



ICCROM





annual bulletin 1981

-	~	12	-	-	 ~	c

CONTENTS			
Editorial	2	Travelling Exhibition	16
Administration and Organization General Assembly	4	Research	18
Member States Personnel		Conference Report	19
Publications  Latest publications  Publications for sale  Publications in press		Technical Assistance	21
		Conferences and Cooperation	23
Library and Documentation Using the library Acquisitions	9	Miscellaneous Calendar 1981	24
Courses	11	Calendar 1982	
Courses at ICCROM Courses outside ICCROM		Open Forum	26

# EDITORIAL

AN APPEAL FROM THE DIRECTOR

Dear Reader.

Conservation of cultural property, as we all know, is an important field of activity whose length, breadth and depth is expanding with exponential rapidity. Yet ICCROM's budget is static, and soon the Director will have to refuse some requests for assistance or participation. due to shortage of staff. We are dangerously near to being over-extended, and have not got the funds to employ extra staff or even part-time consultants to assist us. Whole fields of activity have to be virtually ignored, whereas others such as archaeology, ethnography, archives and libraries receive inadequate attention. With some geographical regions our contacts are too random and too slender, yet we could do much by sending specialists to give "on the spot" courses and so implement the policies established at our last General Assembly. Our routine work has expanded, and yet it is done by the same number of staff as three years ago.

The situation is such that it is now difficult to maintain the momentum of our work. We need more staff, which means more money. So we are asking you, as a friend of ICCROM and a believer in conservation, to work actively to improve our financial support in this critical moment.

NORTH WOULD

There are many ways and means that you can use to help us meet our increasing responsibilities.

First your government, or some department of it, can follow France's example and give a special subvention to ICCROM in addition to the regular Member State contribution. Or your government can ask ICCROM to do some special subsidized project, and we will accept, provided it is within our field and will prove beneficial to our Member States as a whole. For example, funding for a project to design low-cost museum showcases with silica gel humidity control in hot humid climates would give invaluable assistance to museums in a very large number of places. ICCROM's advice to use this method saved Italian authorities millions of lire in a recent exhibition of very sensitive material, but we need more money to develop the method further, adapting it to other climates. There are many other ideas which will be of benefit to everyone; our research on lime mortar, for instance, is another promising project.

Or, again, you can follow the example of the U.S.A., who seconded W. Brown Morton III of the National Park Service to ICCROM for three years, or Japan, who are seconding, through Unesco, a scientist to work with us for one or two years. During his stay, he will assist in our projects and contribute from his own knowledge, gaining valuable experience which he will bring back to his own country. We need scientists, conservators of all types, archaeologists and ethnographers. At a slightly lower level you can send young professionals to do research on subjects agreed with or suggested by ICCROM. They will need subsistence and air travel. You might approach a charitable trust in your country and suggest that they should endow such research fellowships for a given number of years.

In some countries, work of social or cultural value is accepted in place of military service, so recommend suitable candidates to us and we will teach them that conservation is a service to the world. They can work on research projects and help us - provided they are sufficiently qualified.

The EEC and some countries or authorities like the National Trust of Australia (Victoria) are now making grants for subsistence for participants on our This saves some ICCROM courses. money and gains a valuable place for your candidates. This idea might appeal to a rich foundation. We are most grateful to the Ford Foundation and to the John D. Rockefeller III Fund for their help with Asian students.

ICCROM can run courses in your country on any subject in the field of conservation and, if funded by your authorities, this is one more way in which our slender resources can be made to go further and be more effective. ICCROM also has executed pilot projects with a training element such as at Göreme and Lalibella with similar effects.

I have only suggested a few ideas. You know your country best — you can surely think of better ideas or more relevant proposals, and you know the people who can help. Please contact the Director with your proposals. Do not forget that scientific preventive conservation, if used properly, can save vast sums of money. Investment in ICCROM now will bring good dividends later and save cultural property for us all to enjoy.

Please give this problem serious consideration, and let us have your suggestions.

# **ADMINISTRATION AND ORGANIZATION**

#### General Assembly

The 11th session of the General Assembly will be held in Rome from 11-13 May, 1981 (Monday through Wednesday). The Council and its committees will meet the previous week, 6-8 May, 1981. Each Member State is invited to nominate a representative with academic or professional experience in the field of conservation so as to be able to establish the policy of ICCROM and represent his or her country's interests. Associate Members are entitled to send an observer who may advance proposals but who does not have a vote.

Member State governments are also entitled to nominate a candidate with suitable professional qualifications for the new Council which will be elected by the General Assembly and which will be in operation for the following two years. Candidates for Council need not be delegates to the Assembly, and may attend as observers. The General Assembly will consider two special matters. The first is the question of a moderate increase in ICCROM's budget, which is vital to its future rôle to enable the organization to serve the cause of conservation better and to fulfill the obligations incurred by requests for assistance from member governments.

The second matter will be the election of a new director of ICCROM. The present director, Bernard M. Feilden, has been unable to renew his contract because the ill health of his wife requires his presence in England. However, he will be available to serve under the new director in any way required, so preserving continuity in the ever-expanding work of ICCROM.

#### Member States and Associate Members

During 1980 two countries have joined ICCROM:

- Norway on 1 January, 1980;
- Ecuador on 31 March, 1980.

This now brings the number of Member States of ICCROM to 66 as of 31 December, 1980.

At the Council meeting on 16 April, 1980 the following institutions were accepted as Associate Members:

- Canadian Conservation Institute, Ottawa (Canada);
- National Research Laboratory for Conservation, Lucknow (India);
- Centre for Architecture and Urban Studies, Split (Yugoslavia);
- National Archives of India, New Delhi (India);

- Churubusco Centre, Mexico (Mexico);
- Interbuildings Record, Geneva (Switzerland);
- Centro per la Conservazione delle Sculture all'Aperto, Bologna (Italy).

This brings the number of Associate Members to 26 as of 31 December, 1980.

#### United Kingdom

On 22 December, 1980, the United Kingdom announced its intention to withdraw as a Member State after the required statutory period. There was no advance warning of this decision, nor was any explanation provided, but presumably it was due to internal budgetary considerations (and perhaps a lack of conservation spokesmen in the ministry concerned).

The director promptly circulated a letter to 550 conservation establishments and individuals in the U.K., outlining the assistance ICCROM has provided, and requesting their support. The response has been tremendously encouraging. Moreover, other Member States have made official representations to the British government on ICCROM's behalf. It is to be hoped that this unfortunate decision will be reviewed in the near future.

#### Personnel

- Mrs. Cynthia Rockwell, previouusly employed on a consultancy basis, has become a permanent member of staff.
- Miss Monica Garcia, previously employed under a fixed term contract, has become a permanent member of staff.

#### Staff Benefits

Two new measures have been introduced in the past year which will be of great advantage to the ICCROM staff. The first is that ICCROM has been admitted to the U.N. Joint Staff Pension Fund after a long period of negotiations. In 1979 the Advisory Committee (ACABQ) had ruled that admission of the ICCROM staff to the fund should be realized, if possible, through the parent organization, Unesco.

On the basis of an official statement by Unesco that ICCROM was a totally independent organization, the Board decided that ICCROM should be admitted as such, on the basis of article 3a of the statutes of the Fund. The decision was supported by ACABQ and carried by the General Assembly of the United Nations. ICCROM thus becomes the 14th organization taking part in the Fund.

# PUBLICATIONS

Thanks are due to P. Perrot, who represented ICCROM at a decisive meeting of the Pension Board in Washington, to Ambassador M. Majoli, U.N. representative at the Fund, and the secretary general of the Fund, Mr. A. Liveran, for their energetic support of the ICCROM cause. The second measure of importance is that staff members may now avail themselves of an extensive medical insurance plan which provides coverage anywhere in the world. We are gratefu! to the U.N. Food and Agriculture Organization in Rome, which has given us the possibility of participating in this scheme.

#### Internal re-organization

Gaël de Guichen and Susan Inman have borne the responsibility for publications since 1977, and during that time almost every printed item at ICCROM has been examined and improved from the lowly invoice to the most ambitious hook

Due to the increasing number of projects in the sector of Special Programmes, the editorial mantle has now fallen on Cynthia Rockwell, who will be assisted by Monica Garcia in both publications and special documentation.

#### Latest Publications

Two new books by Giorgio Torraca have been added to our "Technical Notes" series, and are now available for purchase.

#### Solubilité et solvants utilisés pour la conservation des biens culturels

by Giorgio Torraca

This is the French translation of a handbook which has proven to be very useful for conservator/restorers. It provides an introduction to the topic of solvents and solubility for those who have no scientific background, explaining concepts such as molecular structure and its influence on solubility, what solvents are, and how they function. The hazards of working with solvents are also discussed, and a table of solvent properties (slightly revised since the 1978 English edition) is provided. The book is liberally illustrated with drawings by the author.

First edition in French. 1980, 78 pp.

Price: Lit. 3,500 (\$ 3.50)

#### Porous Building Materials: Materials Science for Architectural Conservation

by Giorgio Torraca

This book collects and presents in a simplified way the scientific concepts underlying the conservation of porous building materials: stone. adobe, brick, and various binders. Visual models, instead of formulas, are used to explain the mechanisms of deterioration and the theory behind preservation treatments. The many informal drawings throughout the text make it seem almost as if the author is using a blackboard to illustrate various points in the course of a lecture.

As its title indicates, this book is intended for use in architectural conservation, where the decay of porous building materials is a problem of considerable magnitude.

First edition 1981, 141 pp.

E: English - F: Français - I: Italiano - Sp: Espanol \*: New publications - \*: Nouveau

#### ICCROM PUBLICATIONS FOR SALE

AGRAWAL, O.P. ed. Conservation in the Tropics: Proceedings of the Asia Pacific Conference on Conservation of Cultural Property (1972); 216 pp. (1975). (E) Lit. 10,000 (\$ 10) AGRAWAL, O.P. Termites - A. Major Problem in Museums. 23 pp. (1979). Lit. 2.000 (\$ 2) (E) Architectural Conservation and Environmental Education. Conclusions of the meeting, ICCROM. February 1975. Conservation architecturale et éducation à l'environnement. Conclusions de la conférence. ICCROM, février 1975. 24 pp. (1979). Lit. 2,500 (\$ 2.50) (E/F) BACHMANN, K-W. La conservation durant les expositions temporaires. Conservation during Temporary Exhibitions. 46 pp. (1975). (E/F) Lit. 3.000 (\$ 3.00) BROCK, I. - GIULIANI, P. - MOISESCU, C. The Ancient Centre of Capua - Analytical Methods for Urban Il centro antico di Capua - Metodi di analisi per la pianificazione architettonico-urbanistica. 132 pp. (1973). Lit. 6,000 (\$ 6) (E/I)CARBONNELL, M. Quelques aspects du relevé photogrammétrique des monuments des centres historiques. Photogrammetry Applied to the Study and Conservation of Historic Centres. 110 pp. (1974). (F/E)Lit. 4.000 (\$ 4) Catalogues of technical exhibitions; catalogues d'expositions techniques; cataloghi mostre tecniche;

Lit. 1,500 (\$ 1.50)

N. 2: Theft-vol-furto. 59 pp. (1977).

N. 1: Lighting-Lumière-Luce, 40 pp. (1975).

Lit. 2,000 (\$ 2.00)

(E/F/I)

De ANGELIS d'OSSAT, G. Guide to the Methodical Study of Monuments and Causes of their Deterioration. Guida allo studio metodico dei monumenti e delle loro cause del deterioramento. 48 pp. (1972).

(E/I) Lit. 3,000 (\$ 3)

FORAMITTI, H. Mesures de sécurité et d'urgence pour la protection des biens culturels. 44 pp. (1972).

(F) Lit. 2,500 (\$ 2.50)

FORAMITTI, H. La photogrammétrie au service des conser-

vateurs. 48 pp. (1973). (F) Lit. 3,000 (\$ 3)

FRANCE-LANORD, A. Ancient Metals: Structure and Cha-

racteristics. Tecnical cards.

Métaux anciens: structures et caractéristiques. Fiches techniques. 80 pp. (1980).

(E/F) Lit. 10,000 (\$ 10)

GAZZOLA, P. The Past in the Future. 2nd edition, 138 pp. (1975).

(E) Lit. 4,000 (\$ 4)

GUICHEN, G. de. Climate in Museums: Measurement. Technical cards.

Climat dans les musées: Mesures. Fiches techniques 80 pp. (1979).

(E/F) Lit. 4,500 (\$ 4.50)

ICCROM - Library. List of Acquisitions 1977-78.
ICCROM - Bibliothèque. Liste des acquisitions 1977-78.
319 pp. (1979).
(E/F)
Lit. 10,000 (\$ 10)

\* ICCROM - Library. List of Acquisitions 1979-80.
ICCROM - Bibliothèque. Liste des acquisitions 1979-80.
(E/F) to be announced / à voir

ICCROM - Library Subject Index 1977-78. 329 pp. (1979). (E) Lit. 10,000 (\$ 10)

\* ICCROM - Library. Subject Index 1979-80.

(E) to be announced / à voir

ICCROM - Bibliothèque. Table des matières 1977-78. 326 pp. (1979).

(F) Lit. 10,000 (\$10)

\* ICCROM - Bibliothèque. Table des matières 1979-80.

(F) to be announced / à voir

INIGUEZ HERRERO, J. L'altération des calcaires et des grès utilisés dans la construction. 128 pp. (1967).

(F) Lit. 4,000 (\$ 4)

International Index on Training in Conservation of Cultural Property.

Répertoire international des institutions donnant une formation pour la conservation des biens culturels. 138 pp. (1978).

(E/F) Lit. 4,000 (\$ 4)

MARASOVIC, T. Methodological Proceedings for the Protection and Revitalization of Historic Sites (experiences of Split). 56 pp. (1975).

(E) Lit. 4,000 (\$ 4)

MASSARI, G. Humidity in Monuments. 47 pp. (1970). (E) Lit. 3,000 (\$ 3)

MASSARI, G. Bâtiments humides et insalubres - Pratique de leur assainissement. 526 pp. (1971).

(F) Lit. 30,000 (\$ 30)

MORA, P. - MORA, L. - PHILIPPOT, P. La conservation des peintures murales. 530 pp. (1977).

(F) Lit. 36,000 (\$ 38)

Mosaics N. 1: Deterioration and Conservation. Proceedings of the 1st International Symposium on Mosaics Conservation. Rome November 1977. 120 pp. (1980).

(E) Lit. 9,000 (\$ 9)

Mosaïque N. 1: Détérioration et conservation. Actes du 1er symposium international sur la conservation des mosaïques, Rome, novembre 1977, 104 pp. (1978).

(F) Lit. 8,000 (\$ 8)

\* Mosaïque N. 2. Sauveguarde, ca. 50 pp. (projected June 1981).

(F)

Lit. 11,000 (\$ 11)

MÜHLETHALER, B. - BARKMAN, L. - NOACK, D. Conservation of Waterlogged Wood and Wet Leather. 71 pp. (1973).

(E)

Lit. 4,000 (\$ 4)

Problems of Conservation in Museums. Papers presented

Problems of Conservation in Museums. Papers presented to ICOM Committee, Washington and New York 1965. Problèmes de conservation dans les musées. Communications Présentées au Comité de l'ICOM à Washington et à New York 1965. 224 pp. (1969).

(E/F) Lit. 10,000 (\$ 10)

SCHULTZE, E. Techniques de conservation et de restauration des monuments - Terrains et fondations. 177 pp. (1970).

(F) Lit. 4,000 (\$ 4)

STAMBOLOV, T. - VAN ASPEREN de BOER, J.R.J. The Deterioration and Conservation of Porous Building Materials in Monuments, 2nd edition, 86 pp. (1976).

E) Lit. 4,000 (\$ 4)

TORRACA, G. Solubility and Solvents for Conservation Problems, 2nd edition, 64 pp. (1978).

(E) Lit. 3,500 (\$ 3.50)

\* TORRACA, G. Solubilité et solvants utilisés pour la conservation des biens culturels. 78 pp. (1980).

(F) Lit. 3,500 (\$ 3.50)

\* TORRACA, G. Porous Building Materials: Materials Science for Architectural Conservation. 141 pp. (1981).

(E) Lit. 4,000 (\$ 4)

#### OTHER PUBLICATIONS ON SALE

ARGAN, G.C. - MURTAGH, W.J. Historic Districts. Les districts historiques. 38 pp. (1975).

(E/F) Lit. 3,000 (\$ 3)

La lumière et la protection des objets et spécimens exposés dans les musées et les galeries d'art. ICOM. 2<sup>em e</sup> édition. 50 pp. (1977).

(F) Lit. 8,000 (\$ 8)

MASSCHELEIN-KLEINER, L. Liants, vernis et adhésifs anciens. IRPA. 105 pp. (1978).

(F) Lit. 5,000 (\$ 5)

STUMES, P. Wood Epoxy Reinforcement Systems Manual. APT. 84 pp. (1979).

(E) Lit. 4,000 (\$ 4)

Synthetic Materials used in the Conservation of Cultural Property (photocopies).

Matériaux synthétiques utilisés en conservation (photocopies).

Materiales Sintéticos empleados en la conservación de biens culturales (fotocopias). 30 pp. (1968).

(E/F/or Sp) Lit. 3,000 (\$ 3)

The Conservation of Stone I. Proceedings of the International Symposium, Bologna, June 1975, 789 pp. (1976).

(E) Lit. 20,000 (\$ 20)

Thomson, G. The Museum Environment. Butterworths, London. 270 pp. (1978).

(E) Lit. 50,000 (\$ 50)

#### Instructions for payment

These prices are effective as of May 1, 1981. Prices include shipment by surface mail for orders weighing 2 kg or less. Over 2 kg, a standard fee of Lit. 3,000 (\$ 3) will be charged for handling and shipment by surface mail. Special requests for air mail, registered packages, etc., will be charged at actual cost. Payments from Italy must be made in Italian lira by transfer or cheque to the order of ICCROM:

- to CCP 450 70000, Rome, or
- to c/c N. 1574489/01/92 COMIT. Piazza Sonnino, Rome (Italy)

Outside of Italy, payments should be made in U.S. dollars to the order of ICCROM, either:

- by cheque or
- by bank transfer to c/c N. 1574489/02/93 COMIT, Piazza Sonnino, Rome (Italy)

Please address your orders to:

ICCROM, 13 Via di San Michele, Rome, Italy. Tel: 589-4741, 589-2508, 589-2622, 580-9021

Telegram: Interconcerto, Rome Telex: 613114 ICCROM

#### Publications in Press

#### Mosaïque n. 2: Sauvegarde

This volume is a sequel to Mosaïque n. 1, and has been edited by the board of the International Committee for Mosaics Conservation: I. Andreescu, C. Bassier, M. Ennaifer, G. de Guichen, P. Mora, W. E. Novis, M. L. Veloccia, R. Wihr, and with the collaboration of Mme. Ben Osmane and M. T. Suthers.

The text is divided in two parts. The first gives the choices possible when a mosaic floor is discovered, and the procedure to follow in each case; the second presents the results of a technical comparative study of 10 kinds of support for presentation of a detached mosaic.

Projected date of this French edition: June 1981. An English edition (Mosaic No. 2: Safeguard) will follow shortly thereafter.

# International Index on Training in Conservation of Cultural Property. 1981 edition.

Répertoire international des institutions donnant une formation pour la conservation des biens culturels. 1981 édition.

This international index on training is a computerized list of conservation training opportunities in over 40 countries, world-wide. It has been up-dated and expanded considerably since the 1978 edition, on the basis of a survey of all the institutions involved and announcements of new courses. The volume also contains an index by subject (e.g. textiles, paper, photogrammetry, etc.) so that the user can easily locate courses in specific fields. The introduction and subject index are in both English and French; the listings are in English only. Unesco has generously offered to print this edition and assist in its distribution.

The book is currently in press at Unesco.

# ICCROM — Library. List of Acquisitions 1979-80. ICCROM — Bibliothèque. Liste des acquisitions 1979-1980.

As the library continues to computerize its catalogue, all new acquisitions are recorded, as well as part of the backlog prior to 1977, when the computer was first introduced. This is the second volume of the List of Acquisitions, following in sequence after the 1979 edition, which covered the 1977-78 period. For proper use, this List of Acquisitions must be combined with its corresponding Subject Index (see below). Projected publication date: May 1981.

#### ICCROM - Library. Subject Index 1979-1980.

This is the companion volume to the List of Acquisitions for the same period. It contains over 2500 key words identifying different topics related to conservation, and lists the catalogue numbers of all the library acquisitions on those topics registered since 1978. The Subject Index is also available in French, in a separate volume. Projected publication date: May 1981.

# ICCROM — Bibliothèque. Table des Matières 1979-1980.

See above.

#### The Conservation of Historic Buildings

by Bernard M. Feilden

As a corollary to the Butterworths/IIC conservation textbook series, Butterworths is also planning to publish a series of monographs on various related subjects. Dr. Feilden's book will be one of the first of these, due for publication in the latter half of 1981.

This book is the fruit of the author's many years of experience as an architect, first involved in conservation activities in England on York Minster, St. Paul's Cathedral in particular, and then in the international field as director of ICCROM. There are chapters on diagnosis of causes of decay and methods of conservation and repair, including special techniques, as well as several other aspects of architectural conservation. A full bibliography and a glossary is provided, and the book will have numerous illustrations and diagrams.

#### An Outline of Conservation

by Bernard M. Feilden

This short book offers a general survey of the field of conservation, starting with a definition of cultural property, and discussing the ways it is preserved and the various branches of conservation work. It is a revised and expanded version of the earlier "Introduction to Conservation".

As F. Ross Holland wrote in a review in PARKS Magazine, "Clearly the final work will be extremely useful and I recommend that all preservationists, whether of the fledgling variety or old hands, watch for its publication. It will, I believe, become a basic text."

The book is being published by Unesco, and will have about 40 illustrations.

# LIBRARY AND DOCUMENTATION

#### Using the Library

According to ICCROM's Statutes, one of the organization's primary functions is "to collect, study and circulate documentation concerned with the scientific and technical problems of the preservation and restoration of cultural property. With this in mind, our library has set itself the task of facilitating access to its documentation, using modern techniques of data acquisition and information processing. Thus, in 1977 we adopted a computerized system which follows the rules prepared by UNISIST for bibliographic descriptions that can be read by machine. As already explained in previous Newsletters, the paragraphs established by UNISIST have been supplemented by "technical" paragraphs which are especially useful in the cataloguing of works on conservation. Computer registration of these data allows us to perform a wide range of operations and supplies us with the following services in particular:

 printing of the complete library catalogue in its new computerized form, step by step as

the registration proceeds;

printing of standardized cards for the traditional card index by author. We will continue to up-date this index, in order to facilitate research in the reading room, until such time as we can use the computer terminal more easily;

 biennial printing of the List of Acquisitions of the library, together with its companion

Subject Index:

print-outs of specialized bibliographies;

— on-line research at the computer terminal. The procedures for utilizing the data-bank, and the possibilities of documentary research are as follows.

#### For those in Rome

The reader has access to the manual card index by author, which is kept continuously up to date, and the manual card index by subject, which contains the documents registered by the library prior to 1977. For research involving publications after 1977, we must use the new printed lists, i.e. the **Subject Index** and **List of Acquisitions** for 1977-78 and 1979-80 (this last will be published in May 1981). Note that only bibliographic information is given in this **List of Acquisitions**, i.e. author, title, publisher, date, and pages. To consult the technical information stored in the data-bank, the reader can use the computer print-out of the full catalogue, which is also available in the library.

In the case of more complicated research, the reader can ask to work directly on-line at the

computer terminal. This research is done with the assistance of the library personnel. As this option is relatively expensive (US \$ 100 per hour of actual use), we must charge the user at least part of the cost. One must also remember that only material registered since 1977 can be retrieved on the terminal.

#### For those outside Rome

Interested individuals and institutions can purchase the List of Acquisitions and the Subject Index 1977-78 and 1979-80 (four volumes in all) and compile their own bibliographies, remembering that only post-1977 publications are included and that the acquisitions list contains only the bibliographic data indicated above. If a more complete bibliography is desired, one must write the library. In view of the size of the library holdings, bibliographic requests must be very clear and specific. Given a request, we will photocopy the cards from the old subject index and obtain a print-out of the cards of any documents registered since 1977. The procedure is relatively complicated, due to the fact that there are still two parallel systems; it will be greatly simplified as soon as all the holdings are incorporated in the new computer system. Thus, at present we cannot offer bibliographies on a regular basis, but we can send all the available material on request. In this case as well, we are obliged to charge the user part of the cost of research (ca. Lit 200 or 20 US cents per title, so that a bibliography of 100 titles would cost Lit20.000 or US\$20).

Scholars or institutions outside Rome who have difficulty paying in foreign currency can, of course, receive bibliographies in exchange for publications of interest for our library.

In the future, the use of a common computer registration system among the various institutions concerned with conservation could permit us to improve exchange of documentation. Discussions are underway, under Giorgio Torraca's leadership, with various organizations in Europe and North America. If several institutions follow the same system, it will be possible to exchange magnetic tapes and avoid unnecessary duplication of on-line cataloguing. Discussions with institutions that have access to a computer are only one aspect of our efforts to distribute our documentation; we also hope eventually to publish our complete library catalogue on microfiches so that centres distant from Rome and without extensive means can also have access to our documents.

In the meanwhile, do not hesitate to contact us, and we will do our utmost to help you in your research. (M-C. U.)

#### Acquisitions

We have prepared a selected list of interesting new titles in various fields of conservation. Those who wish to have the complete list of acquisitions in the 1979-1980 biennium can order it and the companion subject index (in French or English), which are now in press. See under Publications.

# ARCHAEOLOGY

Proceedings of the 18th International Symposium on Archaeometry and Archaeological Prospection, Bonn, 14-17 March 1978. Köln, Rheinland Verlag, 1979. (Archaeo-Physik Band 10).

#### ARCHITECTURE - BUILDING MATERIALS

CANTACUZINO, SHERBAN - BRAND, SUSAN, Saving old buildings. London, Architectural Press, 1980.

Conservation as cultural survival. Proceedings of the Seminar 2 in the series Architectural transformations of the Islamic World, held in Istanbul, Sept. 26-28, 1978. Grand-Saconnex -Geneva, The Aga Khan Award for Architecture, 1980

Construire en quartier ancien. Paris, Ministère de l'environnement et du cadre de vie, 1980.

Construire en terre, par le CRAterre. Paris, Editions Alternative et Parallèles, 1979.

GERNER, MANFRED, Fachwerk. Stuttgart, Deutsche Verlags-Anstalt, 1979.

Id., Maisons à colombages. Paris, Eyrolles, 1980.

HORNBOSTEL, GALEB, Construction materials. Types, uses and applications. New York, John Wiley and Sons, 1978.

Il mattone di Venezia. Stato delle conoscenze tecnico-scientifiche. Atti del convegno presso la Fondazione Cini, 22-23 ottobre 1979. Venezia, Laboratorio per lo studio della dinamica delle grandi masse - Centro nazionale della ricerca scientifica, 1979.

MICHELL, GEORGES, Ed., Architecture of the Islamic World. London, Thames and Hudson, 1978.

STIERLIN, HENRI, *Architecture de l'Islam.* Paris, Société française du livre, 1979.

WIHR, ROLF. Restaurierung von Steindenkmälern. München, Callwey, 1980.

#### **CONSERVATION - GENERAL**

Australian National Commission for UNESCO, Regional Seminar on the Conservation of Cultural Materials in Humid Climates, Canberra College of Advanced Education, 19-23 February 1979. Canberra, Australian Government Publishing Service, 1980.

Symposium interamericano de conservación del patrimonio artístico, México, septiembre 1978, in Cuadernos de arquitectura y conservación del patrimonio artístico, México, 1979, n. 4-5.

#### **EARTHQUAKES**

The assessment and mitigation of earthquake risk. Paris, UNESCO, 1978.

La protection contre le risque sismique. Paris, UNESCO, 1980.

#### PAPER

The conservation of library and archive materials and the graphic arts. Proceedings of the International Conference held in Cambridge, UK, 22-26 September 1980. London, The Society of Archivists - The Institute of Paper Conservation, 1980.

#### PHOTOGRAPHY

SCHWARZ, DANIÈLE, Conservation des images fixes. Paris, La Documentation française, 1977.

#### **PROSPECTION - SURVEY**

REEVES, ROBERT G. - ANSON, ABRAHAM - LANDEN, DAVID, Ed., Manual of remote sensing. Falls Church, Virginia, American Society of Photogrammetry, 1975.

#### SECURITY - HEALTH HAZARDS

Fiches de sécurité des produits dangereux. Paris, Editions France-Sélection, 1977.

MAC CANN, MICHAEL - BARAZANI, GAIL, Ed., Health Hazards in the Arts and Crafts. Proceedings of the SOEH Conference. Washington, Society for Occupational and Environmental Health, 1980.

# **COURSES**

#### Courses at ICCROM

#### Architectural Conservation - Course A

The regular Course on Architectural Conservation, forming the first part of the two-year Diploma Course, was organized by the "Scuola di specializzazione per lo studio ed il restauro dei monumenti" of the University of Rome in collaboration with ICCROM and using our premises. It was held from 9 January through 20 June, 1980.

The course was again directed by Professor G. De Angelis d'Ossat. It followed the general outline of ICCROM Course B, and was coordinated by Stefano Marani, University of Rome, with the assistance of Sveva di Martino, Giuseppe Benedetti, and Bruno Menichelli. The faculty members were mainly Italian, and some lectures by visiting foreign experts formed contacts with the international course.

There were 94 registered participants, 67 of whom were of Italian nationality and 27 foreign.

#### Architectural Conservation Course B

The 1980 Course on Architectural Conservation was held from 9 January through 20 June. There were 25 participants representing 19 countries. It is interesting to note that the average age, which was 30 years of age in 1977 and 32.6 years in 1979, was 34.8 years in 1980. In practical terms, this means that all participants already had a solid amount of experience in conservation, and most of them were also responsible officers in government service.

Compared to the 1979 programme, only minor changes were made in the schedule, and the basic structure remained the same. The technology of materials was given an extra week, while the time on historic towns was concentrated into three weeks. Special emphasis was given to seminars on the reading of urban texture, the historico-typological development of structures, and the principles of conservation. Practical examples were found in Rome — the areas of Tordinona and Via Giulia.

Field work projects were carried out as in past years in small groups or individually. Major attention was given to the church of Santa Maria dell'Orto (a general inspection report, structural survey, recommendations for maintenance and repairs), the church of San Benedetto (study of mortars, analysis of humidity), and the convent of San Francesco a Ripa (study for rehabilitation, use of solar energy and comparative studies for restoration of a long-neglected building). A number of individual reports were also prepared

Guided visits were also organized during the course with the kind assistance of local authorities such as the Soprintendenza ai Beni Architettonici ed Ambientali of Rome and Lazio, the Soprintendenza alle Antichità responsible for the Forum Romanum, and the planning authorities of the City of Rome. A six-day workshop tour was taken to the north of Italy, where assistance was provided by the planning offices of Gubbio and Ferrara, the Soprintendenza ai Beni Architettonici ed Ambientali of Ravenna, as well as the Venice office of Unesco.

Those responsible for the programme and course assistance were:

- Jukka Jokilehto, architect (FIN) General Coordination
- Alejandro Alva, architect (PER) Course Tutor
- Simonetta Peroni, architect (ITA) Architectural laboratory
- Roberto Marta, engineer (ITA) Field work consultant
- Sergio Lucarelli, engineer (ITA) Recording consultant. (J.J.)

#### Conservation of Mural Paintings

The 1980 course on the Conservation of Mural Paintings was held in English from 6 February - 6 June. There were 13 participants from 9 countries.

In cooperation with the Istituto Centrale del Restauro, and with Prof. Paolo Mora, Course Consultant, and Paul Schwartzbaum, Course Coordinator, the course continued its thirteen-year history of disseminating to conservator/restorers from all over the world the philosophy and methods for the conservation of mural paintings that have been developed by the ICR during its many years of experience in the field.

As in the past five years, the practical work in Rome continued at the churches of Santa Maria dell'Orto and San Benedetto in Piscinula. However, major progress was made with the completion of conservation interventions on the Capella di San Francesco in S.M. dell'Orto and the medieval painting fragments at San Benedetto. Final documentation of these interventions has been delivered to the office of the Soprintendente in charge. Moreover, the scaffolding was moved in S.M. dell'Orto, and the conservation of the paintings in the pendant, Capella della Passione, was commenced.

More emphasis was placed this year on studying the methods of mural painting conservation being used outside of Rome. To this end, the methods being used in Florence and Bologna were examined through an in-depth study visit Profs. O. Nonfarmale of Bologna and G. Botticelli of the Opificio delle Pietre Dure in Florence generously gave presentations of their work and took part in seminar discussion.

The final month of the course was spent at the Castello Caetani, Sermoneta, where the participants continued the conservation treatment of the two frescoed rooms of the castle and remounted a detached "stacco", now on a new support, in its original location.

The assistants to the course in 1980 were Fiona Allardyce, Heinz Leitner, Emilia Santona, and

Laura Spada Scandurra. (P.S.)

#### Course on Conservation Science

The 1980 Conservation Science Course commenced on 6 February, and ended on 6 June, lasting a total of 18 weeks. It was attended by

14 participants from 10 countries.

The structure and general scheme of the course was the same as in 1979. It was held in English with lectures in the mornings and demonstrations/practical work usually in the afternoons. The major changes were in the Paper Section. Prof. Otto Wächter, due to ill health, was unable to lecture this year and, upon his suggestion, Dr. Helmut Bansa was invited to coordinate the Paper Section. The programme was shortened to cover only one week, and the whole course was held on ICCROM premises, thus ending our liaison with the Italian State Archives.

Lectures for the Chemistry Section were held in conjunction with the Mural Painting Course, in their classroom. Minor changes were also made

in the duration of other sections.

The course visited Florence, Faenza, and Bologna, and most participants continued on to Venice at their own expense. The main point of interest during the field trip was metal and ceramic conservation. For the first time we visited the Institute of Ceramics and the Ceramic Museum in Faenza.

A library/practical research programme was introduced in conjunction with the staff of the Istituto Centrale del Restauro. The aim was to familiarize the participants with all aspects of library research on a practical conservation problem, and to teach them how to use ICCROM's computerized library indexes and the computer data-bank. The participants were divided into four groups to study the four following topics:

- surface analyses of stone monuments;
- filling of missing parts in a bronze statue;
- substitution of iron dowels in marble statues, and re-attachment of marble pieces;
- filling in restoration of terracotta.

The course tutor was Lena Wikström, and the course assistants were: Marie-Emmanuelle Meyohas for the first three months, Christine Borruso for the Paper Section, and Claudia Camiz, a 1979 participant, for the last month (L.W.)

#### Preventive Conservation in Museums

Last year, the general feeling of the participants was that a fortnight was not long enough for this course, so we decided to extend it to 18 days. The participants this year appreciated this new measure, so it will be adopted again next year, with more time given to practical work and case studies.

Dr. Walter Persegati, Secretary General of the Vatican Museums, for the first time gave an afternoon's lecture at ICCROM on the management problems of a large museum.

Another new feature this year was a visit to Chieti museum, where considerable work has been done over the last 3 years by its director, Dr. Scichilone, and his team, to install adequate climate control, security, and fire protection. It is an interesting case of an average-size museum that has been entirely transformed from the viewpoint of preventive conservation.

There were 18 participants this year in the course, coming from 13 different countries: Australia, Egypt, Finland, France, Greece, Italy, Kenya, Norway, Romania, Spain, Thailand, the United Kingdom and the U.S.A.

The course next year will be in French and will be given from 3-18 September, 1981. (G.G.)

#### **Bi-Lingual Experiment**

For the first time, this year, the Conservation of Mural Paintings Course and the Course on Scientific Principles of Conservation are held in both English and French. Consecutive translation is mainly used during lectures and all didactic materials for the Scientific Principles of Conservation Course have had to be translated.

It is still too early to comment upon the results of this bi-lingual experiment.

#### Common Introductory Programme

This year, in addition to the bi-lingual experiment, courses II and III have a common introductory programme for the first month of their courses. The introductory programme is organized as follows:

#### First month: Introductory Programme

Some months prior to their arrival in Rome, all participants are sent some basic material to help them prepare for an evaluation test which they take at the beginning of the course.

On the basis of a general evaluation of the professional backgrounds of the participants, their command of the course language, and the evaluation test results, the participants are divided into two groups for the first month of the course:

#### Group A: Basic Course.

This group includes those participants who are found to need a review of fundamental scientific concepts in physics (humidity and light), chemistry and biology. Introductory lectures on the history and theory of conservation are also given.

#### Group B: Research or Field Projects.

This group is made up of those participants who are found to have sufficient scientific grounding to undertake an independent research project. (Group B participants may also elect to attend lectures intended for Group A.) Individual participants, or small groups, are confronted with an actual conservation problem which may be in the study or in the treatment phase. They must gather information on the problem, first by interviewing the conservator or scientist in charge, and second by consulting the relevant literature in the ICCROM library. At the end of the second week an interim (informal) report must be submitted to the tutor in charge. At the end of the fourth week a final (formal) report, containing a critical evaluation of the data collected, must be submitted.

#### At the end of the Introductory Programme:

Participants in Group A must pass a review test for admission to the subsequent course programme:

Participants in Group B must submit a satisfactory research report for admission to the subsequent course programme.

Participants failing to qualify for admission to the continuation of the course programme because of language difficulties or insufficient background, may be assigned, at the discretion of ICCROM, to a special internship programme.



Seminar meeting in the town hall of Budva.

#### Courses outside ICCROM

#### Montenegro

In September 1980, a twelve-day seminar on earthquake damage and repair was held at the Institute for Protection of Cultural Monuments of Montenegro. ICCROM provided the lecturers, Bernard M. Feilden, Rowland Mainstone (consultant), and Alejandro Alva; Mr. Kapisoda, director of the Institute, provided the organization.

There were 24 participants, four of whom were former ICCROM trainees. The group included art historians, archaeologists, conservators, artists, an economist, an engineer, and several architects. The consolidation and restoration of two buildings, and the problems of the historic centre of Budva were studied in detail at the site and then in conference. A multidisciplinary approach to repair of earthquake damage was stressed and this was much appreciated.

The dramatic problem of earthquakes was brought home to us again with the recent disaster in southern Italy. For this reason, the conclusions of the seminar are published here with the hope that lives and cultural property may be saved by application of the principles presented.

#### Seminar Conclusions

Bearing in mind that the detailed characteristics of earthquakes are unpredictable and the way a historic building reacts to the earthquake is also unpredictable, the most profitable field of study is in analysis of the case histories of the damage to the most typical types of buildings.

Taking whatever resources are available, the best use should be made of them by skillful application to the weakest parts of a historic building, as and when opportunities present themselves in a general programme of preventive maintenance. Well-maintained historic buildings of good workmanship have proved themselves to have a high degree of earthquake resistance.

The principles of repair should be to restore and improve the building's capacity to resist an earthquake, enabling it to absorb seismic energy without dangerous damage. The fabric of the building should be considered as a whole, elements being tied together to better resist seismic stresses and to avoid disintegration into mutually destructive parts. One must imagine the most probable mode of destruction and

design against seismic disintegration. After an earthquake, examination of typical collapse sequences should be made in order to rectify defects in traditional local construction. There is never a single correct answer to the structural problems, so several alternatives must be considered and costed. The answer given by applying modern building regulations is rarely the right one, as each historic building is an individual case and must be treated as a special problem. One must consider the sequence in which the damage occurred; how it might extend and how it might be prevented in the next earthquake. Traditional practices of each region must be accepted where they have been proved to be good, but where they have failed should then be improved with modern techniques.

Weight at the top of buildings should be reduced if possible. Ties and struts should be inserted at strategic places — and the closer they are to the centre of gravity of the structure the more effective they are likely to be, hence the importance of bonding floor joists to the walls. Stiffness may be increased by the addition of buttresses (on prestressed ground). Structural systems should not be mixed, as every joint between materials produces problems of unification of their reactions in an earthquake. The principles of conservation must be followed all the time, but with added difficulty of considering, in addition to static forms, the dynamic force of an earthquake. The character of ensembles must be recognized and this includes the way they were lived in and utilized.

The value of full documentation as a basis of scientific repair work cannot be over-emphasized. The Yugoslav standard *proforma* for assessing damage is recommended to Unesco for general use.



Visit to traditional lime kiln during on-site training in Bangkok.

#### Bangkok, Thailand - Oct. 27 - Dec. 26, 1980

Since 1968 ICCROM, in collaboration with the ICR in Rome, has been offering a four-month course on the Conservation of Mural Paintings. This course to date has been attended by 188 participants from 41 countries.

Although the programme has proved to be highly valuable certain inherent problems have been brought to our attention by the students — especially those from countries where the techniques of mural paintings and the climatic conditions differ greatly from the didactic models encountered here in Rome.

Given the fact that the course is taught in Italy, it is clear that it is extremely difficult to deal adequately with such specific topics as the conservation of "a secco" wall paintings or the special problems related to the conservation of mural paintings in tropical environments. Equally difficult is the very real problem of adapting modern conservation methods, materials, and theories to countries where qualified professionals are few and overworked, where specialized conservation products are difficult, if not impossible, to obtain, and where conservation is a young field whose importance has yet to be adequately appreciated.

In an attempt to deal with some of these problems, a two-month course, made possible by a generous grant from the Ford Foundation, was organized by ICCROM and the Thailand Dept. of Fine Arts, Mural Paintings Section, in Bangkok. The course followed, on the whole, the Rome ICCROM course but was modified to be as relevant as possible to the particular problems of mural painting conservation in Thailand. The syllabus was determined by the needs and experience of the individual participants and was



Preparation of test mortar mixes.

divided into theoretical studies, site visits and practical conservation treatments at the temple of Wat Dusit in Bangkok. Twenty-three conservators from Thailand with different levels of experience participated in the course.

The course was coordinated by Wannipa Na Songkhla of the Department of Fine Arts and by Paul Schwartzbaum of ICCROM. Many Thai and international conservation specialists made contributions to the course. These included B.B. Lal (IND), Guido Botticelli (ITA), Carlo Giantommassi (ITA), Heinz Leitner (AUT), Alejandro Alva (ICCROM), and Arphorn Na Songkhla (THA).

The lectures and demonstrations by the international specialists were carried out in English and translated into Thai by Mrs. Na Songkhla.

The course appears to have been a great success. Of the 23 participants, 21 completed all of the course requirements and were awarded certificates by ICCROM and the Department of Fine Arts. Moreover, the course offered the following advantages in comparison to training in Rome:

- Several participants with little skill in foreign languages were able to attend, as translation was provided.
- The cost per trainee was extremely low. For the price of training six students in Rome, 23 were trained "on site" in Bangkok.
- There were no problems of housing or homesickness — problems which sometimes have distracted ICCROM participants in Rome who find themselves away from their countries for the first time.
- A much fuller and more relevant conservation dialogue was made possible between the visiting and the local specialists.

- The international specialists were able to work on site long enough to become familiar with local problems and techniques, and thus were able to make a positive contribution towards resolving the problems encountered.
- The benefits of an "on site" course are obvious and it is hoped that interest and support for similar courses will be forthcoming from other member countries in the future. (P.S.)

#### Islamic Architectural Conservation Course

ICCROM assisted the Regional Centre for Conservation of Cultural Property in the Arab States, Baghdad, in organizing the Unesco-sponsored Islamic Architectural Conservation Course, April - May 1980. The lecturers were Abdelaziz Daoulatli (TUN), Mustafa Lamei (LBN), Emre Madran (TUR), Roberto Marta (ICCROM), and Jean Louis Michon (CHE). They lectured on architectural conservation in Islamic countries; methods and techniques of restoration; architectural and urban renewal for historic quarters; traditional crafts and historic conservation; and international and national conservation legislation.

At the request of the Italian Embassy, Roberto Marta also held conferences at Baghdad University and for the Italian community.

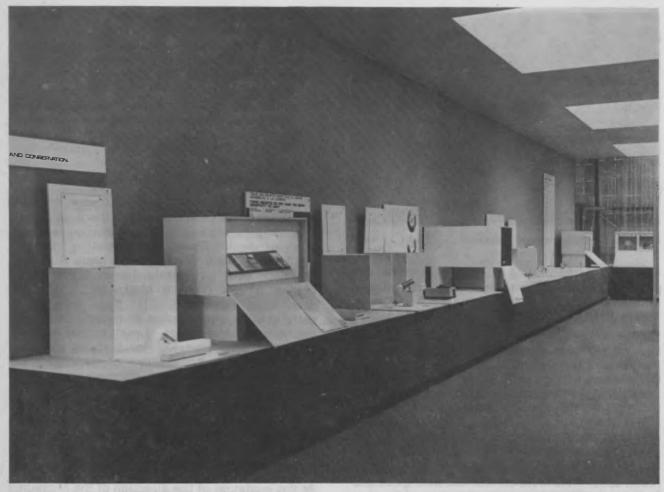
#### Québec, 19-31 January 1981

At the invitation of the direction of the Museums of Québec, ICCROM organized, in Québec itself, a week-long refresher course on the theme, "Control of Climate and Lighting". Eighteen directors, curators, conservator/restorers, and museum architects attended. Gaël de Guichen led the work sessions, and left behind all the didactic material used for the course (300 slides, exercise sheets, demonstration panels), so that Jacques Bussière, Director of Training Services, can bring this information programme to others in charge of collections. A 90-minute video tape was also made for use in sensitizing museum personnel to the problems of climate control.

#### Course on Stone Conservation

The Unesco-sponsored course on the Conservation of Stone will be held again in Venice from 28 April to 26 June, 1981. The 16 participants for this year have already been selected through the Unesco National Comissions in their own countries. ICCROM will provide the organization of this course in cooperation with local authorities and the Unesco Bureau of Venice.

# TRAVELLING EXHIBITION



General view of the travelling exhibition on its visit to Amsterdam. The cubes and showcases have been opened for display, and the showcases set up on bases.

Some of the panels are visible against the wall. Each stand has explanatory text attached. A catalogue, available in several languages, accompanies the exhibition. Photo by Thijs Guispel.

Up through 1974, whenever museum officials (curators, architects, directors, secretariesgeneral, etc.) visited ICCROM, we tried to introduce them to the concepts of preventive conservation, control of light in particular. To make our explanations livelier, we would quickly set up small experiments demonstrating the presence of ultra-violet or the effects of infra-red. Eventually we reached a point where the suc-

cess of these experiments (and the nuisance of continually mounting and dismantling the equipment) convinced us to set up a permanent demonstration on lighting in museums: its dangers, measurement, and control.

Thus in 1975 an exhibition was born, and in 1976 it was joined by a related exhibition on climate in museums: its dangers, measurement, and

These two themes were developed in a space of about 145 m<sup>2</sup> on the ground floor premises of ICCROM.

The exhibition consists of 32 stands where the visitor is invited to make his own experiments and work the equipment on display.

The exhibition is regularly brought up to date. In 1976, one of our course participants, Jan Karsten, State Consultant for Museums in the Netherlands, expressed the desire to circulate this material in his country.

As this exhibition had proved to be extremely useful for trainees and visitors at ICCROM, we decided to create a travelling version. This decision was not without its difficulties, however: among other things, the exhibition in Rome involved more than 200 metres of electric wiring, and we also wanted to provide stands that could be mounted quickly and properly by non-specialized personnel.

Eventually we chose to produce the display stands in large wooden cubes measuring 50 cm per side. By undoing two screws, one can lift the lid. Two other screws release the front of the cube. The entire electric circuit is incorporated in the wood, so one simply plugs an extension cord into the back of the cube, and the stand is ready for display.

The same system was applied to the showcases, which measure  $0.50 \times 0.50 \times 1.00$  m. The front folds down and the showcase is ready for display.

The cubes and showcases are shipped in crates measuring 1.06 x 1.06 x 0.56 m.

The panels are shipped in crates measuring  $1.06 \times 1.06 \times 0.15$  m.

The section on lighting has the following specifications:

showcases
cubes
panels
total volume
total weight
400 kg
packing crates
11

The section on climate includes:

showcases : 4
panels : 20
total volume : 3 m³
total weight : 560 kg
packing crates : 10

This material, with accompanying instructions, is loaned free of charge to any institution requesting it, but borrowers must undertake to ship it, at their own expense, to the next destination (up to a maximum distance of 2,500 km).

#### Results

Since 1977, the travelling exhibition has visited 7 countries: the Netherlands, Yugoslavia, Hungary, Romania, Italy, Spain, and Belgium (in chronological order). It has been shown in 16 cities. It is currently en route to the Federal Republic of Germany, and has also been requested in France.

Initially, the exhibition was conceived for, and restricted to, museum specialists. This was an occasion to raise their consciousness of preventive conservation and to organize seminars and one-day workshops in conjunction with the exhibition.

In some countries the exhibition was also opened to the public, who were thus given a glimpse behind the scenes of a museum. Indeed, if we wish our action to be understood and financed by government officials, it is very important that the general public understand conservation problems as well.

Schoolchildren came, and saw why it is sometimes necessary to have humidifiers and dehumidifiers behind the showcases. The public realized that there are good reasons for reducing the lighting on collections of organic objects. Museum guards were also concerned about the types of lamps used in lighting their museums.

In some cities, the exhibition was visited by more than 15,000 people.

All this is encouraging and, upon reflection, it seems to me that if one wishes to admit the public one could utilize this material in a larger exhibition, which would have 3 facets:

- what cultural heritage is (photographic material);
- prevention of deterioration (material described above);
- restoration, when necessary (material to be prepared).

The public is not aware that the heritage of the past is deteriorating much more rapidly today than in previous eras. An exhibition of this sort could bring home to everyone that our generation bears a heavy responsibility, and that if restoration is good, preventive conservation is even better. (G.G.)

### RESEARCH

#### RTU/4

A new research training unit carried out studies on the structural stabilization of old masonry and rock structures by means of the injection of grout or other filling materials, both organic and inorganic.

This programme began in April, 1980 and will continue through the first three months of 1981. Four progress reports were produced in 1980. They include: the definition of the terms of reference, test methods, materials, and one on fluidifiers or water reducers.

RTU/4 is composed of two graduate researchers: Joseph Malliet (BEL), architect-engineer, and Daniela Ferragni (ITA), architect. A. Alva (ICCROM) is the coordinator for this unit.

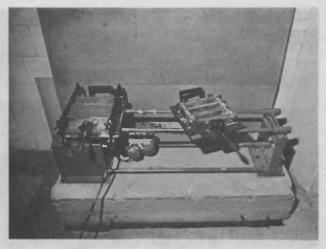
#### Mortar Research Training Unit - RTU/1

A second phase of mortar research was begun in April 1980, and will continue through the end of March 1981, under the direction of G. Torraca. The research programme involves the preparation of lime mortars with several additives to improve their setting time and hydraulic properties. The specimens of mortar are submitted to mechanical, chemical, and physical tests. A series of tests, described in a progress report, were done throughout 1980. A final report will be presented at the November meeting at ICCROM.

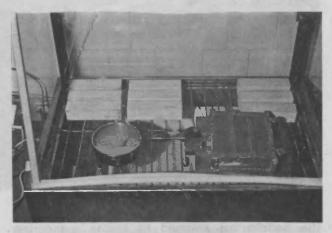
RTU/1 is composed of Massimo Forti, engineer, and Franca I. Pietrafitta, architect; Giuseppe Benedetti, architect, also worked on this project for four months. The Unit is coordinated by S. Peroni (ICCROM), and three experts also participated: Dr. Carlo Tersigni (ICCROM), analysis and thin sections; Dr. Federico Guidobaldi, analysis of alkalis, and Dr. Paola Rossi Doria, porosity (both CNR-Rome).



The mortar is prepared in a special heavy-duty mixer.



Standard mortar samples pounded in a settling machine to eliminate air bubbles.



The samples are cured in a humid cabinet at a constant temperature and relative humidity.



Each type of mortar is tested for mechanical strength. Shown here, a compression test.

# CONFERENCE REPORT



Some of the conference rapporteurs. From left: V. Mehra, M. Nimmo, B.M. Feilden, M. LaRose, R. Organ.

#### Conference on Didactic Material used in the Teaching of Conservation and Restoration

This conference, which took place from September 1-6, 1980, was organized by ICCROM and the working group, "Training in Conservation and Restoration" of the ICOM Comittee for Conservation.

It was made possible by a grant from the Direction of the French Museums, to whom special thanks are due. We are also grateful to those of the 55 participants who generously left behind the didactic material they had brought to the conference (films, video-cassettes, slides, and models).

After the welcome ceremonies, discussion began on the following topic: "Should a conservator/restorer be given theoretical training? If so, how much weight should be given to this theoretical training?" There was no lack of discussion between those who consider that the most important quality of a restorer is manual skill, and those who were in favour of restorers' having theoretical knowledge in addition to manual ability, in order to be able to take on greater responsibility.

The afteroon session, with Vishwa Raj Mehra as rapporteur, dealt with the use of films. The participants stressed that the market offers many films on physics, chemistry, and manufacturing techniques, and that some of these are excellent. In contrast, there are few films on restoration itself, and they, unfortunately, are expensive to produce. Before making a film, one should clearly define one's audience. If the producer avoids the pitfall of the "wider public" (a temptation because it offers greater returns),

interesting results can be obtained by concentrating on the registration of specific details of a technique. But this type of film will be more useful for restoration colleagues with some experience already than for teachers addressing a group of beginners. Moreover, a major disadvantage of film is the high cost of projection equipment.

The Tuesday morning of the conference was devoted to video cassettes. For many participants, this was a completely new material Robert Organ presented a selection of cassettes produced by the Smithsonian Institution as he explained the problems of production, and the advantages and disadvantages of video.

Martin Weaver also presented a selection of video programmes produced by Parks Canada. A clear distinction must be made between a video recording of a classroom lecture, which could eventually replace traditional teaching, and a video recording of a technique which could not otherwise be adequately described.

Noted among the advantages of video was the fact that a student can go over a section as often as he wishes. Among the disadvantages mentioned were the high cost of the equipment, the impersonality of the information, and above all, the risk of overtheoretical teaching in a field where practice is essential.

In the afternoon, Michele LaRose and James Stark discussed slides as teaching aids. They emphasized that although slides are among the most widespread and least expensive of teaching materials, they must of necessity be accompanied either by a teacher's commentary or by a tape. In the latter case, the information is automatically somewhat deadened. It is possible, however, to produce a slide which carries its own message and which can be understood without accompanying commentary.

Several institutions currently sell slide sets with written or taped commentaries.

The following day was spent on the more classic materials used in teaching: books, cards, and models. Mara Nimmo introduced a significant collection of examples as background for this all-day session.

Although the book is still a teaching material par excellence, it is also somewhat unattractive and static, which is a major drawback in restoration teaching. During the discussion, the participants pointed out that books used in teaching had too often not been conceived for that purpose, and were frequently little more than recipe books. Examples of books produced specifically for teaching were presented. These are quite attractive but they are produced for



Models demonstrating the lost-wax casting process. From left: wooden pattern, clay mould for making waxes, wax model, section through invested waxes, investment section after burnout, casting removed from investment, and finishing stages. Photo by B. Malter.

specialities such as medicine where the market is particularly wide.

Also to be noted are attempts in recent years to produce cards which furnish basic technical information, and are easily up-dated. Three institutions presented their technical cards: the ICR (DIMOS series), the Canadian Conservation Institute, and ICCROM.

It was unfortunate that there was not enough time to show the models in detail and discuss their use and didactic function, for this type of material coud be extremely useful.

The Thursday morning session was devoted to remarks by two specialists in education who had never attended a restoration conference before. One, Mr. Bochu, works at the "Centre d'etudes et d'applications pédagogiques" of the French Electric Company. The other, Mr. Ferguson, is head of the Department of Educational Media, University of London, Inst. of Education. Mr. Bochu demonstrated how even the most unlikely ideas can be illustrated by means of specially conceived material.

Mr. Ferguson noted the curiously reluctant attitude that a good part of the audience had shown towards pedagogy and teaching material. He then stimulated the discussion by asking whether the participants considered themselves to have some unique charisma, to be the only ones really capable of teaching conservation and restoration. If this were true, didactic material would be unnecessary; indeed, it might even be dangerous in the hands of others who would use it improperly!

During the comments that followed, it appeared that our profession, with the development of a number of new schools and institutes, is passing through a new phase of growing pains,



The same models packed as a teaching kit. Photo by B. Malter.

just as it went through growing pains 30 years ago when restorers first made public the methods and products they used.

Contributions by participants about their own teaching experiences were scheduled for the morning of the last day. The session was organized by Christoph von Imhoff. The speakers were: D. Ankner, N. Baer, A. Ballestrem, K. Finch, J. Hanlan, R. Harley, M. LaRose, L. Masschelein-Kleiner, R. Organ, C. Pearson, I. Sandner, and I. Tomljanovic.

It is not possible here to convey the content of these contributions, but it must be said that the participants appreciated the great frankness with which real teaching problems were shared among colleagues. Recalling previous conferences where the speakers went into tedious detail about their school's programmes, one participant exclaimed: "At last we are not just listing the menu but explaining how to cook!"

In the afternoon, the rapporteurs of different groups presented their final reports with summaries of the various sessions.

Dr. Feilden concluded the conference by saying that it seemed to him that a concerted effort must be made to create teaching material for conservation, bearing in mind the students' level of education. Professional assistance should be sought wherever it is available because there is already considerable knowledge in the field of teaching material in general. Furthermore, we should not expect immediate results from a conference of this type. To the contrary, one might hope that each participant will take its message to heart, putting himself in the student's shoes, and seeking to study how the teaching of conservation and restoration may be improved. (G.G.)

# TECHNICAL ASSISTANCE

#### Cairo Museum



Standing in front of the Cairo Museum, the team which carried out the survey of conservation and storage facilities.

As announced in Newsletter No. 6, ICOM has signed a contract with the Egyptian Department of Antiquities to make a nine-month study of the Cairo Museum. Partially financed by the World Bank, the study covers every sector of museum activity: organization, administration, finance, architecture, reception of visitors, choice of collections for display, storage ... and, obviously, conservation and restoration. We must emphasize the significance of having conservation as an integral part of this museum renovation project, instead of its being either left out altogether or brought in as an afterthought, as happens in many cases. ICCROM is responsible for this sector.

In the course of an initial mission from 11-24 October 1980, Gaël de Guichen provided the elements for a preliminary report which, contrary to common belief, showed that Cairo's climate was very humid (annual average R.H. 58%) and extremely variable. Consequently, particular attention must be paid to stabilization of climate in order to prevent the collections (which were marvellously preserved in the stable, dry climate of upper Egypt) from being damaged in the future museum.

During a second mission from November 26 - December 12, 1980, the following areas were studied: the condition of the objects which will be displayed in the future museum, and the personnel, material, space, and time necessary to treat these objects. This study was carried out by Karl-Albert Fritsch, Gaël de Guichen, Christian Heydrich, Christopher Wheatley, to-gether with Egyptian colleagues: Abdel Latif Erfan, Narsy Iskander, Nadia Ibrahim Lokma and Samir Abaza.

A report has already been presented to ICOM, and will be incorporated in the general report which must be sub mitted to the Egyptian Department of Antiquities in the beginning of March.

#### **Photogrammetry**

Sergio Lucarelli, our photogrammetry consultant, has been involved in a number of interesting projects in cooperation with various other organizations. Among these were:

 Jenoptik Jena (GDR) — completion of a photogrammetric survey of the Arch of Constantine. The plotting is being done at the Dresden laboratory, and eventual publication of the results is forseen. Articles by S. Lucarelli, Ing. Voss, and Prof. Meyer will be included.

Shots of the Arch of Titus were also taken and given to the Superintendence of Antiquities of Rome.

- Escuela Española de Historia y Arqueología en Roma - a survey of the Temple of Giunone Gabina in Gabii (Rome). Plotting and publication of the work will be done in Madrid.

- City and diocese of Venone (Friuli, Italy) - participation in a second meeting about the reconstruction of the cathedral. The survey done in August 1976 (a joint mission of ICCROM and the Bundesdenkmalamt of Vienna after the first earthquake) will be invaluable in the present stage of reconstruction. Other surveys of the facades along major streets have also been plotted and given to the city.

- Istituto Centrale del Restauro photogrammetric survey of equestrian statue of Marcus Aurelius on the Capitoline. The statue has now been dismantled and moved to the ICR, where its deterioration will be studied and conservation measures proposed. The survey will provide an exact record of the placement of the rider on the horse, and would also be very useful should any part of the statue be damaged in transit.

#### Photogrammetry Enquiry

The ICCROM enquiry to nearly 300 centres that seemed potential users of close-range photogrammetry had disappointing results. The questionnaire set out the useful possibilities of photogrammetry in conservation and sampled interest in a short course on the subject. It would seem that some countries already have adequate photogrammetric services, e.g. Austria, France, FRG and GDR, but in others. until senior officials have actual experience of its scope and labour saving potential, there is little likelihood of a full response to such a questionnaire.

Another problem seems to be how to put potential users of photogrammetry in touch with photogrammetric centres. A first step would be to publish a map indicating these centres and a register of their addresses.

#### Earthquake assistance

Readers of this newsletter will have felt immense sympathy for the tragic victims of the November 1980 earthquake in southern Italy, and ICCROM has offered to undertake a suitable project. The work of conservation of damaged cultural property will take several years, and the local authorities are now evaluating the damage and preparing detailed plans for restoration and repairs. It is possible that the future cooperation of foreign specialists will be useful in certain fields, e.g. mural paintings, metals, ceramics, and architectural survey.

ICCROM is in contact with the Italian agencies in charge of the restoration work, and starting to propose some joint operations to be initiated as soon as planning and funding permit.

#### Torcello, Italy

ICCROM participation in the campaign for the preservation of the mosaics continued throughout 1980.

Meetings of the technical committee were attended by G. Torraca on 16-18 January and 1-3 June, while P. Mora of the ICR represented ICCROM at the meeting of 11 November.

After consultation with L. Majewski of N.Y.U. Conservation Center, the work of consolidation of the mosaics of the west wall was started and completed in a few months under the direction of P. Mora, who also developed the plastic cramps which secure the whole mosaic surface to the wall. The restoration of the apse mosaic should follow in the summer of 1981. Microclimatic conditions were monitored for one year by the Venice Superintendence laboratory, with the support of international funds. problem of the control of moisture in the walls is still a difficult one, however.

ICCROM is completing the petrographic study of stones and bricks used to make the tesserae of the south chapel and the west wall. The Glass Research Laboratory of Murano is carrying out the analysis of the glass tesserae.

#### Jerusalem

2-3 January. Paul Schwartzbaum was invited by the Al Aqsa Restoration Committee to inspect the progress of the emergency consolidation of the fire-damaged paintings of the Al Aqsa Mosque and to plan Phase Two of the project.

#### Yugoslavia

4 February - 4 April. ICCROM sent Rodrigo Aparicio, a Guatemalan architect, on a two-month mission to Montenegro to make an architectural analysis of the damage caused by the earthquake of April 1979. His report illustrates typical damage patterns, solutions for temporary supports, and proposals for consolidation.

#### Italy

4 March. Christopher Wheatley went to Venice at the request of the Super-intendance of Monuments to propose a method for restoring the statue of the Virgin in the Church of the Carmini. The statue had been hit by lightning, partially burned and broken.

15 April. At the invitation of the Finnish Sawmills, Jukka Jokilehto gave a lecture in Florence on "Development and Conservation of Finnish Architecture".

22-23 May. Jukka Jokilehto gave a lecture on Urban Conservation in European Countries at the Faculty of Architecture, University of Genoa.

15 July. Christopher Wheatley spent a day at Orvieto instructing restorers in the use of an Airbrasive unit for cleaning the facade of the Duomo.

24 July. Paul Schwartzbaum was called to do some emergency consolidation on mediaeval frescoes discovered in Farfa during a dig by the British School.

14 August. Gaël de Guichen advised on the stabilization of climate in the showcases for the exhibition of musical instruments in the Pitti Palace in Florence.

11-13 September. Jukka Jokilehto was one of the key-note speakers at a seminar in Boissano entitled "Costruire nel Costruito".

#### Thailand



The director and former participants in Bangkok. From left: S. Naktong, S. Chandiwat, W. Na Songkla, B.M. Feilden, S. Siriratana, T. Suwanwattana, P. Ginagaroen.

11-13 March. Bernard M. Feilden discussed with the representative of the Ford Foundation in Bangkok the proposals for the Mural Paintings Course to be held in December in Bangkok.

#### India

29 March - 9 April. At the invitation of the Indo U.S. subcommission and the Archaeological Survey of India, Paul Schwartzbaum participated in a symposium at Ajanta and Ellora on the Conservation of Wall Paintings and gave a paper on "Secco Paintings on Mud Plaster".

#### Yemen

8-17 April. At the request of the Arab-Republic of Yemen and with the funding from a Unesco contract, Eugenio Galdieri and Alejandro Alva made a detailed inspection of the Ashrafiyah Mosque at Taïz, which presented structural problems. A technical report proposing solutions was prepared.

#### Algeria

23 April - 2 May. At the request of the Algerian Ministry of Information and Culture and with funding from a UNDP contract, Ken and Giulia Hempel went to study the causes of deterioration in the 70 marble statues of the Cherchell Museum. Treatment demonstrations were given, a list of priorities established, and the necessary material was left with the Algerian restorers.

#### Tunisia

26-29 April. At the invitation of the Ministry of Information and Cultural Affairs, Bernard M. Feilden, accompanied by Werner Bornheim gen. Schilling, inspected the condition of the great mosque of Kairouan, discussed the creation of a national conservation laboratory at Carthage, and studied the creation of a conservation centre at the Palace of Reggada.

#### Sweden

28-30 May. At the invitation of the Royal Academy of Letters, History, Antiquities, Bernard M. Feilden participated in a conference on the Safeguarding of Mediaeval Altarpieces and Wood Carvings in Churches and Museums in Stockholm, and gave a paper on "Preventive Maintenance of Historic Buildings".

#### Malta

16-19 June. On sub-contract from Unesco, a multidisciplinary team went to plan conservation strategy with the

Maltese government. Gaël de Guichen and Paul Schwartzbaum were sent from ICCROM, Maria Lilli di Franco and Giampiero Bozzachi from the Istituto Centrale per la Patologia del Libro. Three areas of concern were investigated: the need for a central conservation unit/laboratory; the conservation situation in the National Library of Valletta, and conservation problems of two mural paintings, the first by Paladini in the Old Chapel, Grand Masters Palace, Valletta, and the Gothic Paintings at L'Abbatija Tad-Deir (Rabat).

#### Ecuador and Venezuela

3-13 July. At the invitation of the Central Bank of Ecuador, Bernard M. Feilden went to advise on the Bank's project for construction of museums in three principal cities: Quito, Guayaquil and Cuenca. Among the problems considered were sites, safety measures (flooding, earthquakes, aircraft), climate control and eventual laboratory facilities. While in South America, the director also spent two days in Venezuela inviting that country to become an ICCROM Member State and discussing cooperation on a national course for museum curators.

#### Nigeria

28 July - 14 August. Lena Wikström attended a Seminar on Training in Museum Techniques, sponsored jointly by the German Cultural Institute and the Carl Duisberg Foundation. The hosts were the National Museum in Jos and the Jos Centre for Museum Studies.

#### Libya

4-7 August. At the behest of the National Museum of Tripoli, Gaël de Guichen went to consult on their staff training programme and to inspect the state of their collection before it is moved to a new location.

#### Gorëme, Turkey

September. The 8-year project of conservation of the church of Tokali Kilisi has now been completed. Isabelle Dangas, working with Turkish colleagues, began consolidation work on the churches of Karanlik and Elmali.

#### France

15-20 September. Sergio Lucarelli represented ICCROM at the ICOMOS/CIPA Meeting in Paris on Optimum Use of Architectural Photogrammetric Surveying. He also represented IC-CROM at the annual CIPA meeting in Rouen.

# CONFERENCES AND COOPERATION

#### Turkey

29 September - 4 October. Alejandro Alva, Paul Schwartzbaum, Giorgio Torraca, and Marie-Christine Uginet represented ICCROM at the 3rd International Symposium on Mud Brick (Adobe) Preservation in Ankara. This meeting was organized by the Unesco Participation Programme and also by ICCROM. Two papers prepared by ICCROM staff were presented:

 "A Bibliography on Mud Brick (Adobe)"; by A. Alva, G. Torraca, M-C. Uginet.

Uginet.

2) "Consolidation & Mounting of a Chalcolithic Mural Painting from the Site of Teleihat Ghassul", by P. Schwartzbaum, C. Silver and C. Wheatley.

#### Denmark

9-16 October. At the invitation of the Danish School of Conservation in Copenhagen, Paul Schwartzbaum gave a one-week course on the Conservation of Mural Paintings.

#### Tarquinia, Italy

22 October. Alejandro Alva and Christopher Wheatley visited the tombs, and collected samples for laboratory analysis.

#### Sri Lanka

18-29 November. J. Jokilehto continued the work begun in 1979, advising the Archaeological Dept. on the cataloguing and recording of movable and immovable cultural property. A report was prepared in consultance with J. Franklin, director of the Interbuildings Record Assn. and P. Ashby, director of Oxford Microform Publishers Ltd., who wrote the sections on computerized records and establishing a micro-filming unit. The report included recommendations on procedure as well as record cards and a thesaurus. Further cooperation is foreseen in training on pilot cataloguing projects. The mission was undertaken at the request of the Sri Lanka government, under Unesco contract.

#### Florence, Italy

27-28 November, Carlo Tersigni represented ICCROM at the Normal Petrography Committee meeting on Stone Petrography.

#### Nepal

29 November - 2 December. Jukka Jokilehto established contact with the Archaeological Survey, the Bhaktapur and Lumbini Development Projects.

#### Rome, Italy

24 January. Elena Fiorini discussed the problems concerning our trainees in Italy at the U.C.S.E.I. (Ufficio Centrale Studenti Esteri in Italia).

#### Australia

23 February - 10 March. Bernard M. Feilden went on an exploratory mission to study the needs of this Member State which plays such an important rôle in the activities of the Pacific region, and to see how ICCROM could adapt its programmes to these needs.

#### India

14-18 March. Bernard M. Feilden met persons active in conservation in New Delhi and discussed their problems. He also was requested to give lectures, seminars and broadcasts.

#### Denmark

17-19 March. At the invitation of the Danish School of Restoration Gaël de Guichen was asked to be on the selection committee to appoint two chemists whose work would include both teaching and research. He also gave a lecture to the ICOM Danish group.

#### Belgium

27-29 March. Bernard M. Feilden attended the Conference of the Council of Europe in Brussels.

#### Paris, France

29 April - 6 May. Gaël de Guichen attended the meeting of the International Committee for the Conservation of Mosaics at the Atelier SOCRA.

#### Ferrara, Italy

10-12 April. Jukka Jokilehto represented ICCROM and gave a paper at the meeting organized by the Ministero per i Beni Culturali on the Training of Craftsmen.

#### Canada

7-12 July. Marie-Christine Uginet represented ICCROM at the International Symposium on the Conservation of Contemporary Art, held at the National Museum in Ottawa. She gave a short presentation on the ICCROM library computer cataloguing system.

#### France

9-10 July. Gaël de Guichen went to Unesco headquarters in Paris to discuss the publication of a special issue of "MUSEUM" dedicated to problems of preventive conservation in museums.

#### Austria

8-13 September. The IIC Vienna Congress on Conservation within Historic Buildings was attended by various ICCROM staff members, both officially and unofficially. Bernard M. Feilden presented a paper on "The Internal Environment of Historic Buildings".

#### Cambridge, United Kingdom

22-26 September. Christina Borruso represented ICCROM at the International Conference on the Conservation of Library and Archive Materials and the Graphic Arts.

#### Mexico

24 October - 4 November. Bernard M. Feilden and Gaël de Guichen represented ICCROM at the ICOM triennical meeting in Mexico City.

#### Netherlands

10-12 November. B.M. Feilden and Cynthia Rockwell assisted the Council's Standards and Training Committee in a trial evaluation of the Opleiding Restauratoren (Training Programme for Restorers).

# MISCELLANEOUS

#### Other Activities

#### Course in Measured Drawing

A four-week course entitled "Measured Drawing", offered through Cornell University Summer Session, will be based at ICCROM from June 2-27, 1981, making use of our drafting studios and library. The course, taught by W. Willson Cummer, classical archaeologist, and Sarah Whitney Powell, archaeological illustrator, combines the study of ancient Roman buildings with training and practice in sketching, measuring, and preparing finished drawings for publication. It is intended for students in classical studies and architectural history, as well as those in fine arts, architecture and conservation. During the past two years, Bernard M. Feilden and Jukka Jokilehto have addressed the course on aspects of building conservation, and such talks will be included again this year. For further information and application forms, contact:

S.W. Powell Peabody Museum Harvard University 11 Divinity Avenue Cambridge, MA 02138, USA

#### University of Washington

ICCROM was again host to the University of Washington (Seattle) Rome programme, which was directed by Profs. Astra Zarina and Norman Johnston of the university's Architecture Department. The group of 18 undergraduate students spent 10 weeks, from 6 October to 12 December 1980, studying the urban fabric of Rome in terms of both its history and its modern development. This is the third year we have been able to offer lecture and drafting rooms to the University of Washington, which is an Associate Member.

#### National Initiatives

Some past participants of ICCROM courses have expressed interest in setting up national groups of "alumni". We welcome this initiative and will provide computer lists and labels to assist these groups. Former participants of the Architectural Conservation course who live in the United States or Canada are invited to contact Thomas H. Taylor, Jr., at the address below:

Chief, Architectural Conservator The Colonial Williamsburg Foundation Drawer C Williamsburg, VA 23185, USA Tel. (804) 229-1000, ext. 2314. The Newsletter will also publish news of the activities of these groups. Another kind of organization, on a more official level, is the formation of Conservation Advisory Councils. Ideally, each nation should have such a council to help set policy and advise governments on national conservation needs and developments. Brazil is the latest to set up their council.

#### ICR Moves to San Michele

The Istituto Centrale del Restauro (Italian Central Restoration Institute) is moving to a nearby courtyard in the San Michele complex where ICCROM has its headquarters. The ICR training department and the mural paintings section have already been transferred to San Michele; the laboratories, archaeological section, and administration will remain in their old building until the renovation is completed.

This move is an important one for both the Istituto and ICCROM. It means that the ICR will have expanded facilities for carrying out its many activities, and that contacts between our two organizations will be as easy as walking next door. This proximity will be especially advantageous for our course on Conservation of Mural Paintings, which works very closely with the Istituto.

#### • Calendar - 1981

7-9 May

IIC-CG: 7th Annual Conference. Victoria, Canada.

For information:
IIC-CG 1981 Conference
Conservation Division
BC Provincial Museum
601 Belleville Street
Victoria, B.C., V8V 1X4, Canada

7-10 May

10th Annual Conference of the Society for Industrial Archaeology. Hartford, CT, U.S.A.

For information: Stephen Victor Slater Mill Historic Site Box 727 Pawtucket RI 02862, U.S.A.

10-15 May

IRG 12 International Research Group on Wood Preservation. Sarajevo, Yugoslavia. For information: IRG 12 Booking - R.O. SIPAD - IRC Omladinsko setaliste 10 71000 Sarajevo, Yugoslavia

25-30 May

VI General Assembly of ICOMOS. Rome, Italy.

For information: Organization Committee VI General Assembly of ICOMOS B.P. 522 Naples, Italy

27-31 May

9th Annual Meeting of the American Institute for Conservation. Philadelphia, PA, U.S.A.

For information:
Barbara Appelbaum
AIC Program Chmn.
444 Central Park West
New York, NY, U.S.A.

6-12 September

5th International Biodeterioration Symposium. Aberdeen, Scotland.

The Biodeterioration Society.

For information: Dr. J.M. Shewan 79 Duthie Terrace Aberdeen, AB1 6LS, Scotland

14-16 September

2nd International Conference on the Durability of Building Materials and Components. Gaithersburg, MD, U.S.A.

National Bureau of Standards

For information:
Dr. Geoffrey Frohnsdorff
B348, Building 226
Center for Building Technology
National Bureau of Standards
Washington, D.C. 20234, U.S.A.

14-20 September

4th International Conference on the Study and Conservation of the Industrial Heritage. Lyons et Le Creusot, France.

The International Committee for the Conservation of the Industrial Heritage

For information: Secretariat CILAC 48 Saint-Lambert 75015 Paris, France

15-18 September

ICOM Working Group on Waterlogged Wood. Ottawa, Canada.

For information: Registrar Conference on Waterlogged Wood Box 9270 Ottawa, Ontario, K1G 3T9, Canada

16-18 September

Architectural Photogrammetry Sym posium. Vienna, Austria.

Comité international de photogrammétrie architecturale (CIPA).

For information: Maurice Carbonnell President, CIPA 2, Avenue Pasteur 94160 Saint-Mandé, France

19-24 September

The First International Symposium on the Antiquities of Palestine. University of Aleppo, Syria.

Arab Educational and Culture Orga- 14-16 October nization.

For information: Dr. Shawqi Sha'th Secretary of the Organizing Committee The First International Symposium on the Antiquities of Palestine University of Aleppo Aleppo, Syria

21-25 September

6th Triennial Conference of the International Committee for Conservation. Ottawa, Canada,

For information: J.R.J. van Asperen de Boer, Brouwersgracht 54 bv. Amsterdam 1003, Netherlands

1-3 October

I Congresso Nazionale "Consolidamento e Restauro Architettonico". Verona, Italy

Associazione Italiana Ristrutturazione e Consolidamento Costruzioni.

For information: **ASSIRCO** Via Nizza 22 00198 Rome, Italy

7-10 October

Annual Meeting of the Association for Preservation Technology: "REHAB/ TECH'81". Washington, D.C., U.S.A.

For information: Lee H. Nelson Program Chairman 4708 Twinbrook Road Fairfax, VA 22032, U.S.A.

4th Conference of European Historic Towns. Fribourg, Switzerland.

Council of Europe.

For information: Council of Europe 67006 Strasbourg, France

27-30 October

International Symposium on the Conservation of Stone. Bologna, Italy.

Centro per la Conservazione delle Sculture all'Aperto.

For information:

Centro per la Conservazione delle Sculture all'Aperto Via de Pignattari 1 40124 Bologna, Italy

3-6 November

Cements, Mortars and Mixes for Injections used in Conservation. Rome. Italy

ICCROM. By invitation only. For information: Simonetta Peroni **ICCROM** 13 Via di San Michele 00153 Rome, Italy

4-5 December

Textiles and Museum Lighting Conference. Washington, D.C., U.S.A. Harper's Ferry Regional Textile Group. For information: **HFRTG** c/o Kathleen Stradley Anderson House Museum 2118 Massachusetts Ave. NW. Washington D.C. 20008, U.S.A.

#### Calendar - 1982

21-22 May

Symposium on the Use of Resins in Conservation of Art Objects. Edinburgh, Scotland.

The Scottish Society for Conservation & Restoration of Historic & Artistic Works and the Department of Extra-Mural Studies, University of Edinburgh.

For information:

SSCR, National Museum of Antiquities of Scotland

West Granton Road Edinburgh EH6 4SP, Scotland 9-12 July

Fourth International Congress on Deterioration and Preservation of Stone. Louisville, Kentucky, U.S.A.

For information: Prof. K.L. Gauri Department of Geology University of Louisville Louisville, KY 40292, U.S.A.

September

Science and Technology in the Service of the Conservator. Washington, D.C., For information: IIC - 6, Buckingham Street London WC2N 6BA, England

12-16 October

Architectural Conservation in its Historical and Cultural Context. Basel, Switzerland. ICOMOS/ICCROM/University of Basel

For information: John Calabrini Institut des Festivals d'Arts internationaux I, place du Pont CH-1024 Geneva, Switzerland

# **OPEN FORUM**

The "Open Forum" column provides space for thought-provoking opinions and observations about the practice or philosophy of conservation. There are three contributions in this issue, one dealing with graphic art, one on metals conservation, and one on the need for control of the profession.

#### International Advisory Committee of Keepers of Public Collections of Graphic Art

The International Advisory Committee of Keepers of Public Collections of Graphic Art wish to draw the attention of dealers in prints and drawings to the fact that the art trade is increasingly in the habit of submitting graphic works to an operation of rejuvenation by washing and bleaching, sometimes also retouching of colours, pressing and other means destined to make them more attractive for sale. There are even dealers and auctioneers to whom these practices have become a matter of course.

The Curators of fifty public collections of prints and drawings, meeting as an International Committee, wish to underline the dangers to graphic works of such treatment which is often done more than once to the same object, and which nearly always entails a loss of historic and artistic authenticity, often of irreparable damage to the paper itself. All of this is bound to affect the work's intrinsic value.

The Advisory Committee has to point out that drawings and prints that have been treated in this way lose a great part of their significance and value for public collections. The Committee hopes that the abandonment of these practices will protect an increasing number of graphic works threatened by destruction each year.

#### • The Conservation of Metals

The conservation of ancient metal objects, archaeological objects in particular, poses some problems for museum curators, and these cannot be solved unless curators are sufficiently informed. Whether one is dealing with collections on display (where appearance and meaning must be considered together with stability), or with objects in storage (which is generally the bête noire of those in charge), it is vital to take a certain number of precautions.

Indeed, the preservation of metal objects is a special field of conservation which stems from the nature of the materials themselves.

#### What are metals?

With the exception of gold, metals are the unstable state of the material; they are won from ores which constitute the stable form of the metal in nature. The complex operations of metallurgy transform the ores into metals which are used either in a pure state or as alloys, and

worked according to highly varied techniques which modify their internal structure. Metals are not stable, and the passage of time and the effects of environment will cause them to revert, sooner or later, to the stable state. These transformations constitute corrosion, which, independently of possible physical injury, will more or less completely modify the form of the object: its weight, colour, and material. Eventually, the metal object becomes completely illegible unless specially treated.

#### Conserving metals

The conservation of metals has a two-fold aim: first, to retrieve the meaning of the deformed object — the meaning which is its reason for being included in a collection and cared for; second, to interrupt the continuing phenomena of transformation. Consequently, two quite different kinds of operations are involved. First comes cleaning in order to make the object readable and restore its meaning. Cleaning consists of removing corrosion products back to the original surface of the object. These products are metallic salts formed in a reaction with the environment. Cleaning is always a delicate task because it is irreversible; numerous objects have been more or less totally altered or destroyed by incompetent cleaning Although the principle of cleaning is simple, its application is often very difficult because the result one hopes to reach is highly dependent on the object's meaning, and there are various kinds of message the object can carry. An object can also be the bearer of a potential message which is not immediately apparent, and which careless cleaning may destroy. For this reason, cleaning should only be undertaken under the responsibility of an historian, archaeologist, or art historian who knows the nature of these messages, and not by a technician or scientist who only understands the materials and its alterations. Too often, objects have been given for cleaning either to "scientists" or, worse still, to technicians of varying degrees of skill, such as the "odd-job" museum guard. The role of the scientist, however, is very important in conservation, and thanks to him, one can be assured of the object's stabilization. The conservation of a metal, often deeply altered and unstable, depends on protection from external agents: humidity, thermal shock, atmospheric pollution, and contact with other metals, wood, or dust, etc... This is more important since the cleaned object has often become unstable, and there is no treatment which will ensure eternal stability.

If paintings have frequently suffered from inept restoration over the centuries, metal objects have been equally badly treated and remain so. Although great progress has been made, there are still workshops and laboratories where objects are improperly treated and doomed to gradual or rapid deterioration.

#### Storage conditions

Museum reserves often contain hundreds of kilogrammes of objects stored under dangerous conditions; these objects have been more drastically changed in a few dozen years there than in the last two thousand years in the soil. Currently, there are relatively simple ways to improve storage and climate control, but these require the curator to be informed, and he or she is already expected to have innumerable skills and different kinds of knowledge. In fact, this information does not require any special scientific knowledge.

The general principles of metals conservation are now better defined than they have been in the past. Vague notions such as "patina" have been clarified and replaced by concepts of the epidermis, corrosion products, or erosion. This progress was made possible by the combined efforts of historians and scientists. One must not forget that ultimately museum curators are responsible for the condition of the collections in their charge, and that metal objects are often very difficult to conserve.

Albert France-Lanord

#### • The Key Word is Control

Legal controls over its practice is the difference between the medical profession and art conservation no matter how many superficial similarities can be emphasized. Both activities concern themselves with physical condition, both use certain instrumentation, both rely on aspects of chemistry. Any assertion of resemblance in depth is misleading. Comparison of numerica! volume of practitioners is about a thousand to one, medical personnel to art conservators. Medical students may select from hundreds of training centers. There are four available in the USA to those interested in an academic approach to art conservation, four disparate training programs with a total of less than 40 openings. Medical education shares recognized standards, requisites for graduation of an accredited professional. There are no criteria established for the training of an art conservator, none of the existing programs is able to

award a professional status in conservation practice. After graduation the medical professional wins license to practice via governmentally regulated examinations. He or she enters society with a legal label. There is no way a conservator may reach comparable social identification. No form of licensing, no type of generic testing. no legal stipulations enable the public to differentiate between the avowedly competent and the incompetent practitioner of art conserva

No one claims that doctors are equally educated, equally skilled, or equally ethical. However, there are controls to admit them to practice. controls during practice and if proven below requisite standard of performance, legal measures to bring them to account. The education of nurses parallels that of doctors. The two may criticize one another but neither invades the known territory of the other. The functions of a nurse are exactly stipulated, her parameters clearly defined. A nurse who exceeds her prerogatives or fails in her responsibilities may be brought to question, proven out of line, she

may be deprived of her license to practice. Each human unit in the medical hierarchy has won legal rights to specific operations. Redress against abuse may not be conspicuous, it is available. This is the crux of public protection and public respect.

The suggested comparison between the relationship of a nurse to a doctor and that of the proposed "paraprofessional" to an art conservator is invalid. The figure of the conservator is without substance, not professional, devoid of legal status, foundering in a muddled lack of controls. Until a legal reality has been achieved for this occupation, to proliferate the volume of incompletely skilled is little short of criminal. Such addition would open the floodgates of uncared-for collections to the ravages of the inept. It would betray the integrity of these materials to a destructive force far more deadly than that of neglect. It would also serve to depress the quality of a field struggling for lawful recognition.

Caroline K. Keck Caroline K. Keck Cooperstown, New York

#### Just arrived:

The proceedings of the Third International Symposium on Mudbrick (Adobe) Preservation. 29 September - 4 October 1980, Ankara. The volume consists of 18 offprints of papers (in various languages) presented at the symposium. 308 pp. It can be purchased from ICCROM for Lit 10,000 (\$10).

#### Newsletter Distribution

This Newsletter is currently being distributed to everyone on our mailing list. You can help us to improve our lists for this and other purposes by informing us:

- 1) of your telephone number, and telex or telegraphic address, if any;
- 2) if your address is incorrect;
- 3) if you are receiving duplicate copies;
- 4) if your office has received a Newsletter addressed to someone who has moved or retired:
- 5) if you prefer to have this publication in French.

Please send your mailing label, if possible, with any corrections you wish to make in your address.

This Newsletter is published by the International Centre for the Study of the Preservation and the Restoration of Cultural Property (ICCROM) 13, Via di San Michele, 00153 Rome, Italy Editors: Monica Garcia, Gaël de Guichen, Cynthia Rockwell.

Design: Azar Soheil-Jokilehto

Cover: A view of the Ospizio of San Michele where ICCROM is now located.