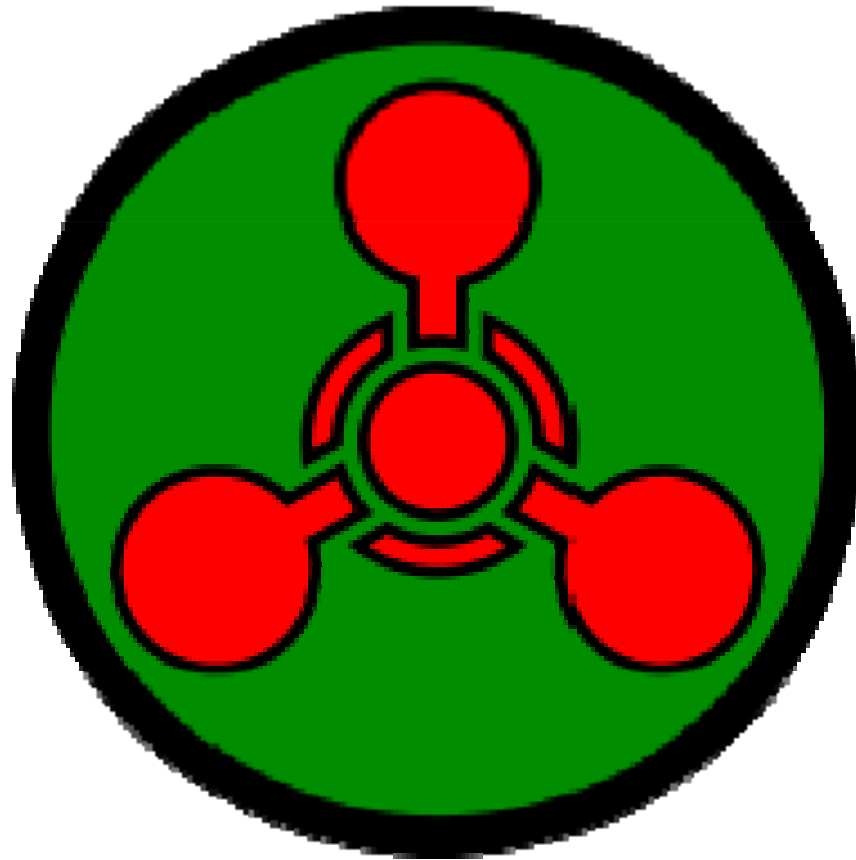


Do you know what this symbol represent ?



How many of you are familiar with this symbol ?





ORGANISATION FOR THE
PROHIBITION OF CHEMICAL WEAPONS

Working together for a world free of chemical weapons

Temporary **W**orking **G**roup on **E**ducation and **O**utreach (**S**cientific **A**dvisory **B**oard)

An overview of the objectives, the past and ongoing
works and the future tasks

Djafer BENACHOUR
(Chairman of the TWG)

A



Why a Temporary Working Group on E & O ?

Education and Outreach in Sciences & Technologies are important to the CWC's future implementation.

E & Outreach serve a number of purposes including :

- raising awareness of the CWC among the broad community of relevant professionals who should be aware of it
- stressing the potential risks posed by the multiple uses of chemicals
- contributing to national implementation of the CWC
- contributing to the prevention of the misuse of toxic chemicals
- facilitating chemical safety and chemical security
- building skills and capabilities in areas relating to the peaceful uses of chemistry



ORGANISATION FOR THE
PROHIBITION OF CHEMICAL WEAPONS

Working together for a world free of chemical weapons

UN disarmament education study

United Nations

A/57/124



General Assembly

Distr.: General
30 August 2002

Original: English

Fifty-seventh session
Item 67 (c) of the provisional agenda*
General and complete disarmament

**United Nations study on disarmament and
non-proliferation education**

Report of the Secretary-General**

Summary

There has never been a greater need for education in the areas of disarmament and non-proliferation, especially with regard to weapons of mass destruction, but also in the field of small arms and international terrorism. Since the end of the cold war, changing concepts of security and threat have demanded new thinking. Such new thinking will arise from those who are educated and trained today.



Actual composition of the TWG E&O (13 members)

Djafer Benachour (Algeria) Chair

Philip Coleman (South Africa)

Temechegn Engida (Ethiopia)

Jo Husbands (USA)

Peter Mahaffy (Canada)

Alejandra Suarez (Argentina)

Alastair Hay (UK)

Detlef Maenig (Germany)

Jan Apotheker (The Netherlands)

Stefan Mogl (Switzerland)

Mahdi Balali-Mood (Iran)

Ting-Kueh Soon (Malaysia)

Robert Mathews (Australia)



ORGANISATION FOR THE
PROHIBITION OF CHEMICAL WEAPONS

Working together for a world free of chemical weapons



www.opcw.org

GENEVA, December 10, 2012



TWG objectives

- The objectives of the TWG are:
 - to build on earlier work in this area by the SAB and its members
 - to utilise the experience of other initiatives in this field and related areas
 - to make recommendations to the SAB for sustainable activities which could be pursued by the OPCW and its Member States



Questions for the TWG

- How to raise awareness of the CWC in the education sector?
- How can the OPCW further develop its relationships with the scientific community and the chemical industry?
- How can the OPCW contribute towards expanding and promoting a culture of responsibility in the scientific community and the chemical industry?
- How to take advantage of existing initiatives in this area with a view to avoid duplication and allow the OPCW to build relationships with other international organisations, professional associations, networks etc
- How to find sustainable ways in which the OPCW can take forward its education and outreach activities once the TWG completes its work



OPCW-IUPAC collaboration

- Workshops on S&T in 2002 , 2007 and 2012
- Conference in Oxford in July 2005
 - PAC report (2006)
- “Multiple uses” project
 - *Chem Int* article (Nov-Dec 2007)
 - Website, but IUPAC link not working properly
- Codes of conduct project
 - *Chem Int* article (Nov-Dec 2011)
- Involvement of Committee of Chemistry Education members (**3 of them are members of the TWG E&O**)



Work in other fields

- **Life sciences**
 - BWC intersessional process
 - Inter Academy Panel, etc
 - Responsible conduct of research/research integrity
- **Nuclear security**
 - International Nuclear Security Educators' Network
 - MSc course syllabus
- **Comprehensive Test Ban Treaty Organisation**
 - Capacity Development Initiative
 - S&T conferences (2006, 2009, 2011 and 2013)



TWG E & O first meeting main recommendations (April 12-13, 2012, OPCW headquarters, The Hague)

1-Prepare educational and outreach materials not only in the forms of books and printed documents, but also in the form of electronic platforms, documentaries, short video films... Exemple of the movie ‘FIRES**’**

Specific materials will be adjusted to the audiences concerned at different levels

2- Encourage teaching of ethics and responsible science as part of training of scientists and educators...

3- Engage in other forms of outreach: museums, chemistry Olympiads, national chemical societies promoting awareness in schools, national scientific events...



4- Take advantage of other education and outreach activities made by similar organizations (IAEA, CTBTO, BWC, WHO,...), international scientific bodies (IUPAC, IUTOX, IUBMB...) , professional associations (ICCA, CEFIC...) as well as NGO's

5- Review existing national codes of conduct, in particular any elements related to the CWC. Based on these results, consult with IUPAC leadership about possible additional initiatives...

6- Convince the National Authorities and State Parties that they should get involved more in outreach activities and that they must co-work with their national scientific community.

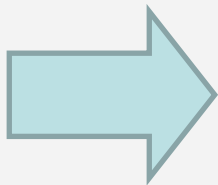


TWG E & O second meeting **(The Hague, November 22-24, 2012)**

**Meeting devoted mainly to the interaction with the
National Authorities (NA's):**

***Objective : to get the NA's (more) involved in E & O
activities in their respective countries***

***E & O on the CWC and the CW must become a
national issue for each and all State Parties.***



Response of the NA's: VERY POSITIVE



WHY ARE WE (The OPCW) HERE ?

BECAUSE OF THE CONVERGENCE OF BIOLOGY AND CHEMISTRY

According to Prof.Scott MOHR :

**“ BIOLOGY IS THE HIGHEST FORM OF APPLIED
CHEMISTRY “**

... and such an evidence clearly justifies, if needed, the existence of the TWG on the Convergence of Biology and Chemistry within the Scientific Advisory Board of the OPCW.

The recent development of Sciences and Technologies makes E & O more and more important and unavoidable for all persons involved not only in education but also in the well-being of the society ...I



Convergence of the BWC and the CWC ... ?

Quoting J.B. TUCKER (Pentagon allocution on 02/02/2011)

“ Technology is beginning to outgrow the treaties that keep us safe from Biological and Chemical weapons. **Biological and chemical production methods, once distinct, are converging. On the one hand, it is possible to produce organic chemicals with biologically mediated processes; on the other hand, biological molecules such as DNA and proteins can be made by strictly chemical means.** This technological crossover is creating risks of misuse for warfare and terrorism that were not anticipated by the treaties banning biological and chemical weapons, posing a major challenge to the nonproliferation regime.”

See : <http://scienceprogress.org/2011/02/growing-together/>



ORGANISATION FOR THE
PROHIBITION OF CHEMICAL WEAPONS

Working together for a world free of chemical weapons

**UNFORTUNATELY WE WILL CONTINUE
TO SEE THIS SIGN / SYMBOL**





ORGANISATION
PROHIBITION OF

**BUT WE
SHOULD
NEVER SEE
AGAIN
IMAGES
LIKE THIS**

www.opcw.org



apons

GENEVA, December 10, 2012



ORGANISATION FOR THE
PROHIBITION OF CHEMICAL WEAPONS

Working together for a world free of chemical weapons

**SO ...LET US ALTOGETHER DO OUR VERY
BEST TO EDUCATE AND REACH OUT ALL
AUDIENCES IN ORDER TO GET RID OF, AT
LEAST, THESE TWO SYMBOLS !**





ORGANISATION FOR THE
PROHIBITION OF CHEMICAL WEAPONS

Working together for a world free of chemical weapons

Thank You for your Attention





Presentation by the TS/guest (in the form of a movie)

A very interesting short movie ‘FIRES**’ (produced by Eric van der Borcht of the OPCW Media and Public Affairs Branch) on the life of Fritz Haber, movie made with the collaboration of Prof. Chretien Schouteten.**

**This movie emphasized the way chemistry should be taught: scientific facts based on real life events and associated with ethical and social impacts.
This new teaching approach increased the students’ interest in chemistry as well as their awareness about chemicals misuses.**