused on specific scientific issues
• Directories to data sources
• Guides to the presentation of data
• Training courses on data access
• Publications
• Computer use
International Compendium of Numerical Data Projects

A Survey and Analysis

Produced under the Auspices of
The Committee on Data for Science and Technology
of the
International Council of Scientific Unions

Springer-Verlag Berlin • Heidelberg • New York 1969
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International Training Course in Data Dessemination
Tsukuba Science City, 1 – 4 October, 1980

Tskuba Training Course - 1980
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INTRODUCTION

An important and definable part of the overall problem of the evaluation, storage, and retrieval of scientific information is the compilation of critically selected numerical and other quantitative scientific data. In order to promote international co-operation and effort in this field, a Committee on Data for Science and Technology, or CODATA, was established in 1966 by the International Council of Scientific Unions (ICSU).

This first edition of the CODATA Newsletter is intended to provide background information on the origin and organization of CODATA, and to define its tasks and objectives, within the context of world-wide activity on the compilation, evaluation, and dissemination of numerical data for science and technology. A general dissertation, by Prof. F.D. Rossini, the President of CODATA, on the history, present status, and possible future developments on an international basis, of the evaluation of scientific and technological data, is followed by descriptions of the organization and activities of CODATA, and of the First International CODATA Conference, by Dr. Guy Waddington, the former Executive Director of CODATA.

Future issues of the Newsletter will not only present news of planned or established national and international
AUTOMATED INFORMATION HANDLING IN DATA CENTERS


INTRODUCTION

1. UNITED STATES

1.0 GENERAL
1.1 NUCLEAR DATA CENTERS
1.2 DATA CENTERS FOR THERMODYNAMICS, TRANSPORT PROPERTIES AND CHEMICAL KINETICS
1.3 SOLID-STATE DATA CENTERS
1.4 DATA CENTERS FOR ATOMIC AND MOLECULAR PROPERTIES
1.5 INFORMATION SYSTEMS
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Norman Jones – Organizer of Freiburg Symposium on Man Machine Communication for Scientific Data Handling
CONCLUSIONS OF FREIBURG MEETING

• Technology for storing and accessing data is here

• Retrieval from remote data banks has been done

• Long-term problems are socio-political, not technical

• CODATA should take lead in both technical and economic-political issues
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Jacques-Emile Dubois
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Edgar Westrum
CODATA – The Early Years

Takehiko Shimanouchi
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Christoph Schaeffer – First Executive Secretary

Bertrand Dreyfus – Second Executive Secretary
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Phyllis Glaeser
Third Executive Secretary/Executive Director
CODATA – The Early Years

CODATA'S ACHIEVEMENTS IN ITS FIRST 15 YEARS

• Providing a forum for scientists from different disciplines to learn about common problems in data handling and work together for a solution

• Fostering international cooperation on data projects, especially during the cold war.

• Reaching international agreement on key data sets in physics and chemistry

• Conducting educational activities such as training courses, guides to the presentation of data, and directories to data sources

• Contributing to the introduction of modern information technology into the handling and dissemination of scientific data.