



# EUTROSYM '76

20.-25. IX. 1976 Karl-Marx-Stadt  
German Democratic Republic

*W*

**Proceedings**  
of the International Symposium  
on EUTROPHICATION and REHABILITATION  
of SURFACE WATERS

I,1

E U T R O S Y M '76

International Symposium  
on  
Eutrophication  
and  
Rehabilitation of Surface Waters

September 20 - 25, 1976  
Karl-Marx-Stadt  
German Democratic Republic

organized by

United Nations  
Environment Programme  
(UNEP)

Institute of Water Management  
of the Ministry of  
Environmental Protection  
and Water Management of the  
German Democratic Republic

Vol. I, part 1

Vol. I: Report  
Vol. II: Complex A  
Vol. III: Complex B  
Vol. IV: Complex C  
Vol. V: Complex D, E



Contents Vol. I, part 1

Vol. I: Report

part 1: Organizational and other matters

Index

Rec

201/3

V. I, pt 1

1) The Symposium on Eutrophication and Rehabilitation of Surface Waters organized jointly by the United Nations Environment Programme (UNEP) and the Institute of Water Management of the Ministry for Environmental Protection and Water Management of the German Democratic Republic took place in Karl-Marx-Stadt (GDR) from September 20 to 24, 1976.

A final preparatory meeting took place in Karl-Marx-Stadt on September 18, 1976. The participants in this meeting drew up draft recommendations concerning the protection of surface waters from eutrophication.

2) Participants from the following UN member states were represented at the Symposium:

Bangladesh	India
Belgium	Kenya
Benin	Mexico
Bulgaria	Nigeria
Cameroon	Norway
Canada	Philippines
Czechoslovakia	Poland
Denmark	Spain
Egypt	Sri Lanka
Finland	Sweden
France	Turkey
German Democratic Republic	Ukrainian Soviet Socialist Republic
Germany, Federal Republic of	Union of Soviet Socialist Republics
Ghana	United States of America
Greece	Upper Volta
Hungary	Venezuela
Iran	Zaire

3) Representatives from the following UN bodies and organizations took part:

United Nations Environment Programme (UNEP),  
United Nations Educational, Scientific and Cultural Organization (UNESCO),  
World Meteorological Organization (WMO).

4) EUTROSYM '76 was opened by Herr H. Reichelt, Deputy Chairman of the Council of Ministers and Minister of Environmental Protection and Water Management of the German Democratic Republic.

5) On behalf of the Executive Director of UNEP, Mrs. L. Obeng, Chief of the Water Division of the UNEP Secretariat, welcomed the delegates to EUTROSYM '76.

6) Herr W. Schnese (GDR) was elected President of the Symposium. Mr. W. Thitai (Kenya) and Mr. T. Ahl (Sweden) were elected Vice-Presidents.

7) The following participants acted as rapporteurs:

Mr. S. V. Ganapati (India) for Complex A: Economic and social aspects of eutrophication,

Mr. R. V. Thomann (USA) for Complex B: Mechanisms, trends and modelling of eutrophication processes in water,

Mr. J. Aguirre (Mexico) for Complex C: Measures against mass growth of aquatic weeds and phytoplankton,

Mr. L. Felföldi (Hungary) for Complex D: Use of eutrophicated waters and technologies for their rehabilitation. The report was presented by Mr. E. Dobolyi (Hungary) who also summarized the discussion,

Mr. A. M. A. Imevbore (Nigeria) for Complex E: Education and further training.

8) For the five complexes as mentioned in paragraph 7, the following participants were elected chairmen:

Mr. M. Straškraba (Czechoslovakia) - Complex A,  
Mr. C. S. Weeraratna (Sri Lanka) - Complex B,  
Mr. Obeng-Assamoah (Ghana) - Complex C,  
Mr. F. Hosseini (Iran) - Complex D,  
Mr. O. Kaarstad (Norway) - Complex E.

9) A drafting committee was elected including the two Vice-Presidents, the five rapporteurs and Herr Schmidt from the host country.

10) The following agenda was adopted:

Agenda

Sunday, 19th September, 1976	Arrival and registration
Monday, 20th September, 1976	
Morning: 10.00 - 10.30 a.m.	Opening ceremony
10.30 - 12.30 a.m.	Plenary session, General report A, Discussion
Afternoon: 2.00 - 5.30 p.m.	Discussion to A Plenary session, General report B
Tuesday, 21st September, 1976	
Morning: 9.00 - 12.30 a.m.	Discussion to B, Plenary session, General report C, Discussion
Afternoon: 2.00 - 5.30 p.m.	Plenary session, General report D, Discussion
Wednesday, 22nd September, 1976	
9.00 a.m. - 8.00 p.m.	Study tour

Thursday, 23rd September, 1976

9.00 - 12.00 a.m.

Plenary session,  
General report E,  
Discussion

Friday, 24th September, 1976

Morning: 9.00 - 12.00 a.m.

Adoption of the report of the  
Symposium,

Afternoon 2.00 - 3.00 p.m.

Performance of scientific films,  
Concluding plenary session.

11) On the 20th September, 1976, the following statements were made:

a) Statement of the Delegation of the Union of Soviet Socialist Republics

"The Soviet delegation wants to draw attention to attempts of the Federal Republic of Germany to include Herr Hesselbarth, a representative of the Federal Health Office of the FRG which is illegally situated in West Berlin, in the work of the Symposium taking place under the auspices of UNEP. The presence of this office in West Berlin is in direct contradiction to the provisions of the Quadripartite Agreement of 3 September, 1971, according to that West Berlin is no part of the FRG and also in future will not be governed by it.

The Soviet delegation states that it does not recognize the mandate of the collaborator of the Federal Health Office of the FRG and will maintain no contacts with him whatsoever.

The Soviet delegation also expects that the appropriate UNEP organs will undertake the necessary measures not to allow that in future the authority of the organization will be misused for aims having nothing in common with the fulfillment of the tasks to be solved by UNEP."

b) Statement of the Delegation of the German Democratic Republic:

"The delegation of the GDR completely and entirely supports the statement of the delegation of the USSR and for its part states:

According to the Quadripartite Agreement of September 3rd, 1971, Berlin (West) is no part of the Federal Republic of Germany and may not be governed by it. Accordingly, the activities of the Federal Health Office of the FRG in Berlin (West) illegally exercising state authority of the FRG in Berlin (West) are in contradiction to the Quadripartite Agreement. The attempt to include the Federal Health Office into activities of the UNEP is directed against détente and cooperation and is in contradiction to the aims and tasks of the UNEP and to the Quadripartite Agreement.

For this reason the delegation of the GDR is unable to accept the mandate of the collaborator of the Federal Health Office of the FRG and will maintain no contacts with him whatsoever."

c) Statement of the Delegation of the CSSR:

"The delegation of the CSSR fully and completely supports the statements submitted by the delegations of the USSR and the GDR."

d) Statement of the Delegation of the People's Republic of Hungary:

"The Hungarian delegation fully and completely supports the statements submitted by the delegations of the USSR and the GDR."

e) Statement of the Delegation of the People's Republic of Bulgaria:

"In agreement with the provisions of the Quadripartite Agreement that West Berlin is no part of the FRG and may not be governed by it, the Bulgarian delegation fully and completely supports the statements of the USSR and the GDR."

12) The President took note of the statements as contained in para. 11.

13) On the 23rd of September, 1976, the following statements were made:

a) Statement of the Delegation of France:

"We would like to refer to the Soviet protest regarding the representation of the Federal Republic of Germany at the UNEP Symposium on eutrophication.

The contention of the representative of the Soviet Union that the designation of Dr Hasselbarth as a representative of the Federal Republic of Germany at the Symposium of UNEP on eutrophication is contrary to the Quadripartite Agreement of September 3rd, 1971, is without foundation. That Agreement which was signed in Berlin by the Governments of France, the United Kingdom of Great Britain and Northern Ireland, the United States of America and the Union of Soviet Socialist Republics contains no provision from which such a contention could be drawn.

The location of the Federal Health Office in the Western Sectors of Berlin was approved in 1952 by the British, French and American authorities acting on the basis of their supreme authority. These authorities convinced themselves that the Federal Health Office does not perform in the Western Sectors of Berlin acts in exercise of direct state authority over the Western Sectors of Berlin. Neither the location nor the activities of that Office in the Western Sectors of Berlin, therefore, contravene any of the provisions of the Quadripartite Agreement.

The protest which is referred to above contains an incomplete and, consequently, misleading reference to the Quadripartite Agreement. The relevant passage of that Agreement to which the Soviet representative referred provides that the ties between the Western Sectors of Berlin and the Federal Republic of Germany will be maintained and developed, taking into account that these sectors continue not to be a constituent part of the Federal Republic of Germany and not to be governed by it.

Regarding other communications on this subject, we would like to state that states which are not parties to the Quadripartite Agreement are not competent to comment authoritatively on its provisions."

b) Declaration of the Delegation of the Federal Republic of Germany:

"The delegations of the Union of the Soviet Socialist

Republics and the German Democratic Republic have made declarations on September 20, 1976, concerning Professor HÄsselbarth, member of the delegation of the Federal Republic of Germany.

Referring to these declarations my delegation wishes to state on behalf of the Government of the Federal Republic of Germany:

The Government of the Federal Republic of Germany shares the position set out in the declaration of the Government of France on behalf of the Three Powers. The Government of the Federal Republic of Germany regrets the attempts of the Union of the Soviet Socialist Republics and the German Democratic Republic to interfere with the appointment of Professor HÄsselbarth as a member of the delegation of the Federal Republic of Germany to this Symposium, which as a matter of principle, is for the Federal Government alone to make.

For many years the Federal Health Office and its collaborators whose qualification is widely recognized have participated in international cooperation. It is for this reason that they also participate in the activities of UNEP. The delegation of the Federal Republic of Germany, therefore, is strongly opposed to the attempt to exclude the Federal Health Office and its collaborators from international cooperation and particularly from the activities of UNEP.

There is no reason to question the mandate of the representative of the Federal Health Office and openly to discriminate him by explicitly refusing to cooperate with him within the framework of this Symposium.

The Federal Government regrets that the cooperation within the framework of this Symposium and moreover within UNEP is hampered and jeopardized by such politically motivated declarations. For its part the Federal Government is determined to pursue this matter and to take it up with the competent UNEP authorities in order to ensure in the interest of all member states an unimpeded cooperation.

Furthermore my delegation wishes to state on behalf of the Government of the Federal Republic of Germany the following.

It contravenes international practice that Professor HÄsselbarth is the only participant of this Symposium who is listed

in the official list of delegations without indicating the institution which he represents. This is a discriminatory measure against which my delegation protests on behalf of the Government of the Federal Republic of Germany. The Federal Government will reserve itself the right to take up this matter with the competent UNEP organs in order to make sure that in future established international rules are respected by those countries to which the organization of UNEP meetings and other events is entrusted.

My delegation should like to ask you, Mr President, to include this statement in the Protocol of this Symposium."

c) Statement of the Representative of the Organization Committee:

"Referring to the statement just made, the organizing committee wants to state the following:

According to established practice the preliminary list of participants as prepared and edited by the organizing committee of this scientific Symposium is of inofficial and informative character only. In accordance with your statement, Mr President, that you took note of the statements of the delegations of France and of the Federal Republic of Germany as well as according to your statement of 20th September, 1976, that you took note of the statements of the delegations of the USSR, the GDR, CSSR, Hungary and Bulgaria, the organizing committee will examine the question taking into account the fact that purpose, tasks and aims of this scientific Symposium should contribute to the solution of problems of eutrophication and the prevention of water pollution.

At the same time the organizing committee strongly rejects the assertion of one delegation of not having respected the established international rules. The organization committee has done its best in the preparation and successful implementation of this scientific Symposium and will do so also in the further course of this meeting."

d) Statement of the delegation of the People's Republic of Poland:

"With reference to the statements of the delegations of the

USSR and the GDR made on September 20th, 1976, the delegation of the People's Republic of Poland supports the protests of the USSR and the GDR with regard to the participation in the Symposium EUTROSYM '76 of the representative of the Federal Health Office of the FRG, which is illegally situated in West Berlin. The Polish delegation regards this as in contradiction to the Quadripartite Agreement dated September 3rd, 1971."

e) Statement of the representative of UNEP:

"As the representative of the Executive Director of UNEP I should like to state that I take note of the statements of the various delegations on this incident.

I shall convey this matter to the Executive Director who reserves the right to take any action that he may deem necessary.

UNEP is an international body which is not in a position to interpret or to violate international agreements.

UNEP has been given the responsibility for promoting environmental safety on an international scale. This was the aim for convening this Symposium."

14) The President took note of the statements as contained in para. 13.

15) The five complexes as mentioned in para. 7 were dealt with in plenary sessions. The rapporteurs critically appraised the contributions submitted and summarized them to general reports which were available to the participants in the Symposium before the different complexes were dealt with.

16) In addition to the general reports on complexes A to E, the Draft Recommendations for the Protection of Surface Waters against Eutrophication agreed upon during the final meeting of the Preparatory Committee formed the subject of the discussion.

17) A full day subject-related excursion into the central Erzgebirge formed part of the Symposium. In the course of this excursion, the optimum utilization of the available water in a drinking water catchment area and the tasks of hydrobiological

laboratories serving educational, training and research purposes and of stationary and mobile measuring facilities for determining the water quality were demonstrated.

18) Five films produced in the GDR on the following themes were shown:

- Eutrophication - Problems and Measures,
- The Removal of Hypolimnic Water for the Control of Eutrophication,
- Application of Photogrammetry for Water Quality Assessment,
- Problems in the Utilization of Water Resources, particularly for Drinking Water Supplies,
- Planned Landscape: Problems Relating to Reclamation of Deserted Mining Areas.

19) In his introductory report, Mr. Ganapati, rapporteur on Complex A, informed the Symposium on the main aspects of the 15 contributions received from eight countries. Eleven participants from five countries took the floor during the discussion.

The rapporteur on Complex B, Mr. Thomann, presented an introduction to the report in which he analysed and evaluated the 25 contributions he had received. Six participants from five countries took the floor during the discussion.

The report on Complex C was presented by the rapporteur, Mr. Aguirre Martinez, who summarized a total of 10 contributions received from five countries. 11 participants from five countries took part in the discussion.

Mr. Feldföldy, rapporteur on Complex D, was unable to attend the Symposium. The report he had drawn up summarized 8 contributions received from four countries and was presented by Mr. Dobolyi. Eight participants from six countries and UN-organizations took part in the discussion.

In his report, the rapporteur on Complex E, Mr. Imeybore, analysed the main aspects contained in two contributions received from one country . 12 participants from 9 countries and UN-Organizations took part in the discussion.

20) The main aspects of the five general reports and the discussion are summarized as follows:

The increasing eutrophication of the waters accompanying the progressive development of industrial and agricultural production are impairing to an increasing degree systematic utilization of the waters.

The utilization of eutrophic waters as drinking and industrial water sources as well as for recreational purposes and bathing, therefore is associated with increasing expense and other difficulties. Important resources for human nutrition are, thereby, lost since commercial fisheries are either obstructed or, in some cases, rendered impossible.

Aggravating eutrophication, furthermore, promotes the spreading of pathogenic agents.

The mass growth of aquatic plants leads to waterways becoming blocked as well as to irrigation and drainage ditches failing to serve their purpose. It also leads to rapid silting and alluviation of waters.

The elimination of the resultant damage involves increasing expense.

21) The Symposium, therefore, directs special attention to the urgent need for further research into the mechanisms and the complex correlations between the causes and effects of eutrophication in order to derive necessary action required for eutrophication abatement.

22) The participants in the Symposium point out that, when selecting appropriate measures for eutrophication abatement, the complex character of the eutrophication problem must be taken into consideration and that, therefore, ecological knowledge must be applied to the widest possible extent.

Besides investigations in the field of eutrophication

abatement, increased attention must be paid in future to the utilization of eutrophic waters with the aim of increasing the resources for human nutrition.

Comprehensive application of the knowledge gained concerning eutrophication requires, in particular, intensified efforts in education and up-grading at all education levels down to and including unskilled workers.

To achieve this, all facilities of public relations must be used in future for comprehensive enlightenment of the general public on eutrophication problems.

23) As a result of the Symposium, in accordance with the state of knowledge reached, recommendations for the protection of surface waters from eutrophication have been adopted. (Vol. I part. 1)

Taking into account General Assembly Resolution 3513 (XXX) of December 15th, 1975, ECOSOC Resolution 1983 (LX) of April 23, 1976 and Decision 55 (IV) of the 4th Session of the UNEP Governing Council of April 13th, 1976, the participants of the Symposium consider these recommendations to be a contribution to the UN Water Conference to be held in 1977 in Argentina.

24) The Symposium decided that the following papers will be annexed to the report of the Symposium:

a) the reports of the rapporteurs, including the summaries of the discussion on the corresponding complexes,

b) the papers sent to the rapporteurs for evaluation, and

c) the discussion papers on the complexes A - E which were presented during the Symposium.

25) The report of the Symposium including the annexes as described in para. 24 will be sent to the secretariat of UNEP as well as to the participants of the Symposium by the end of 1976.

26) After final addresses by the President of the Symposium and by the representative of the Executive Director of UNEP as well as by representatives of several delegations, the Symposium was finished on September 24, 1976.