

**World Health Organization**  
**Technical Report Series**  
**No. 1**

**EXPERT COMMITTEE**  
**ON THE UNIFICATION**  
**OF PHARMACOPOEIAS**

**Report on the Fourth Session**

*Geneva, 20-30 April 1949*

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**WORLD HEALTH ORGANIZATION**

PALAIS DES NATIONS

GENEVA

JANUARY 1950

EXPERT COMMITTEE ON THE UNIFICATION  
OF PHARMACOPOEIAS

Fourth Session

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Professor E. Fullerton Cook, Pharm.D., Chairman, Committee of Revision of the Pharmacopoeia of the United States of America, Philadelphia, Pa., USA

I. R. Fahmy, Ph.D., Professor of Pharmacognosy, Fouad I University, Cairo, Egypt; Secretary, Egyptian Pharmacopoeia Commission

H. Flück, Dr Sc.Nat., Professeur de Pharmacognosie à l'Ecole Polytechnique Fédérale, Zürich, Switzerland; Membre de la Commission fédérale de la Pharmacopée

Dr C. H. Hampshire, Secretary, British Pharmacopoeia Commission, General Medical Council Office, London, United Kingdom (*Chairman*)

Dr R. Hazard, Professeur de Pharmacologie et de Matière médicale à la Faculté de Médecine de l'Université de Paris, France; Membre de la Commission de la Pharmacopée française

D. van Os, Dr Sc.Nat., Professor of Pharmaceutical Chemistry and Toxicology, University of Groningen, Netherlands; Chairman, Netherlands Pharmacopoeia Commission

*Secretary :*

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The report on the fourth session of this committee was originally issued in mimeographed form as document WHO/Pharm/70, 20 May 1949.

# EXPERT COMMITTEE ON THE UNIFICATION OF PHARMACOPOEIAS

## Report on the Fourth Session<sup>1</sup>

The Expert Committee on the Unification of Pharmacopoeias held its fourth session in Geneva from 20 to 30 April 1949.

### 1. Matters Arising from Report on Third Session<sup>2</sup>

#### 1.1 *Negotiations for the establishment of a single international secretariat for pharmacopoeias*

The committee noted the confirmatory letter from the Belgian Government, received 15 November 1948, stating that the government would prefer the International Secretariat for Pharmacopoeias to remain in Brussels, although under the auspices of WHO, unless, for practical reasons, it would be desirable for such a secretariat to be set up in the WHO headquarters.

After hearing a further report from the secretariat on the question, the committee recommended that the following resolution be submitted to the Executive Board for its consideration :

Whereas the World Health Organization, as a specialized agency of the United Nations, constitutes the directing and co-ordinating authority on international health work and the principal international authority for the promotion of international standards with respect to biological, pharmaceutical, and similar products ; and

Whereas the World Health Assembly, acting in pursuance of Article 21 (*d*) of the Constitution, has authority to adopt regulations concerning standards with respect to the safety, purity, and potency of biological, pharmaceutical, and similar products moving in international commerce ; and

<sup>1</sup> The Executive Board, at its fourth session, adopted the following resolution :

The Executive Board

(1) NOTES the report of the Expert Committee on the Unification of Pharmacopoeias on its fourth session,

and

(2) AUTHORIZES its publication.

(*Off. Rec. World Hlth Org.* 22, 3)

<sup>2</sup> *Off. Rec. World Hlth Org.* 15, 39

Whereas there exist two international secretariats, the one in Brussels—established under the 1929 Agreement respecting the unification of pharmacopoeial formulas for potent drugs—and the other in Geneva; and

Whereas the secretariat in Geneva forms a part of the Secretariat of the World Health Organization and performs those functions concerning the preparation of an international pharmacopoeia as have been entrusted to the World Health Organization; and

Whereas the task of the preparation of an international pharmacopoeia entrusted to the World Health Organization would be greatly facilitated by the existence of a single secretariat,

The Executive Board

RESOLVES that the World Health Organization continue negotiations with the Belgian Government with a view to reaching a mutual agreement for the establishment of a single permanent international secretariat under the aegis of the World Health Organization at the headquarters of the said Organization in Geneva.<sup>3</sup>

1.2 *Pan American pharmacopoeia*

The committee noted an informal report on the first Pan American Congress of Pharmacy, Havana, 1948, presented by Professor Cook, as well as a report on the present position of the proposed Pan American pharmacopoeia, presented by the secretariat.

1.3 *Relations with other expert committees*

1.3.1 *Expert Committee on Biological Standardization.* The committee noted that, owing to the postponement of the date of the meeting of the Expert Committee on Biological Standardization, the latter committee had not been able to consider the items referred to it during the second and third sessions of the Expert Committee on the Unification of Pharmacopoeias. These items would, however, be discussed at the meeting beginning 2 May 1949, and the report would be made available to members.

1.3.2 *Expert Committee on Malaria.* The committee noted that, owing to the fact that the Expert Committee on Malaria was not meeting until 10 August, the latter committee had been unable to consider the draft monograph on Quinini Sulfas. Four additional antimalarial drugs had

<sup>3</sup> The Executive Board, at its fourth session, adopted the following resolution:

The Executive Board

RESOLVES that the Director-General continue negotiations with the Belgian Government with a view to reaching an agreement for the establishment of a single permanent international secretariat under the aegis of the World Health Organization at the headquarters of the said organization in Geneva.  
(*Off. Rec. World Hlth Org.* 22, 3)

been suggested by the secretary of the Expert Committee on Malaria, namely, proguanil, chloroquine, pentaquine and isopentaquine. Draft monographs of the first two had been prepared by the chairman for consideration.

## 2. Preparation of the International Pharmacopoeia

The greater part of the session was devoted to the consideration of monographs and reports and to arrangements for the printing of the International Pharmacopoeia.

### 2.1 *Consideration of draft monographs*

Draft monographs, which had been prepared and revised by the members during the first, second and third sessions of the committee, were placed before the committee. 194 draft monographs considered were before the meeting. These were completed in certain cases, final adjustments being left to the chairman and secretary, except that three monographs were withdrawn from the programme.

### 2.2 *Consideration of draft reports*

The committee considered a number of reports which had been prepared by members. These were adopted with amendments where necessary.

### 2.3 *The title "International Pharmacopoeia"*

The committee noted the correspondence exchanged on the title of the International Pharmacopoeia between Dr Hampshire and Professor Cook, as well as the preceding discussion summarized in the report on the third session.<sup>4</sup> At the request of the chairman, the members summarized the results of consultations in their own countries on the suitability of the suggested alternative title "Codex Medicamentarius Internationalis".

Professor van Os said that he had consulted the Netherlands Pharmacopoeia Commission, which would prefer the title "International Pharmacopoeia", as the word "Codex" implied a work of secondary importance. Professor Fahmy had received the same expression of opinion from the Egyptian Pharmacopoeia Commission, as had Professor Flück from individual members of the Swiss Federal Pharmacopoeia Commission. Professor Baggesgaard-Rasmussen said that he and his colleagues would prefer the title "International Pharmacopoeia" and that the other Scandinavian countries were of the same opinion. In these countries, the term "Codex" was reserved for a general formulary. Professor Hazard, while

<sup>4</sup> *Off. Rec. World Hlth Org.* 15, 40.

recognizing the fact that in many countries the word "Codex" had by now a slightly weaker meaning than "Pharmacopoeia", would agree with either name. On the other hand, Professor Cook stressed the fact that the Board of Trustees of the United States Pharmacopoeial Convention was opposed equally to both terms, since they might imply an official authority and might indirectly serve as a means of enforcing adoption of the work, thereby superseding the national pharmacopoeia. The chairman pointed out that the preface to the International Pharmacopoeia would be drafted in such a way as to express clearly that the pharmacopoeia was not intended to be a legal pharmacopoeia in any country, unless approved by the pharmacopoeial authority of that country.

A proposal by Professor Cook that the title "Compendium" be adopted was not seconded.

Professor van Os proposed, and Professor Fahmy seconded, that the work on which the committee was engaged should be presented to the World Health Assembly under the title "International Pharmacopoeia". This motion on being put to the vote was carried by five votes to one, Professor Cook voting against the proposed title.

On the proposal of Professor Cook, it was agreed that, when the International Pharmacopoeia is presented for adoption by the World Health Assembly, the resolution of adoption should include a statement to the effect that the pharmacopoeia is not intended to be a legal pharmacopoeia in any country unless adopted by the pharmacopoeial authority of that country.

#### 2.4 *Table of usual and maximal doses*

The committee considered and revised the table of usual and maximal doses<sup>5</sup> which had been prepared by Professor Hazard. Certain names were deleted from the list.

The question of the renewal of prescriptions containing quantities exceeding the maximal dose was discussed, and it was agreed that the following paragraph should be added to the introduction:

If the physician desires that the prescription for preparations containing quantities in excess of the maximal dose be not repeated, he must mark it with the words "Non repetatur".

Professor Hazard agreed to complete the revision of the table, taking into account the opinions expressed or written by members of the committee, and to send the completed list to the chairman and the secretariat for printing.

### 2.5 *Reagents and test solutions*

A working party composed of Professors Cook, Fahmy, Flück, and Hazard was set up to define the meaning of T(est) S(olution) and R(eagent) in English and in French. Their findings were approved by the committee.

### 2.6 *General notices*

The document WHO/Pharm/15 Rev. 1<sup>6</sup> was considered and accepted with a few editorial amendments and additions. The following were the principal additions and amendments:

*Containers* : Descriptions of the types of containers to be used were drawn up.

It was agreed to add the following paragraph:

*Water* : Unless otherwise stated, distilled water will be used.

### 2.7 *Printing of the Pharmacopoeia*

The committee discussed the style to be adopted for the printing of the International Pharmacopoeia, the Director of the Division of Editorial and Reference Services attending.

### 2.8 *Date of publication of the International Pharmacopoeia*

The secretariat pointed out that budgetary provision has been made in 1949 for the publication of the Pharmacopoeia. The committee decided that monographs already revised by the committee but not completed would be handed to the secretariat and the chairman for preparation for publication, and that such monographs would be printed and discussed finally in proof form. The chairman expressed the wish that the French and English texts should be published simultaneously.

## 3. **Nomenclature of New Drugs**

The chairman referred to a report on the question of non-proprietary names prepared at the request of the secretariat by Dr W. Winter. The committee asked the secretariat to thank Dr Winter for his report.

After members had reported on the regulations and arrangements for the establishment of non-proprietary names in their own countries, the committee agreed that this was a matter for which means should be found of inaugurating a system for giving non-proprietary names which would have international recognition so as to avoid the present confusion, not only for habit-forming drugs, but for all new drugs which might later be

<sup>6</sup> Document WHO/Pharm/15 Rev. 1, unpublished working document

included in subsequent editions of the International Pharmacopoeia. These names should therefore not be trademarked in any country.

Because of the necessity for establishing non-proprietary names on an international level, the committee agreed that the task should be undertaken, especially since there would be more opportunity for working on this problem now that the first edition of the International Pharmacopoeia would be going to press in 1949. The committee recommended that the following resolution be submitted to the Executive Board for its consideration :

Whereas it is highly desirable that a system of common nomenclature be established internationally for such new pharmaceutical products, including habit-forming drugs, as might be contemplated for later insertion in the International Pharmacopoeia,

The Executive Board

RESOLVES that the World Health Organization take such steps as might be deemed suitable in order to establish a system of common nomenclature for new pharmaceutical products moving in international commerce.<sup>7</sup>

#### 4. Relations with Other Expert Committees

##### 4.1 *Expert Committee on Biological Standardization*

The committee decided that the secretary should approach by letter the secretary of the Expert Committee on Biological Standardization, submitting the monographs on sera antitoxica, together with the comments of Dr M. V. Veldee, United States National Institutes of Health, and of Dr A. A. Miles, National Institute for Medical Research, London, and asking the opinion of this committee on the biological assay of these sera.

It was agreed that the Expert Committee on Biological Standardization should also be consulted on the biological assay of digitalis.

##### 4.2 *Expert Committee on Habit-forming Drugs*

The question of the international nomenclature of habit-forming drugs had been referred by the Expert Committee on Habit-forming Drugs<sup>8</sup> and, after discussion, the committee agreed to provide common names for

<sup>7</sup> The Executive Board, at its fourth session, adopted the following resolution :

Whereas it is highly desirable that a system of common nomenclature be established internationally for such new pharmaceutical products, including habit-forming drugs, as might be contemplated for later insertion in the International Pharmacopoeia,

The Executive Board

REQUESTS the Director-General to study the questions involved in establishing a system of common nomenclature for new pharmaceutical products moving in international commerce, and to report thereon to the sixth session of the Board.

(*Off. Rec. World Hlth Org.* 22, 3)

<sup>8</sup> *Off. Rec. World Hlth Org.* 19, 32

such drugs as the Expert Committee on Habit-forming Drugs may suggest should be brought under international control.

## 5. Other Matters

### 5.1 *International Union of Chemistry*

The secretariat outlined the correspondence which had been exchanged with the International Union of Chemistry.

The committee decided that such relationships should be continued so that the members could be kept informed of all developments in the international unification of chemical formulae, atomic weights, nomenclature, abbreviations, etc.

The committee noted the information on the setting-up of a commission for standardization of reagents and, possibly, medical substances and requested the secretariat to take all possible steps to avoid the duplication of standards of substances for medical use.

### 5.2 *Letter from the Control Commission for Germany (British Element)*

The committee noted a letter from the Office of the Public Health Adviser, Control Commission for Germany (British Element), suggesting that recent German scientific work in pharmaceuticals should be taken into consideration in the preparation of the International Pharmacopoeia. The committee decided to reply that it was kept informed of the work in progress in different countries, and would be pleased to receive from the Control Commission all information relating to pharmacopoeial questions.

### 5.3 *Date of next meeting*

The committee recommended that its next meeting should be held in the last week of September 1949, the period 26 September - 5 October being suggested.

## Annex 1

LIST OF MONOGRAPHS TO APPEAR  
IN THE INTERNATIONAL PHARMACOPOEIA

	WHO/Pharm/Mon
Acetarsol . . . . .	46 Rev. 1
Acidum Acetylsalicylicum . . . . .	212
Acidum Ascorbicum . . . . .	213
Acidum Benzoicum . . . . .	44 Rev. 1
Acidum Hydrochloricum . . . . .	25
Acidum Hydrochloricum Dilutum . . . . .	26 Rev. 1
Acidum Nicotinicum . . . . .	73 Rev. 1
Aconiti Tuber . . . . .	49 Rev. 1
Aconitinum . . . . .	214
Adrenalinum . . . . .	90 Rev. 1
Aether Anaestheticus . . . . .	32 Rev. 1
Aether Vinylicus . . . . .	82 Rev. 1
Aethisteronum . . . . .	83 Rev. 1
Aethylis Aminobenzoas . . . . .	84 Rev. 1
Aethylis Chloridum . . . . .	137 Rev. 1
Amidopyrinum . . . . .	215
Aminophyllinum . . . . .	115 Rev. 1
Amphetamini . . . . .	154 Rev. 1
Amphetamini Sulfas . . . . .	164 Rev. 1
Amyleni Hydras . . . . .	160 Rev. 1
Amylis Nitris . . . . .	138 Rev. 1
Apomorphini Hydrochloridum . . . . .	150 Rev. 1
Argenti Nitras . . . . .	156 Rev. 1
Argentum Proteanicum . . . . .	175 Rev. 1
Arseni Trioxidum . . . . .	27 Rev. 1
Atropini Sulfas . . . . .	217
Atropinum . . . . .	216
Barbitalnatrium . . . . .	218
Barbitalum . . . . .	219
Barii Sulfas . . . . .	140 Rev. 1
Belladonnae Herba . . . . .	4 Rev. 2
Belladonnae Herba Pulverata Standardisata . . . . .	16 Rev. 1
Belladonnae Radix . . . . .	3 Rev. 2
Bismuthi Subcarbonas . . . . .	144 Rev. 1
Bismuthi Subsalicylas . . . . .	145 Rev. 1
Bromoformum . . . . .	220
Butacaini Sulfas . . . . .	85 Rev. 1
Butylis Aminobenzoas . . . . .	86 Rev. 1
Calciferol . . . . .	77 Rev. 1
Calcii Gluconas . . . . .	158 Rev. 1
Calcii Lactas . . . . .	157 Rev. 1
Carbacholum . . . . .	176 Rev. 1
Carbarsonum . . . . .	47 Rev. 1
Carbonei Dioxidum . . . . .	87 Rev. 1
Carbonei Tetrachloridum . . . . .	139 Rev. 1
Cascarae Sagradae Cortex . . . . .	23 Rev. 1
Chiniofonum . . . . .	170 Rev. 1
Chlorali Hydras . . . . .	221

WHO/Pharm/Mon

Chloraminum . . . . .	155 Rev. 1
Chloroformum Anaestheticum . . . . .	31 Rev. 1
Chloroquini Diphosphas . . . . .	210
Cocaini Hydrochloridum . . . . .	222
Cocaini Nitras . . . . .	223
Cocainum . . . . .	224
Codeini Phosphas . . . . .	132 Rev. 1
Codeinum . . . . .	225
Coffeinum . . . . .	226
Coffeinum cum Natrii Benzoate . . . . .	2 Rev. 2
Coffeinum cum Natrii Salicylate . . . . .	1 Rev. 2
Colchici Semen . . . . .	13 Rev. 1
Colchicinum . . . . .	131 Rev. 1
Cresol . . . . .	161 Rev. 1
Desoxycortoni Acetas . . . . .	88 Rev. 1
Diethylstilboestrol . . . . .	89 Rev. 1
Digitalis Folium . . . . .	17 Rev. 1
Digitalis Folium Pulveratum Standardisatum . . . . .	18
Digoxinum . . . . .	96 Rev. 1
Emetini Hydrochloridum . . . . .	71 Rev. 1
Ephedrini Hydrochloridum . . . . .	227
Ephedrinum . . . . .	134 Rev. 1
Ergometrini Maleas . . . . .	45 Rev. 1
Ergota . . . . .	19 Rev. 1
Ergota Pulverata Standardisata . . . . .	20 Rev. 1
Ergotamini Tartras . . . . .	10 Rev. 2
Ferri et Ammonii Citras . . . . .	143 Rev. 1
Ferrosi Sulfas . . . . .	141 Rev. 1
Ferrosi Sulfas Exsiccatus . . . . .	142 Rev. 1
Filix Mas . . . . .	15 Rev. 1
Histamini Phosphas . . . . .	92 Rev. 1
Homatropini Hydrobromidum . . . . .	230
Hydrargyri Aminochloridum . . . . .	231
Hydrargyri Bichloridum . . . . .	237
Hydrargyri Iodidum Rubrum . . . . .	234
Hydrargyri Oxidum Flavum . . . . .	236
Hydrargyri Oxycyanidum . . . . .	235
Hydrargyri Subchloridum . . . . .	232
Hydrargyri Subchloridum Praecipitatum . . . . .	233
Hydrargyrum . . . . .	238
Hyosciami Herba . . . . .	5 Rev. 2
Hyosciami Mutici Herba . . . . .	153 Rev. 1
Hyoscini Hydrobromidum . . . . .	239
Injectio Oxytocini . . . . .	93 Rev. 1
Injectio Vasopressini . . . . .	94 Rev. 1
Iodum . . . . .	24 Rev. 1
Ipecacuanhae Radix . . . . .	8 Rev. 2
Ipecacuanhae Radix Pulverata Standardisata . . . . .	14 Rev. 1
Kalii Bromidum . . . . .	163 Rev. 1
Kalii Hydroxidum . . . . .	257
Kalii Iodidum . . . . .	172 Rev. 1

	WHO/Pharm/Mon
Lanatosidum C . . . . .	97 Rev. 1
Lobelini Hydrochloridum . . . . .	240
Menadionum . . . . .	78 Rev. 1
Mepacrini Hydrochloridum . . . . .	102 Rev. 1
Mersalylum . . . . .	178 Rev. 1
Methyltestosteronum . . . . .	103 Rev. 1
Morphini Hydrochloridum . . . . .	135 Rev. 1
Morphini Sulfas . . . . .	136 Rev. 1
Natrii Bromidum . . . . .	159 Rev. 1
Natrii Citras . . . . .	171 Rev. 1
Natrii Iodidum . . . . .	173 Rev. 1
Natrii Salicylas . . . . .	165 Rev. 1
Neoarsphenaminum . . . . .	58
Neostigmini Bromidum . . . . .	182 Rev. 1
Neostigmini Methylsulfas . . . . .	191 Rev. 1
Nicotinamidum . . . . .	74 Rev. 1
Nikethamidum . . . . .	241
Oestradiol . . . . .	105
Oestradiolis Benzoas . . . . .	106
Oestronum . . . . .	107
Oleoresina Filicis Mas . . . . .	124 Rev. 1
Oleum Chenopodii . . . . .	126 Rev. 1
Oleum Jecoris Aselli . . . . .	75 Rev. 1
Oleum Jecoris Hippoglossi . . . . .	76 Rev. 1
Oleum Ricini . . . . .	125 Rev. 1
Opium . . . . .	127 Rev. 1
Opium Pulveratum Standardisatum (Pulvis Opii) . . . . .	128 Rev. 1
Ouabainum . . . . .	197 Rev. 1
Oxidum Nitrosum . . . . .	104 Rev. 1
Oxygenium . . . . .	108 Rev. 1
Papaverini Hydrochloridum . . . . .	242
Pentetrazolum . . . . .	169 Rev. 1
Pethidinae Hydrochloridum . . . . .	185 Rev. 1
Phenacetinum . . . . .	243
Phenantoinum . . . . .	188 Rev. 1
Phenazonum . . . . .	244
Phenobarbitalnatrium . . . . .	245
Phenobarbitalum . . . . .	246
Phenolum . . . . .	247
Phenolum Liquefactum . . . . .	151 Rev. 1
Physostigmini Salicylas . . . . .	248
Physostigmini Sulfas . . . . .	249
Picrotoxinum . . . . .	148 Rev. 1
Pilocarpini Hydrochloridum . . . . .	109 Rev. 1
Pilocarpini Nitras . . . . .	250
Pituitarium Posterius . . . . .	110 Rev. 1
Procaïni Hydrochloridum . . . . .	251
Progesteronum . . . . .	112
Proguanili Hydrochloridum . . . . .	211
Quinidini Sulfas . . . . .	256
Quinini Sulfas . . . . .	6 Rev. 2
Riboflavinum . . . . .	80 Rev. 1

WHO/Pharm/Mon

Santoninum . . . . .	252
Scillae Bulbus . . . . .	21 Rev. 1
Sera Antitoxica . . . . .	60-64 App. Rev. 1
Serum Antidiphthericum . . . . .	64 Rev. 1
Serum Anti-Oedematiens . . . . .	62 Rev. 1
Serum Antiperfringens . . . . .	61 Rev. 1
Serum Antitetanicum . . . . .	63 Rev. 1
Serum Anti-Vibrio Septicum . . . . .	60 Rev. 1
Solutio Formaldehydi . . . . .	177 Rev. 1
Solutio Iodi Aquosa . . . . .	50 Rev. 1
Solutio Iodi Spirituosa . . . . .	51 Rev. 1
Solutio Kalii Arsenitis . . . . .	152 Rev. 1
Stibii et Kalii Tartras . . . . .	30 Rev. 1
Stibii et Natrii Tartras . . . . .	42 Rev. 1
Stibii et Natrii Thioglycollas . . . . .	43 Rev. 1
Stramonii Herba . . . . .	22 Rev. 1
Strophanthinum G . . . . .	253
Strychni Semen . . . . .	11 Rev. 1
Strychni Semen Pulveratum Standardisatum . . . . .	12 Rev. 1
Strychnini Nitras . . . . .	254
Succinylsulfathiazolum . . . . .	41 Rev. 1
Sulfadiazinum . . . . .	34 Rev. 1
Sulfadiazinum Natricum . . . . .	37 Rev. 1
Sulfaguanidinum . . . . .	36 Rev. 1
Sulfamerazinum . . . . .	38 Rev. 1
Sulfamerazinum Natricum . . . . .	39 Rev. 1
Sulfanilamidum . . . . .	33 Rev. 1
Sulfarsphenaminum . . . . .	59
Sulfathiazolum . . . . .	35 Rev. 1
Sulfathiazolum Natricum . . . . .	40 Rev. 1
Testosteroni Propionas . . . . .	113
Tetracaini Hydrochloridum . . . . .	114 Rev. 1
Tetrachloroathylenum . . . . .	174 Rev. 1
Theobromini et Natrii Acetas . . . . .	146 Rev. 1
Theobromini et Natrii Salicylas . . . . .	147 Rev. 1
Theophyllum . . . . .	29 Rev. 1
Theophyllum et Natrii Acetas . . . . .	28 Rev. 1
Thiamini Hydrochloridum . . . . .	81 Rev. 1
Thiopentalum Natricum cum Natrii Carbonate . . . . .	52
Tinctura Digitalis . . . . .	56 Rev. 1
Tribromethanolum . . . . .	184 Rev. 1
Tryparsamidum . . . . .	48 Rev. 1
Tuberculinum Pristinum . . . . .	166 Rev. 1
Tuberculinum Pristinum (Biological assay) . . . . .	168 Rev. 1

**Annex 2****PREPARATION OF DRAFT MONOGRAPHS, REPORTS AND EXPERIMENTAL INVESTIGATIONS****Professor Baggesgaard-Rasmussen agreed :**

- To prepare tables for the replacement of specific gravity by density at 20° C. (in collaboration with Professor van Os)
- To prepare a set of graphic formulae and recalculate molecular weights
- To check the figures for solubility in general
- To investigate the limit test for sulfates (in collaboration with Professor Fahmy)

**Professor Cook agreed :**

- To determine solubilities at 20° C. for all the substances referring only to other temperatures

**Professor Fahmy agreed :**

- To investigate the assay on Ergota (in collaboration with Professor Flück)
- To investigate the limit test for sulfates (in collaboration with Professor Baggesgaard-Rasmussen)

**Professor Flück agreed :**

- To provide figures for ash in the monographs on Belladonnae Radix and Belladonnae Herba
- To review the suitability of lactose and starch as diluents
- To investigate the assay on Ergota (in collaboration with Professor Fahmy)
- To investigate the methods of alkaloidal assays of crude drugs
- To provide figures for non-phenolic alkaloids in different varieties of Ipecacuanha

**Dr Hampshire agreed :**

- To prepare monographs on Kalii Hydroxidum and Quinidini Sulfas
- To check a list of the reagents and test solutions
- To check the list of monographs so as to determine to which the caution "very poisonous" should be added
- To prepare the draft of the Preface

**Professor Hazard agreed :**

- To revise table of usual and maximal doses, taking into consideration the opinions expressed or written by members
- To assist in the preparation of the French text of monographs and appendices

**Professor van Os agreed :**

- To prepare tables for the replacement of specific gravity by density at 20° C. (in collaboration with Professor Baggesgaard-Rasmussen)
- To report on the determination of aconitine in a mixture of alkaloids

## Annex 3

## GENERAL PRINCIPLES DISCUSSED AND APPROVED

During the consideration of the draft monographs and reports, the following decisions on general principles were taken by the committee :

*Specific gravity.* In all monographs specific gravity should be replaced by density at 20° C., and a formula for correction should be worked out so as to enable rapid conversion to be made of densities at other temperatures and of specific gravities at 15° C., 20° C., 25° C.

*Solubility.* The temperature at which solubility should be indicated should be stated in the General Notices at 20° C., and temperature should not be mentioned in the monographs.

*Terminology for alcohols.* Alcohols in general should be named according to the nomenclature of the International Union of Chemistry, i.e., methanol, ethanol, propanol, glycerol, etc., and the adjectives, methanolic, ethanolic, etc.

*Limit tests for lead and heavy metals.* Limit tests both for lead and for heavy metals should be included.

*Nomenclature of mercuric compounds.* Hydrargyri Chloridum Mite should be renamed Hydrargyri Subchloridum ; Hydrargyri Perchloridum should be renamed Hydrargyri Bichloridum, and Hydrargyri Chloridum Mite Praecipitatum should be renamed Hydrargyri Subchloridum Praecipitatum.

*Ash and acid-insoluble ash.* As in vegetable drugs both sulfated ash and acid-insoluble ash vary according to the soil in which the plant was grown, the figure for total ash should be adopted.

The determination of ash will be made on the basis of the Pharmacopoeia of the United States, with the addition that platinum, silicon and porcelain crucibles could be used.

The term "ash" will be reserved for vegetable drugs, and "residue on ignition" for other drugs.

*Reaction.* pH figures for reaction will be discarded in all monographs and instead the indicator, as well as the amount of solution to be used, should be specified. Only a limited number of indicators should be selected.

*Containers for liquids.* All liquids will be kept in tightly closed containers.

*Test solutions.* The test solution should be described in a percentage, provided the strength be chosen so that the solution contains a proportion of the reagent as close as possible to the normal or molar solution.

*Atomic weights.* The latest atomic weights will be used on a table inserted in the Pharmacopoeia.

*Concentrations of solutions.* Only the concentrations of volumetric solutions should be given.

*Limit tests for arsenic.* Two methods giving the same results will be given for the arsenic limit test, an explanation being given in the introduction to the effect that the two tests had been adopted so that national pharmacopoeias might choose the one or the other.

*Solubility of alkaloids in alcohol.* For all alkaloids, the solubility in alcohol 95% will be given whenever possible.

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