

# Dr Anna Muller

PhD, BSc (Chemistry) MRSC, CChem, BSc (Biomedical), MSc (Nanotech), MIO N

Email: [amuller5@hotmail.co.uk](mailto:amuller5@hotmail.co.uk)

## Profile

A highly motivated scientist with a natural flair for solving problems and delivering solutions. Has qualifications in all three major areas of science (chemistry, physics and biology) therefore fits easily into an integrated scientific workforce environment. Keen to pursue challenging academic research, has great aptitude for both experimental and theoretical projects and enjoys teaching.

## Key Skills

- **Research** – experience of practical, theoretical and computational projects at university level.

PhD research involved novel software development using Fortran, based on Factor Theory and applied to infra-red spectroscopic data. This research was highly successful, leading to two outstanding publications for which I was jointly awarded the Sir Harold Thompson Memorial Award.

- **Teaching** - in post compulsory and secondary education.

Worked as an 'A' level science tutor for Surrey Tutorial College. Taught in several comprehensives. At University level, helped with a Fortran programming problem class and was a chemistry undergraduate laboratory demonstrator.

- **Computer literacy** – ability to use software packages and to programme in Fortran. Microsoft Office skills including Word, Excel and Powerpoint presentation skills (CLAIT and IBT2).
- **Interpersonal** - as exemplified by the ability to work on my own or as a member of a team.
- **Communication** - good verbal and written communication skills acquired from giving presentations and writing reports. Experience of proof reading and writing research papers to publishable standard in peer reviewed journals.
- **Problem solving** - ability to analyse and solve problems and to provide effective solutions as evidenced by my research and publications.
- **Time management** - good at organising and prioritising work having successfully met all academic deadlines.

## Higher Education

---

<b>MSc Nanotechnology</b> (Distinction)	Surrey University	2006-2007
---	-------------------	-----------

Modules: Introduction to Nanotechnology, Advanced Laboratory, Research Methods, Nanophotonics, Computational Methods  
Research Project: *'Novel 3D Scaffolds based on Carbon Nanotubes for Tissue Engineering'*

---

**BSc Biomedical Sciences** (First Class) Surrey University 2003-2005  
 Modules: Immunology, virology, bacteriology, molecular biology, biochemistry, cancer  
 biochemistry, analytical techniques  
 Final Project: *'Quantum Chemistry Calculations for Haemoprotein-CO adducts'*.

---

**PhD Chemistry** (Part Time) Royal Holloway 1985-1991  
 Title of Thesis: *'Vibrational Intensities in Chemical Analysis. Use of Factor and Quantum Theory approaches'*.

---

**BSc Chemistry** (Second Class) Royal Holloway 1981-1984

---

**'A' Levels**

Physics	Grade A	Brooklands	2000
Chemistry	Grade A	Guildford College	2000
Human Biology	Grade A	Guildford College	1998
English	Grade B	Godalming College	1999
AS Environmental Science	Grade B	Guildford College	1999

## Employment History

### Science Teacher

Part-time science teacher at Christ's College, Bellfields. 1.6.09- 22.7.09

### Disabilities Student Helper

9.08- 4.09

Helping university students with medical conditions, to complete their course (part-time)

### Examination Invigilator

May 2008-09

Invigilating examinations for Surrey University (part-time)

### Examination Assistant

Feb 2006

Worked for AQA, Guildford, checking examination papers.

### Supply Teacher

Sept 2001

Supply teacher for the Academy of Human Resources, Reading. Worked in various schools in Berkshire (part-time).

### Assistant Examiner

June 2001

Assistant examiner for AQA, Guildford. Marked GCSE Physics examination papers.

### Science Teacher

2001

Taught Key Stage 3 and GCSE Science at Broadwater School for the summer term.

### Examiner – Numeracy and Literacy

1995-00

Marked numeracy and literacy papers for AQA (part-time).

### External Patent Abstractor

1988-98

Summarising data from chemical abstracts for Derwent Information Ltd, London (part-time)

### Examination Assistant

1993-94

SEG assistant examiner for GCSE Double Science. Involved marking scripts.

### Library Assistant

1986-90

Worked in the Founders library (arts) and in the science library at Royal Holloway College, University of London (part-time)

## Awards

- **The Sir Harold Thompson Memorial Award 1990**

I was the joint recipient of this award, given by the directors of Pergamon Press, in recognition of significant research publications in the field of IR Spectroscopy.

**Professional Membership** MRSC, CChem, MIoN

## PUBLICATIONS

### Dr Anna Muller

PhD, BSc (Chemistry) MRSC, CChem, BSc (Biomedical), MSc (Nanotech), MIOhN

Email: [amuller5@hotmail.co.uk](mailto:amuller5@hotmail.co.uk)

- [1] P.POWELL, M. STEPHENS and A. MULLER. *Journal of Organometallic Chemistry*. 310 (1986) 255. Diene and Dienyl Complexes of Transition Elements.
- [2] A.MULLER and D. STEELE. On the Extraction of Spectra of Components from Spectra of Mixtures. A Development in Factor Theory. Part 1. *Spectrochim. Acta 46A (1990) 817*. \*
- [3] A.MULLER and D. STEELE. (Title as above. Part 2). *Spectrochim. Acta 46A (1990) 1177*. \*
- [4] A. MULLER. Reassessing the Transformation Step in Factor Theory. The Case for a Non-Orthogonal Transformation Matrix. *J. Math. Chem.* 7 (1991) 363.
- [5] D.STEELE and A. MULLER. Vibrational Absorption Intensities in Chemical Analysis. Part 4. An *ab initio* study of intensities for methyl ethanoate. *J. Phys. Chem.* 95 (1991) 6163.
- [6] D.STEELE and A. MULLER. Vibrational Absorption Intensities in Chemical Analysis. Part 6. Group Vibrations in ethyl ethanoate. *Spectrochim. Acta.48A (1992) 495*.
- [7] A. MULLER. Vibrational Intensities in Chemical Analysis. Use of Factor and Quantum Theory Approaches. PhD 1991 (University of London).

*I was jointly awarded the Sir Harold Thompson Memorial Award for these publications* \*.