Chemistry in Germany
- educational and research opportunities

German Chemical Society
Gesellschaft Deutscher Chemiker
GDCh
German Education System

Elementary, secondary & postsecondary education

- Elementary + High School  
  9-10 years
- Elementary + High School  
  12 years
- Vocational education  
  - industry + school  
  - school
- University  
  or  
  Vocational education
Postsecondary Education in Chemistry

Hochschule

University
Universität

research-orientated

Bachelor (6 semester)
Master (4 semester)

PhD
PostDoc

University of Applied Science
Fachhochschule

application-orientated

Bachelor (6-7 semester)
Master (4-3 semester)

PhD: cooperation with universities!
PostDoc: ?

www.gdch.de
Postsecondary Education in Chemistry

Bachelor → Master → PhD

career entry

56 Universities
23 Universities of Applied Science

6095 1st year students
1945 1st year students

6 %
67 %

90 %
23 %

University
University of Applied Science

GDCh, Chemiestudiengänge in Deutschland, Statistische Daten 2012, www.gdch.de/statistik
Postsecondary Education in Chemistry

higher education entrance qualification

Bachelor

career entry

Master

career entry

PhD

career entry

PostDoc

career entry
Postsecondary Education in Chemistry

**Analytical Chemistry**

**Biochemistry**

**Business Chemistry**

**Construction Chemistry**

**Degree Program “Teaching Chemistry”**

**Environmental Chemistry**

**Food Chemistry**

**Inorganic Chemistry**

**Medical Chemistry**

**Nuclear Chemistry**

**Organic Chemistry**

**Physical Chemistry**

**Polymer Chemistry**

**Technical Chemistry**

**Theoretical Chemistry**

**Water Chemistry**

www.gdch.de
PhD in Germany

Where?
- universities
- research institutes
- graduate schools

Requirements?
- Master
- Bachelor: examination

How long?
3.5 years average

Language?
- English
- German courses

Financial support?
- salary
- scholarships funding-guide.de
Post Doc in Germany

Where?
- universities
- research institutes
- industry

Requirements?
- PhD

How long?
1-3 years

Language?
- English
- German courses

Financial support?
- salary
- scholarships [www.funding-guide.de](http://www.funding-guide.de)
Have a Look at …

Research in Germany
Land of Ideas
research-in-germany.de

Universities
hochschulkompass.de
or universities’ webpages

Research Institutes
Max Planck Association mpg.de
Helmholtz Association helmhotz.de
Leibniz Association wgl.de
Fraunhofer Association fraunhofer.de

DAAD
German Academic Exchange Service
daad.de

DFG
German Research Foundation
dfg.de

www.gdch.de
Why should you come to Germany?

Cutting-edge research facilities in Germany

✓ variety of Bachelor, Master, PhD & PostDoc positions
✓ challenging PostDoc research activities
✓ numerous funding possibilities
✓ access to German chemical industry
✓ cultural diversity & modern lifestyle in the heart of Europe

Heidelberg
Frankfurt
Dresden
Postsecondary Education in Chemistry

Bachelor

Career entry

2 %
42 %

Master

University

98 %
48 %

University of Applied Science

GDCh, Chemiestudiengänge in Deutschland, Statistische Daten 2012, [www.gdch.de/statistik](http://www.gdch.de/statistik)
Postsecondary Education in Chemistry

Bachelor -> Master

PhD -> PostDoc EU+abroad 17%

Career entry 74% (including temporary positions)

GDCh, Chemiestudiengänge in Deutschland, Statistische Daten 2012, www.gdch.de/statistik
PhD in Germany

**Individual PhD**
- individual professor-student relationship
- no explicit curriculum
- application directly to the professor
- every university in Germany

**Structured PhD Program**
- supervision by a group of professors
- systematic study program
- structured, formal admission program
- Max Planck Research Schools
  Research Training Schools
  Graduate Schools

www.gdch.de