

EFCE Working Party on Distillation, Absorption and Extraction

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HISTORY

Foreword

I was entrusted by the working party Chairman Prof. Darton with a difficult task - to set up the WP history. It occurred in a situation where no official archives existed. There was only a slight hope that a significant collection of documents for doing such a work could be attained. Happily enough several WP members possessed some personal archives and also the willingness to help. Among others I am very thankful especially to Prof. Ulfert Onken, Dr. Ivan Wichterle, Dr. Michael Slater and Prof. Hans-Jörg Bart for completing the most important materials – the Minutes – and for helping me in many other aspects. Without their cooperation the work could not be done.

Apart of collecting the data on WP members and WP meetings into tables I also felt the necessity to include some written texts on individual WP projects and on the WP history in whole. I honestly tried to present the history truly and “sine ira et studio”. Unfortunately, the true picture of the data and the texts is limited by the considerable inaccuracies of the documents and by the weakness of the human memory. Therefore e.g. the membership in the WP is presented without exact description of its character (Delegate, invited member etc.) and with shortened titles only. I hope that the presented text will stimulate its readers to correct possible mistakes and add many interesting complements.

The Tables are the important part of this study, which contains short extracted information on the individual WP Meetings, WP Officers and Membership. Further the Supplements, containing the copies of selected texts from individual WP Publications – Projects and Recommendations.

Hard copy archives of the Minutes and of selected documents exist and will be handed over in the charge of WP Secretary.

Prague, 2006-2007

Introduction – Post-war Europe and EFCE

After the Second World War a huge reconstruction has been started in Europe generally and as a consequence also in chemical and process industries. In a short time it became clear that the conceptions of the technological outfit from the pre-war time are not sufficient for the new demands. It urgently needed innovation to fit the requested higher product capacities and quality. This fact became an outstanding imperative for the development of chemical engineering, resp. its shift from the technological empiricism - sometimes prevailing in continental Europe - to the strictly rational and generalised bases.

As a consequence of this situation in 1960 an organisation has been founded, aiming at support and development of this engineering branch in Europe: **The European Federation of Chemical Engineering – EFCE**. The EFCE membership consisted of the majority of European national non-state organisations (engineering societies), active in this or in

closely related fields. As the working bodies of EFCE the Working Parties – WP – have been established for individual sections of chemical engineering. WP's originate by decision of the Executive of EFCE according to the general interest or to the future oriented demands. Principle members of the WP are the delegates of national societies accepted by the EFCE executive. They should be 2 specialists per every society. The original idea was to have one from the industry and the other one from the academy. This arrangement aimed at mutual informal discussions, enriching and motivating both spheres. The WP's are free to invite further specialists ad hoc.

Dr. Underwood's term

As one of the first WP's the **WP on Distillation** has been established on 6th November 1963 with Dr A.J.V. Underwood, world-renowned distillation expert, in chair.

The first period of this WP activities in the years 1963 to approx. 1968, was devoted to formulation of the WP technical program and introduction of working and organization methods. Chairman Underwood and Secretary Weller were very thorough men and their minutes from the WP meetings were very detailed. The meetings were devoted to step by step investigation of the state of the art of distillation field from the engineering view of both the equipment and the process. The WP membership was set up. In the beginning the meetings were held twice a year mostly in west Europe and attended by members only. The first project of the WP was elaborated as a collective work: The Six-Language Vocabulary of Distillation Terms (Editor Dr. Underwood). Probably at this time there was born the idea what actually should be the content of the work of this party. It should be the help in the fields of research, development, design, teaching and application, serving in such their parts, where individual striving is insufficient, and where informal exchange of information, cooperation, advices, mutual understanding and professional bonds are needed. When such situation arises, the WP will declare a project for the purpose and entrust selected WP members with solving it.

A big attention was given to the topic of testing, design and construction of high capacity distillation columns. It was found, that the results of testing the columns by various laboratories and pilot plants were incomparable and as a consequence useless for the general purposes. To create suitable conditions for comparable and reliable testing and research of distillation equipment the first sub-committee for selection and elaboration of recommended systems was established, composed of specialists from both the academy and the industry (Prof. Ellis, Dr. Brandt with Prof. Zuiderweg in chair).

In 1967 the WP for the first time took part in organizing of the regular Symposium on distillation, known as Brighton Symposia. This organisation became an important active part of WP activities up to now. Professors Sawistowski, Ellis and Sargent were the most deserving agents from the beginning.

In 1968, during the meeting in Brussels, the terms of reference of the WP were extended to cover also Absorption and Extraction. Correspondingly the name of the WP was changed to **WP on Distillation, Absorption and Extraction**.

By 1969 several important things happened. The first booklet on the recommended systems was published: "Recommended Test Mixtures for Distillation Columns" Editor Prof. Zuiderweg. The booklet was successful and recommendation was widely used. Thematic sphere of the WP is being slowly enlarged by absorption and extraction, the physical

separation processes DAE start to be studied in connection with adding further components – the auxiliary agents. The WP meeting was for the first time organised behind the Iron Curtain – in Prague and Liblice castle and for the first time with a new subject: Liquid-Liquid Extraction. On the horizon new, modern equipment emerge: high capacity separation columns with organised packing. New projects were started: Systems for liquid extraction studies (Subcommittee Dr. Brandt, Prof. Hanson and Dr. Míšek in chair), Recommended Nomenclature for the Separation Processes (Sub-committee Dr. Huber (Chair), Prof, Stemerding, Prof. Sawisrowski).

Prof. Zuiderweg's term

In 1972 Dr. Underwood died in consequence of a tragic accident. For his successor there was unanimously elected Prof. F. Zuiderweg, experienced chemical engineer in both theory and practice. Mr. Weller continued as the Secretary for the next three years and retired in 1975. For the WP Secretary there was Prof. C. Hanson nominated, well known for his research in liquid extraction.

In 1978 the project on systems for liquid extraction was finished after a six year's work with publication of a booklet "Recommended systems for liquid extraction studies", Editor Dr. Míšek. 27 specialists from 7 European countries took part in the work. Recommended systems have been used widely in research in the whole world. The booklets were sold out quickly and the second, completed and by further systems enlarged edition occurred in 1985 by editors: Mrs. Dipl.Ing. Berger, Dr. Míšek and Ing. Schröter.

In the course of seventies' there was succeeded to manage the long term physico-chemical research of two-phase equilibriums into the practical use. The theoretical bases of this discipline have been established and a suitable mathematical apparatus for equilibrium description has been found. This apparatus enabled on the one hand to evaluate parameters for description of measured equilibriums and on the other hand to correlate them with chemical structure of individual components using voluminous databases of published data and modern means of information technology. This way highly changed and improved the possibilities of separation process design and also enabled within certain limits to predict separation possibilities for new components without demanding experimental measurements. Also, the WP members - Prof's Hála, Fredenslund, Onken and Arlt - played among many others a significant role in this achievement. This situation stimulated the endeavour for similar solution in the field of other factors (e.g. tray capacity and efficiency, flow structure) enabling the design of separation processes from the first principles, without building expensive pilot plants. It is possible to follow this tendency in research of separation processes till nowadays. We must not forget to mention, that during this period not only this research, but also all the theory and practice of chemical engineering have been massively influenced by the growing impact of computers and of the tools of the information technology.

As a consequence of a great interest and a broad exploitation of the Recommended Test Mixtures for Distillation Columns the WP resolved in 1979 to set up further sub-committee for the second edition of this document: Prof. Hála, Prof. Fredenslund, Prof. Onken chairman. The work of the Sub-Committee was further on supported by Dr. Brandt, Dr. Kleinhenz and Dr. Arlt. The corrected and enlarged second edition was published in 1990 by the editors Prof. Onken and Prof. Arlt.

During Prof. Zuiderweg's chairmanship the definite shape of the WP regular meetings has been settled. Annual Meeting is formally composed of:

- Arrival of WP members evening before the meeting– joint dinner.
- One-day technical session to a declared topic and attended by a number of ad hoc invited specialist in the selected field. Oral and possibly also poster presentation. Invited participants selected by the national delegates with emphases on the attendance from the country of the meeting. Broad discussion to all presented papers. Joint lunch.¹
- Evening get together for all members and participants
- Half day excursion to industrial or scientific institution of the venue's country
- Half day business meeting, with the aim to
 - discuss and evaluate the results of the technical session
 - select the topic and venue of the next meeting
 - hear, discuss and approve the reports of: the Chairman, the Secretary, the chairmen of individual projects; proposals of the members; vote on the decisions.
 - hear and agree the changes of the WP membership
 - varies

The Annual Meetings have been organised on various places in the whole Europe thus enabling the contact of WP with the local specialists. The attendance became settled at 50 - 70 participants with a big share of the local people. The WP became this way not only a closed club of experts but also an important active communicator in its special field. A number of professional, friendly contacts and co-operations have been initiated with a positive impact on both the professional work and the inter-European relationships.

In 1985 unexpectedly Prof. Carl Hanson died in the middle of very active scientific, educational and organisation activities. His close co-worker Dr. Michael Slater was nominated the new WP secretary.

Prof. Porter's term

Prof. Zuiderweg resigned from his position in 1990 and for his merits he was elected Chairman emeritus for life. For the new WP Chairman Prof. Ken Porter was elected. In 1993 also the WP Secretary Dr. M.S.Slater resigned and Dr. M. Griffiths took over his duties.

In the following decade the work connected with recommended systems for distillation was terminated with the second edition of the publication. In liquid extraction without chemical reaction further system was studied and proposed, but the results (Mrs Dipl.Ing. Berger and Ing. Schröter) were published in a classical way in technical journals. Prof Billet proposed to the WP a number of absorption systems suitable for further studies and eventually for recommendation as test systems. He asked the WP members for help and cooperation but the response was not adequate and in spite of several following attempts the work was not realised. The reasons were both practical and theoretical.

Different situation developed in the liquid extraction with chemical reaction. This topic, for the first time proposed in 1980, was actually started in 1986 -1987 by final proposing the system D2EHPA – Metal (Zn) for the study. Prof. Bart and Dr. Slater set up a group of people interested in this topic and together with their students commenced experimental and theoretical work aiming at correct description of both extraction and reextraction processes in the mentioned system. The work was shown to be very demanding and by its nature distant from the work and methods used in the study of physical systems.

It was necessary to uncover the real mechanism of the processes more than to select and describe the liquid systems. The performed work was complicated and extensive. According to different character of the topic the presentation of the results was adapted. The whole work was published in technical journals and selected parts placed on internet Learning Portals of IChemE and DECHEMA. More than 13 specialists from 8 countries cooperated in this project. For more details see the chapter Reactive Liquid-liquid Project.

A number of particularly interesting themes can be found among topics of this decade, signaling arising of new interests in DEA, e.g.: “Basic data in separation processes”, “Environmental matters”, “Unconventional separations”, “Experimental topics”, “Performance analysis”, “Biotechnology”, “Teaching of Distillation”, “Natural Gas”, “Mass Transfer with and without Chemical Reaction”.

In the ninetieth's, a major reorganization of the EFCE took place. The aim was to enforce capabilities of the EFCE to deal with the outside – with industry, authorities and administration. After having induced the possibility of (paid) individual membership in the WP's also the structure of the top managing of the federation was changed by creating the positions of the president and vice-presidents. Thus, the original more collective management has been made more individual. Both the individual membership and the change of the organisational structure practically have not influenced the WP.

Already from the beginning of the WP a slow change of the membership composition occurred by decreasing the industrial delegates number and increasing correspondingly the number of academic delegates. This hardly to change tendency reflects itself step-wise in WP activities as a shift from project type work to a publishing type. The result will be noted later on.

In spite of (or may be because of ?) very favourable results of DAE research the opinion started to prevail among European administrations, that this research – namely in distillation - was already terminated and no more needed. Unfortunately, also some members of the EFCE management shared this opinion (e.g. that time EFCE vice-president Prof. Villermaux). The consequences of this opinion harm seriously the DAE research up to now. The WP and its Chairman thought this standpoint as wrong, false and unreasonable. Prof. Porter fought against this tendency by writing and publishing documents (Why research is needed in distillation 1995), by intensifying the cooperation of all specialists in this field (List of researchers in DAE in 1995 and further on) and by taking care of publishing the WP's reports on the activities and achievements. This striving is reflected in the topics of technical meetings of that time and in broader cooperation with European national working groups on DAE.

After 1989 and after the fall of communism in Europe the conditions for international and namely all-European cooperation massively improved. As a consequence, on one side the number of EFCE member countries increased but on the other hand many other and easy possibilities of mutual contacts among chemical engineers have been opened. The role of the EFCE and of its WP's in this field has thus been relatively lowered. This applies namely to organising of technical meetings of prevailing publishing purpose, where the competition is hard.

Prof. Darton's term

Prof. Porter resigned in 2002 and Prof. Richard Darton was elected WP Chairman. Simultaneously the WP secretary Dr. Griffiths ended and was replaced by Dr. Eva Sorensen.

The work has continued in usual way with all previously mentioned positive and negative factors in play.

The older projects were already terminated and the situation is visibly not favourable toward starting new ones. However, the research in separation technologies is urgently needed and still continues. In the WP's work the accent on following and discussing the development of new possibilities predominates. In this sense the importance of organizing the Symposia on Distillation and Absorption increases, as well as of the Technical Meetings on the topics as environmental separation, sustainable development, hybrid separation processes and CO₂ sequestration, which correspond to the simultaneous situation on the technological market. Because of demanding character of modern technologies, the suitable solutions are of a very complex character and cannot be limited to DAE only. Taking this in account the WP decided to change its name to

EFCE Working Party on Fluid Separations

Here the History for the time being ends and changes into Presence and the hopeful Future. **Good luck!**

Table 1

EFCE Working Party on Distillation, Absorption and Extraction Officers

Year	Chairman	Secretary
1963	Dr. A.J.V. Underwood	Mr.O.G. Weller
1972	Prof. Frits J.Zuiderweg	
1975		Prof. Carl Hanson
1985		Dr. Michael J. Slater
1990	Prof. Ken Porter	
1993		Dr.Michael J. Griffiths
2002	Prof. Richard Darton	Dr. Eva Sorensen
2007	Dr. Eva Sorensen	Dr. Elisabetta Brunazzi

Table 2

EFCE Working Party on Distillation, Absorption and Extraction Meetings and Achievements

Last change: End of 2006

Year	Venue	Meeting topics	Outputs, Remarks
2006	London		before Distillation & Absorption 2006 hence business meeting only
2005	Ljubljana		Name of the WP changed to "WP on fluid separations"
2004	Huelva	"Refinery separations" and "CO2 removal and sequestration"	
2003	Hyvinka	"Property prediction", "Sustainable development" and "Hybrid separation processes"	
2002	Baden-Baden		before Distillation & Absorption 2002 hence business meeting only
2001	Bamberg	"Equipment development for D,Aand E - application and fundamentals"	Joint meeting with annual meeting of the respective German Working party
2000	Winterthur	"Mass Transfer With and Without Chemical Reaction"	
1999	Trondheim	"Natural Gas and other Gas Separations"	
1998	Cagliari, Sardinie	"Interrelationship of academic research with industrial research"l	
1997	Maastricht	"What should we teach on distillation"	

1996	Warsaw	"New developments in separation processes associated with process industries, biotechnology and environmental protection"	
1995	Brussels	"Experimental and industrial topics in separation processes, including the use of computers for performance analysis"	List of researchers on D, A, E set up. "Why research is needed in distillation" by K. Porter has been published
1994	Stockholm I	"Unconventional separations"	
?1993	Vienna	"Liquid-liquid Extraction"	
1992	Guildford	"Gas separations with reference to environmental matters"	
1991	Geleen	"Role of basic data and concepts in separation processes"	Prof. Billet presented list of absorption systems suitable for select the recommendation
1990	Oviedo		Second edition of "Recommended test mixtures for Distillation Columns" ed. Prof. U. Onken, Prof. Arlt
1989	Köln	"Mass transfer phenomena in D, A, E."	
?1988	Alghero, Sardinie	"Separation processes coupled with chemical and biochemical reaction"	
1987	Prague	"General topics with preference of biotechnological aspects"	
1986	Lyon	"Dilute mixtures".	Visit to Crays-Malville nuclear site. First steps to the study of systems for extraction with chemical reaction.
1985	Amsterdam	"Use of fundamental concepts to solve practical problems"	Second edition of the booklet "Standard Test Mixtures for Liquid Extraction" was published
1984	Ljubljana	"Coalescence in L-L and G-L systems"	
1983	Winterthur	"Factors determining the capacity of column contactors"	
1982	Helsinki	"Scale-up of separation equipment in size and properties"	
1981	Köln	"Recovery from dilute fluids"	
1980	Linz	"Separation processes - research and development priorities"	
1979	London		Before Distillation & Absorption 1979 hence business meeting only. A subcommittee was formed for reedition of Distillation test mixtures manual: Prof's: Onken, Fredenslund and Hala

1978	Stockholm	"New application of extraction"	Booklet "Standard Test Mixtures for Liquis Extraction" was published
1977	Teeside	"Energy saving in separation processes"	
1976	Pisa	"Separation of heat sensitive materials"	
1975	Prague	Minutes are missing	Only Business Meeting in connection with the CHISA Congress
1975	Toulouse	"The performance of plates in large scale D.A.E.columns"	
1974	the Hague	"Dynamic behaviour and Control of D.A.E. Equipment"	
1973	Oslo	"Development, testing and scale-up of packed columns for D.A.E."	
1972	Copenhagen	"Application of the techniques of D.A.E. in the purification of gases and liquids, with a view to avoiding environmental pollution"	Subcommittees for: "Standard test mixtures for liquid extraction (Dr. Misesk, Dr. Brandt, Prof. Hanson)" and for "Recomensation of nomenclature in separation processes" (Dr. Huber, Prof. Stemerding, Prof. Sawistowski)" were set up.
1971	Bad Soden	"Factors governing the selection of auxiliary agents in counter current separation processes, such as..."	
1970	Prague - Liblice	"Key problems in the development and design of equipment for continuous L/L extraction"	Project Test mixtures for liquid extraction has been proposed
1969	Venice	"Distillation and Absorption coupled with Chemical Reaction". .	The booklet "Recommended test mixtures for Distillation Columns" was published
1968	Basel		Business meeting only
1968	Brussels	"Vapour - liquid equilibria"	The terms of reference WP have been extended to cover also Absorption and Extraction
1967	Ludvigshafen	"The comparison of industrial fractionating devices"	Six-Language Vocabulary of Distillation Terms was published, Editor A.J.V. Underwood. Exploratory Committee on test mixtures has been established. The joined organization of Brighton 1969 Symposium on Distillation had been approved
1966	London	"Plate column performance"	

1966	Zütich	Future activities of the Working Party	Steering committee for Standardisation of distillation test mixtures was set up: Prof. Zuiderweg (Chair), Prof. Ellis, Dr. Brandt
1965	Paris	"Mass transfer and plate efficiency"	
1965	Amsterdam	"Vacuum distillation"	
1964	Leverkusen	"Packed columns of larger diameters"	
1964	Frankfurt		The terms of reference, working methods, the purpose and goals of WP have been broadly discussed. Project of Multilingual Vocabulary was started.
1963	London	"Constitution and working program of the Working Party"	WP on Distillation has been set-up. The board of EFCE at its meeting in Paris on 6th November, 1963 had formally approved the establishment of the Working party on Distillation with Dr. Underwood, chairman.

Table 3

EFCE Working Party on Distillation, Absorption and Extraction Membership history

List of Chairmen, Secretaries, Delegates and Invited members up to 2007
Last change : end of 2006

Country	Title	First name	Surname	Served		Remark
				from	till	
Austria	Prof.	R.	Marr	1984	1989	
Austria	Prof.	F.	Moser	1968	1984	1994 retired
Austria	Prof.	A.F.	Orlicek	1963	1968	
Belgium	Ir	George	De Bruyn	1998	till now	
Belgium	Mr.	Th.	de Menten de Horne	1963	1972	
Belgium	Prof.	Corneille	Ek	1986	1996	
Belgium	Prof.Dr.	G.	Goethals	1963	1974	
Belgium	Dr.	J.M.	Kamp	1988	2001	

Belgium	Dr	Maurice	Preumont	2003	till now	
Belgium	Dr.	J.	van Geel	1976	1980	
Belgium	Prof.	L.	Verhoeve	1975	1982	
Bulgaria	Prof	N	Kolev	1994	till now	
Czech Republic	Dr	Magdalena	Bendová	2005	till now	
Czech Republic	Dr.	Jan	Marek	1967	1970	
Czech Republic	Dr.	Tomáš	Míšek	1970	till now	
Czech Republic	Dr.	Ivan	Wichterle	1987	2005	
Czech Republic	Prof.	Eduard	Hála	1967	1987	died 1989
Denmark	Prof.	Aage	Fredenslund	1976	1995	died 1995
Denmark	Prof	Sten Bay	Jorgensen	2003	till now	
Denmark	Prof.	K.	Ostergaard	1971	1980	?
Denmark	Dr	Esben L	Sorensen	1997	till now	
Finland	Prof.	H.	Ahonen	1971	1973	
Finland	Dr	Juhani	Aittamaa	1989	till now	
Finland	Mr.	Olli	Kaupilla	1963	1989	died
Finland	Mr	Kari	Keskinen	2001	till now	
Finland	Prof.	Jorman	Sohlo	1973	2000	
France	Dr	J	Breysse	1982	till now	
France	Prof.	R.J.P.	Bugarel	1968	1995	
France	Mr.	Y.	Conseiller	1964	1976	
France	Mr.	J.	Mercier	1964	1976	
France	Dr.	M. J.	Pons	1989	1996	
France	Dr	Michel	Prevost	1998	till now	
France	Mr.	J.	Roget	1977	before 1995	
Germany	Prof Dr Ing	Wolfgang	Arlt	1994	till now	
Germany	Prof.	Hans-Jörg	Bart	1989	till now	till 1994 Austria
Germany	Dipl. Ing.	Rosemarie	Berger	1982	1995	
Germany	Prof Dr Ing	Reinhardt	Billet	1967	till now	
Germany	Prof.	E.	Blass	1985	1989	
Germany	Dr.	H. E.	Brandt	1972	1987	died 1989
Germany	Prof Dr Ing	Andrzej	Górak	1993	till now	
Germany	Prof. Dr.	W.	Jost	1963	1966	

Germany	Dr.	K.	Kleinhenz	1987	1996	
Germany	Prof.	U.	Onken	1967	1993	
Germany	Dr	Hartmut	Schoenmakers	2000	till now	
Germany	Ing.	Jürgeen	Schröter	1982	1995	
Germany	Dr.	K.	Sigwart	1963	1972	
Germany	Dr-Ing.	H. E.	Staude	1994	1998	
Germany	Prof Dr Ing	J	Stichlmair	1986	till now	
Greece	Mr.	B.	Philopoulos	1967	1973	
Greece	Dr.	Petros A.	Pilavachi	1993	till now	for EC till 2005
China	Prof	K T	Yu	1989	till now	
Israel	Prof	R	Semiat	1996	till now	
Israel	Prof	David	Wolf	1970	till now	
Italy	Prof.	P.	Bortolini	1963	1993	
Italy	Prof	A	Brambilla	1987		
Italy	Dr	Elisabetta	Brunazzi	2002	till now	
Italy	Dr.	D.	Demuru	1997	2000	
Italy	Dr.	E.	Gianolio	1977	1984	
Italy	Prof	G F	Nencetti	1970	till now	
Italy	Dr.	G.	Soave	1984	1996	
Japan	Prof	Kunio	Nagahama	1970	till now	
Netherlands	Prof dr ir	Andre B	de Haan	1999	till now	
Netherlands	Dr.	K.J.A.	de Waal	1970	1982	
Netherlands	Orif.Dr.	G.	Goethals	1963	1974	
Netherlands	Dr.	W.H.	Hesselink	1994	1997	
Netherlands	Dr	Harry	Kooijman	2003	till now	
Netherlands	Mr.	M.W.	McEwan	1978	1984	
Netherlands	Dr	Zarko	Olujic	2000	till now	
Netherlands	Ir.	J.J.B.	Pek	1997	2001	
Netherlands	Prof.	S.R.M.	Stemering	1964	1980	
Netherlands	Prof.	J.A.	Wesselingh	1985	1999	
Netherlands	Ir.	K.	Wieringa	1992	1996	
Netherlands	Prof Dr	Frits J	Zuiderweg	1963	1990	Chairman since 1972, Chairman emeritus by

						life, died 2006
Norway	Prof.	Olav	Erga	1963	1999	
Norway	Dr	Knut	Nordstad	2003	till now	
Norway	Prof	Sigurd	Skogestad	1999	till now	
Poland	Dr	J	Kuzniar	1989	till now	
Poland	Prof	Ryszard	Pohorecki	1989	till now	
Portugal	Prof	A G	Medina	1977	till now	
Russia	Prof	N. N.	Kulov	1991	till now	
Russia	Dr.	V.A.	Maljusov	1991	2000	
Russia	Prof	L A	Serafimov	1997	till now	
Russia	Prof.	Alexander	Toikka	2003	till now	
Slovenia	Dr.	Ljudmila	Fele	2006	till now	
Slovenia	Prof	Janvit	Golob	1980	2006	
Spain	Prof	Jose	Coca Prados	1986	till now	
Sweden	Prof.	Gharib	Aly	1980	1989	
Sweden	Prof.	Ivars	Neretnieks	1973	1996	
Sweden	Prof.	A.S.H.	Rasmuson	1963	1973	
Switzerland	Dr.	O.	Flatt	1978	1997	
Switzerland	Dr.	A.	Guyer	1963	1969	
Switzerland	Prof.	Stanley	Hartland	1976	2000	
Switzerland	Dr.	M.	Huber	1970	1983	
Switzerland	Dr.	Werner	Meier	1983	2001	died 2002
Switzerland	Dr.	R.J.P.	Perren	1963	1971	
Switzerland	Prof.	E.	Plattner	1971	1978	
Switzerland	Dr	Ralf	Proplesch	1998	till now	
Switzerland	Dr	Lothar	Spiegel	2002	till now	
United Kingdom	Dr.	R.J.P.	Brierley	1982	2000	
United Kingdom	Prof	Richard	Darton	1984	till now	WP Chair since 2002, till 1990 Netherlands delegate
United Kingdom	Prof.	S.R.M.	Ellis	1963	1980	

United Kingdom	Dr.	Michael. J.	Griffiths	1993	2002	WP Secretary
United Kingdom	Prof.	Carl	Hanson	1972	1985	WP secretary 1976 - 1985
United Kingdom	Prof.	John D.	Jenkins	1989	1996	
United Kingdom	Dr.	A.	Newton	1971	1982	
United Kingdom	Prof.	Ken	Porter	1987	2002	WP Chairman since 1990
United Kingdom	Mr.	David	Reay	1988	1997	
United Kingdom	Dr.	M.G.	Royston	1964	1967	
United Kingdom	Prof.	R.W.H.	Sargent	1964	1972	
United Kingdom	Prof.	Henry	Sawistowski	1972	1983	acting secretary 1977,1978, died 1983
United Kingdom	Dr.	D.M.	Siddique	1991	1999	
United Kingdom	Dr.	Michael J.	Slater	1986	1995	WP secretary till 1993
United Kingdom	Dr	Eva	Sorensen	2002	till now	WP secretary
United Kingdom	Dr.	A.J.V.	Underwood	1963	1972	Founding Chairman of the WP, died 1972
United Kingdom	Mr.	O.G.	Weller	1963	1975	First secretary of the WP
United Kingdom	Dr	Malcolm	Woodman	2004	till now	
USA	Dr	Michael J	Lockett	1982	till now	

Publications

1. Six-Language Vocabulary of Distillation Terms. (Editor: A.J.V. Underwood).
2. Recommended Test Mixtures for Distillation Columns. (Editor: F.J. Zuiderweg).
3. Recommended Systems for Liquid Extraction Studies. (Editor: T. Míšek).

4. Standard Test Systems for liquid Extraction (2nd Edition). (Editors: T. Míšek, R. Berger, J. Schröter).

5. Recommended Test Mixtures for Distillation Columns (2nd Edition). (Editors: U. Onken, W. Arlt).

6. Reactive Liquid-Liquid Recommended System. By M.S. Slater and H.J. Bart.
