

Programmatic Symposium of the EuCheMS Working Party

Ethics in Chemistry

Carl Djerassi

In Memoriam

Frankfurt/Main, 25 – 26 Sep. 2015

Goethe Universität Frankfurt

Otto-Stern-Zentrum (OSZ) - Campus Riedberg

OSZ-S2

Ruth-Moufang-Straße 2

60438 Frankfurt am Main

http://web.uni-frankfurt.de/dz/neue_medien/GMW2013/Anreise_GMW2013.pdf

Scientific Committee

Luigi Campanella

Francesco De Angelis

Roald Hoffmann

Jan Mehlich

Brigitte Van Tiggelen

Harald Schwalbe

Organizing Committee

Francesco Dondi

Hartmut Frank

Wolfram Koch

Friday, 25. Sep.

Chair **Brigitte Van Tiggelen**

10:30 **Hartmut Frank** (University of Bayreuth) Opening: Scope of the Workshop

10:40 **David Cole-Hamilton**, EuCheMS President: Welcoming remarks

11:00 **Wolfram Koch**, Executive Director GDCh: Welcome by the GDCh

11:30 **Jan Mehlich** (Taiwan):

The Role of Chemists in Science Ethics – A Technology Assessment Perspective

12:30 Lunch

13:30 **Henning Hopf/Francesco de Angelis** (Facilitators)

Working Groups (Structure, Statutes of the WP)

14:30 Coffee

Summary of the Day

Saturday, 26. Sep.

Chair **Jan Mehlich**

09:00 **Ferruccio Trifirò** (University of Bologna): Applied Ethics – Chemical Warfare Agents

10:00 Discussion/Coffee

10:20 **Modest Gertsyuk** (NAS, Kyjiv, Ukraine): Ethics in international science cooperation

10:40 **Anca Silvestru** (University of Cluj-Napoca, Romania):

Ethics in science, related to the education of young chemists

11:00 **Roald Hoffmann** (Cornell University, Ithaca, USA):

Considerations on the needs for chemical ethics

12:30 Lunch

13:30 **Luigi Campanella/Hans-Georg Weinig** (Facilitators)

Working Groups (Priorities, Key Actions)

15:30 Coffee

Brigitte van Tiggelen/Hartmut Frank Summary, Conclusions

17:00 End of Sessions

In Conjunction

26. Sep.: 19:30 West Side Theater Darmstadt

27. Sep.: 19:00 Internationales Theater Frankfurt

Theater-Aufführung/Theater Performance „**Was Euch gehört**“

Deutsche Fassung von/German version of **Roald Hoffmann's** “Something that belongs to you”

Overview and Keywords

Topic:

- Ethical Implications of Chemistry in Science, Industry, Society and Culture
- The role of Chemists in ethical reflection and decision-making
- Dimensions of Ethical and Social Implications of Chemistry

Meta ethics:

What can "Chemical ethics" contribute to the debate? Why is it important for Chemists to reflect their responsibilities and the implications of their professional activity?

- Aspects of "Science Ethics" ("Good scientific practice", ethical standards in conduct of research, assessment of EHS risks, etc.) and "Professional ethics" (responsibility, societal expectation vs. personal interests, "ethos", etc.)
- Needed for processes of development, especially in regulation and governance (e.g. REACH), ELSI research, translational research (science to industry to consumer)
- Input of "what is" for the ethical argumentation.

What are the goals of this work group and how can they be achieved?

- Raising awareness for the importance of ethical reflection skills.
- Contribution to Chemistry-related governance processes, technology assessment, etc.
- Promoting the importance of ethical reflection and reasoning skills and its implementation in the education of chemists.

The individual level - the chemist between professionalism and responsibility:

Aspects related to the conduct of "chemical activity" of each individual:

- "Bad scientific practice": fraud, betrayal, "FFP" (fabrication, falsification, plagiarism), etc.
- "Virtues" of science: objectivity, dedicated disinterestedness, systematized doubt, disciplined self-control, fairness, etc.
- "Ethical guidelines" or "Ethos" necessary/useful/possible?

The chemical community level - Ensuring its integrity now and in the future

Aspects that play a role within the chemical community, matter to every "chemist" but has no direct link to the general public:

- Education of Chemistry: need for reasoning and reflection skills on responsibility, ethical integrity, etc.; also: global balance of chances for young scientists
- Responsibility of PI for success of students/PhDs/postdocs: marking theses, supporting co-workers, etc.
- Publishing and its impact on career or University reputation, etc.

The institutional level - Chemistry in society and culture

- Impact on society: the design, fabrication and distribution of chemical compounds
- How can "Chemistry" support sustainable development of economy, society, culture?
- Chemistry and risk perception, Science under uncertainty
- Science communication: scientific approaches of risk vs. values/worldviews/virtues concerns in problems with high complexity