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## Internship for Organic Chemistry Skills Development at SPIEZ LABORATORY

### Synthesis of Compounds related to Precursors, Degradation Products and By-Products of CW Agents

## Information for Candidates

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#### **Organizer**

The programme is organized by the Organic Chemistry branch of SPIEZ LABORATORY, Switzerland.

#### **Description of the internship**

The programme is designed for a chemist with relevant practical and theoretical experience in organic chemistry. Practical experience in organic synthesis and gas chromatography, and a theoretical understanding of organic chemistry reactions, are essential prerequisites for selection for the internship. The selected intern must be prepared to work independently on a project. He/she will also receive training in synthetic methods and purification of organo-phosphorus compounds related to precursors, degradation products and by-products of scheduled chemicals (emphasis on synthesis), as well as identification and confirmation of such compounds, mainly by GC-MS and NMR (practical work in laboratory). Preparation of environmental samples and derivatization techniques as well as demonstration and, to some extent, training in the use of various types of analytical instruments, are also part of the programme. Further, visits to other departments of the institution will be arranged and quality assurance will be discussed. With regards to the theme for the project, SPIEZ LABORATORY will typically propose one; however, the candidates may indicate their own areas of interest.

#### **Time and duration**

The internship will be for a duration of 3 months. The exact date of commencement of the internship will be discussed between the intern and SPIEZ LABORATORY prior to its start.

#### **Selection of the participant**

Only one candidate will be selected for the internship offered under this programme. The selection of the candidate will be made during November.

#### **Financial assistance**

SPIEZ LABORATORY will provide tutors, equipment and infrastructure free of charge. The lodging, daily board allowances and travel costs must be financed by a third party. Personal insurances (illness, accident and liability) covering Switzerland must be taken out by the candidate at his/her own cost or covered by the funding agency (the average cost of living is

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about 3'500.- CHF per month). In this context, it may be mentioned that after a candidate is selected by SPIEZ LABORATORY, he/she may apply to the Organisation for the Prohibition of Chemical Weapons (OPCW) for sponsorship under the Internship Support Programme implemented by the International Cooperation and Assistance Division of the OPCW. Details are available on the OPCW website at [www.opcw.org](http://www.opcw.org)

However, please note that the prospective interns are expected to complete all necessary arrangements with SPIEZ LABORATORY prior to applying for OPCW sponsorship. A copy of the acceptance letter from SPIEZ LABORATORY is to be enclosed with the application for sponsorship.

All candidates are requested to indicate in their applications how they propose to fund or obtain sponsorship of their travel and living costs in Switzerland. In case they plan to apply to the OPCW for sponsorship if selected, they may indicate so.

### ***Eligibility***

This programme is open only to citizens of the Member States of the OPCW (list available at the OPCW website). It is intended for relatively young chemists with an academic background and laboratory experience (preferably still working in a laboratory) as indicated earlier. The candidate should have practical experience with computers and Microsoft Windows. A good working knowledge of English (or German or French) is a prerequisite. Spiez is situated in the German-speaking part of Switzerland. English is understood in many places but there may be some restraints in social life.

### ***Application procedure***

Candidates interested in the internship should apply on plain paper with the following:

- an updated curriculum vitae;
- an essay explaining the objective the candidate wishes to achieve and the type of work experience he/she hopes to acquire during the period of the internship (not exceeding 300 words);
- recommendation of the supervisor in the institution where the candidate is presently working indicating how the training will benefit his/her present position, institution and the country.

Applications without valid contact information (including mailing address, fax and e-mail) are not taken into consideration. The applications should be sent by mail or fax directly to SPIEZ LABORATORY between 1<sup>st</sup> June and 30<sup>th</sup> September latest for the next year internship. Incomplete applications or those received after the due date will not be considered.

Applications should be sent to the following address:

Andreas Zaugg  
SPIEZ LABORATORY  
Chemistry  
CH-3700 Spiez  
Switzerland  
Fax: +41 33 228 14 02

Additional information about this programme may be obtained from Andreas Zaugg. General information's about the activities of SPIEZ LABORATORY are available on our website: [www.labor-spiez.ch](http://www.labor-spiez.ch)