

# A Pinch of Salt!

The Newsletter of the Salters' Institute

## Salters' Festivals of Chemistry 2004

2004 **Salters' Festivals of Chemistry** are only round the corner! Plans are well underway to make sure they are as big a success as this year's! The Festivals will run from March to June next year for Years 7 and 8 (or equivalent) and we have over 900 places on offer.

If you are interested in entering a Festival see pages 3, 7 and 8 for more information.

### Have fun with Chemistry!

Would four young chemists from your school enjoy a day in a University Chemistry Department? Then enter one of our

#### Salters' Festivals of Chemistry

- The Festivals are one day fun events for students from Years 7 and/or 8 (or equivalent Years)
- No advance preparation is required for any of the day's activities
- All students receive participation certificates and fun prizes
- Cash Prizes for Winning Schools
- You will have the opportunity to meet other enthusiastic teachers and to swap ideas!

Festival Entry Form - Back Page  
The closing date for entries is  
**31 December 2003**

### Salters' Chemistry Camps 2004

Preparations for next year's Camps are already in progress and an exciting programme is in the pipeline for those keen to find out more about Chemistry. If you know a Year 10 student who fits the bill why not nominate them?

Nomination forms will be available in the next issue of "A Pinch of Salt!"

See [www.chemistrycamps.co.uk](http://www.chemistrycamps.co.uk) for more information.

### Projects By Post

Our thanks to all the schools who entered the Projects by Post Competition this year. The most popular theme chosen by over half of the entries was "**Chemistry in the Home**".

We even had an entry from a school in India! The results of the competition and information on how your school can enter for the next Projects by Post competition are on page 4.

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THE SALTERS' INSTITUTE

**Institute News****Sharing Good Practice - in the Teaching of Chemistry  
on Tuesday 16 March 2004 at Salters' Hall, Fore Street, London**

Following on from the success of this year's Sharing Good Practice Seminar we plan to hold a similar event in March 2004.

- Previous winners of "The Salters' Prizes for the Teaching of Chemistry" will lead sessions on topics such as:

*Practical Work and Difficult Concepts*  
*Using the White Board to Good Effect*  
*Making Chemistry Come Alive*  
*Chemistry in the Sixth Form*

- Share in discussion and debate about key issues
- There is no cost for the event. Participants are responsible for their own travel expenses. Lunch and refreshments will be provided.

Further information and details on how to book a place will be available in the January issue of 'A Pinch of Salt!'.

**Please Keep a Look Out!**

**SALTERS' NATIONAL AWARDS  
FOR SCIENCE TECHNICIANS**

**Four Awards of £250**

The Awards are open to science technicians in schools and colleges catering for students to age 18, and who have a total of 5 or more years experience (either full-time or part-time).

Salters' National Awards for Science Technicians are in association with:

**The Association for Science Education**

**The Institute of Biology**

**The Institute of Physics**

**The Royal Society**

**The Royal Society of Chemistry**

The closing date for nominations is  
**Saturday 1 May 2004**

**SALTERS' AWARDS  
FOR CHEMISTRY TEACHING**

**Four Awards of £3,000  
(£1,500 for the candidate and £1,500  
for the school science department)**

The Awards are open to teachers with between two and seven years teaching experience, irrelevant of age, and who work in secondary schools or sixth form colleges in the UK.

We are looking for:

- Teachers with enthusiasm who share with young people their own excitement for chemistry
- Teachers whose work in the classroom stimulates and challenges pupils throughout the ability range to achieve their full potential
- Teachers who can show the evidence of their teaching excellence through improving examination results

The closing date for nominations is  
**Saturday 1 May 2004**

Nomination forms / further information are available on:

**[www.saltersinstitute.co.uk](http://www.saltersinstitute.co.uk)**

or from:

The Institute Administrator

The Salters' Institute, Salters' Hall, Fore Street London, EC2Y 5DE

Tel: 0207 628 5962 Fax: 0207 638 3679

E-mail: [institute@salters.co.uk](mailto:institute@salters.co.uk)

## Festivals 2004

**SALTERS'**  
Festivals  
*of Chemistry*

The programme follows the same format at all the Festivals. There will be an exciting, hands-on investigation in the morning (**"The Salters' Challenge"**) followed by a second practical activity in the afternoon (**"The University Challenge"**). Most Festivals also feature a "fun" lecture or "chemical magic" demonstration and the day ends with prizegiving where everyone receives certificates and fun prizes. There are also cash and additional prizes awarded to the schools who come first, second and third in the Challenges.

An entry form for the Festivals can be found on page 7. A list of the venues for 2004 is on page 8. Please complete your entry form and send it off to reach us by **31 December 2003**. The earlier you enter the more chance you have of securing a place at your preferred Festival. As before places will be allocated on a **first come, first served basis - so hurry with your entry!**

Please note there are even more Host Universities this year!

" We had an amazing and fascinating time....The demonstration of magic chemistry was excellent! Our favourite parts were when they made the pumpkin blow up!"

**Dame Alice Harpur School - University of Warwick Festival 2003**

## Royal Society of Chemistry - Inset Courses

The RSC will be running a number of INSET courses in the Spring term including:

**Hands-on Symposia** - to update teachers in the applications of core analytical techniques.

April 2004                      Cambridge

**Managing Curriculum & People** - 3-day residential workshops for Heads, and aspiring Heads of Departments.

10 - 12 January 2004      Bristol

24 - 26 January 2004      Manchester

**Using Assessment to Improve Learning in Chemistry and Science Departments** - these interactive one day workshops demonstrate practically the principles of assessment of learning to improve the process of learning and hence student achievement.

23 March 2004                Edinburgh

24 March 2004                Glasgow

March 2004                    York

April 2004                     London

**Improving Teaching and Learning using ICT** - a series of one day hands-on Workshops.

13 January 2004              Leicester

26 January 2004              Bristol (1)

4 February 2004              Huddersfield

9 February 2004              Southampton

9 March 2004                 Sheffield

23 March 2004                Bristol (2)

29 March 2004                Reading

**Industry Study Tours** - 3-day residential courses visiting chemical companies

April 2004                     Dublin/Middlesbrough

**Contact: - Ms L Hart, Royal Society of Chemistry, Burlington House, Piccadilly, London, W1J 0BA**  
Tel. 020 7440 3350    Email [hartl@rsc.org](mailto:hartl@rsc.org)

### Projects by Post Awards 2003

The **SALTERS'**  
Chemistry  
Club

Well done to everyone who entered the competition. We hope you enjoyed working on the projects as much as our panel enjoyed reading them!

#### Students Awarded a Certificate of Excellence

**Brindavan Vidyalaya, India**  
*Know your diet*

B.P. Akshitha, K.Karthik, B.Nirmalraj, G.Sharmili

**Central Newcastle School**  
*What is.... Forensic Science*

Charlotte Brumby, Ashley Hay, Hong-Ting Kwok

**Deacon's School**  
*Research on Detergents*

Laura Tatam

**Didcot Girls' School**  
*Eggshells: The Hidden Protein*

Louisa Greenhalgh, Alex Lewington, Naomi Nickerson,  
Kirsty Rodger, Katherine Scane

*Eggsperiments*

Becky Maryan, Sarah Reid

**Sheffield High School**  
*Investigating Chemistry in Water*

Sivamathy Selvakumaran, Elizabeth Paddock

#### Students Awarded a Certificate of Merit

**Badminton School**  
*Is Cheap Bleach a Cheat?*

Charlotte Burge, Felicity Grove, Jo Jo Ng, Georgina Whicher

*The truth behind the Bottle - Bleach*

Yasaman Haghighai, Sophie Harding, Stephanie Rich  
Kiyoko Shimura, Julie Williams

*Bleach Project*

Nitya Assoniull, Emilie Deacon, Tia Fuse, Antonia Mak,  
Fern Williams

*Bleach (Chemistry in the Home)*

Angel Lee, Victoria Smeaton, Beatrice Warner, Sarah Duncan  
Cynthia Fong

*Operation Power Bleach*

Tori Martin, Laura Day, Amy Clement, Fiona Mills, Alison Tsang

**Brentwood County High School**  
*Water - How hard are you?*

William Lloyd, Emma Scott, Amanda Wren, Adam Mack,  
Michael Parles, Eleanor Lawson

**Humphrey Perkins High School**  
*Water*

Rachel Stothard, Lucy Stephens, Zoe Connell

**Tideway Community School**  
*Water*

Kieran McLoughlin, Andrew Long, Kristian Loft, Jason Preece  
Daniel Todd

#### Projects by Post 2004

The themes for next year's competition are: -

- § Magical Chemistry
- § Salty Chemistry
- § Outdoor Chemistry

You can find more information about the Projects by Post Competition, along with the rules and an entry form from our website [www.salterschemistryclub.co.uk](http://www.salterschemistryclub.co.uk)

The deadline for entry is **31 January 2004**. The deadline for projects is **31 March 2004**.

## Competition Time!

The **SALTERS'**  
*Chemistry*  
Club

### An ABC of Elements

#### Winners

|              |                             |
|--------------|-----------------------------|
| Fiona Hall   | Kirkintilloch High School   |
| Tim Harrison | Alder Community High School |
| Gary Kirk    | Pimlico School              |
| Esme Pugh    | St. Clare's School          |
| Jamie White  | Grosvenor Grammar School    |



#### Runners-Up

|                    |   |
|--------------------|---|
| Shyrun Ali         | Greenhead Grammar School                  |
| Sam Arnot          | The King's School                         |
| Alice Busby        | Sherborne School for Girls                |
| Scarlett Clark     | Beeston Hall School                       |
| Amy Compton        | Ockbrook School                           |
| Harry Grove        | Thamesmead School                         |
| Nicola Guttridge   | Bournemouth School for Girls              |
| Peter Kelly        | Silverdale School                         |
| Meriel Kenchington | Hamilton Community College                |
| Peter Lodge        | Stratton Upper School & Community College |
| Craig McIntyre     | George Watson's College                   |
| Jinesh Mistry      | Desborough School                         |
| Darren Mitchell    | Valley Comprehensive School               |
| John Mullholland   | Slemish College                           |
| John Harry Pye     | Friesland School                          |
| Christopher Taylor | Ehenside School                           |
| Sophie Taylor      | Highworth Grammar School for Girls        |
| Mark Thaller       | Plymouth College                          |
| Elizabeth Walker   | The King's School Canterbury              |
| Kimberley Wheeler  | Neale-Wade Community College              |



The topical phrase was "**The Salters' Chemistry Club**". Well done to everyone who sent in the correct answer! The selected Winners and Runners-Up all received a certificate and fun prize.

Entries are still pouring in for the competition in "A Pinch of Salt!" Issue 18. If your school hasn't entered the competition there is still time - the closing date for entry is **30 November 2003**.

#### Student Zone

The Royal Society of Chemistry has launched a student zone on its website for school and college students, and higher education students. The schools and colleges section contains games and events as well as help and advice on courses and careers. There are also a range of useful links to other websites. The higher education section also contains help and advice on careers and courses along with RSC products, services and activities, and a number of answers to frequently asked questions. The student zone can be accessed at [www.rsc.org/lap/educatio/studentzone.htm](http://www.rsc.org/lap/educatio/studentzone.htm)

#### University entry requirements

The RSC recently contacted all UK universities requesting details of entry requirements for chemical science degree courses for 2004-5. They also asked for information about open days and any sponsorship schemes for undergraduate students.

The information from those universities that replied can be viewed online at [www.rsc.org/lap/educatio/studentzone/sc\\_courses.htm](http://www.rsc.org/lap/educatio/studentzone/sc_courses.htm)

Look out for more information on other activities that the RSC are involved with in future issues of "A Pinch of Salt!"

**Competition Time!**

The **SALTERS'**  
*Chemistry*  
Club

### FAMOUS SCIENTISTS WORDSEARCH

**A bit of fun for your students! Can they find the 25 famous scientists listed below in the word search?**

**ENTRY IS RESTRICTED TO STUDENTS IN YEARS 7, 8 AND 9 ONLY.**

```

A G N I K W A H A R G B I O C Z A C
H W D A C N Q Y A N D A R W I N Z L
O Q D Y N P W I L K I N S J E X D A
Y W F B A J A G D I U H O Z I E J V
L B O Y L E T G X E K U L G E W I O
E O P M P O S N D L L E W X A M O I
A H E P D Q O Z A E Y B P F O E R S
W R H F R A N K L I N Q B R S J S I
L Y V A D S U H T J T D A U L U B E
I H V R O C Y F O W B T C X H V I R
Q M D A Y M K I N Z U I E R A R B L
K C E D D I N G T O N B J B I S F J
N S C A D G M E K R Y F K N O C G O
O H K Y V I N S E J P F P X R S K P
S F K U B T L P A U L I N G T O U M
M A W C U N O Q L C H O N E W T O N
O X M P N C N S F Q N I K G D O H M
H T C R S U X S L H T G M K U R Q G
T V H V E V R Z N X R E L P E K E Y
B Y E I N S T E I N A C R V L T J Z
  
```

|            |           |         |           |         |
|------------|-----------|---------|-----------|---------|
| BOHR       | DALTON    | HAWKING | KEPLER    | PAULING |
| BOYLE      | DAVY      | HODGKIN | KROTO     | PLANCK  |
| BUNSEN     | EDDINGTON | HOYLE   | LAVOISIER | THOMSON |
| COPERNICUS | EINSTEIN  | HUBBLE  | MAXWELL   | WATSON  |
| CRICK      | FRANKLIN  | JOULE   | NEWTON    | WILKINS |

There are another **two scientists** in the grid that are not on the list, can you find them?

**Don't forget to give your name, address, age and school!**

The closing date for entries is **31 December 2003**.

The first 5 correct answers drawn will receive  
Salters' Chemistry Club T shirts and 25 runners-up will receive  
smaller fun prizes.

Schools may enclose multiple entries in one envelope.  
Please make sure each entry has the student's name, age and  
school.

Answers on a postcard please to:

The Salters' Institute  
Salters' Hall  
4 Fore Street  
London  
EC2Y 5DE

Tel: 020 7628 5962  
Fax: 020 7638 3679  
[www.saltersinstitute.co.uk](http://www.saltersinstitute.co.uk)

**Salters' Festivals of Chemistry 2004**

**SALTERS'**  
Festivals  
*of Chemistry*

**ENTRY FORM**

A series of fifty Salters' Festivals of Chemistry will be held between March and June 2004. These are one-day events held at Universities throughout the UK and Ireland.

The main focus of the morning will be a practical challenge ("**The Salters' Challenge**") which will be common to all the Festivals. This is a competitive, hands-on activity for which **no advance preparation is required**. There will be a second practical challenge in the afternoon chosen by the University ("**The University Challenge**"). This activity will be similar to those in the RSC publication "In Search of Solutions".

All students taking part will receive fun prizes and participation certificates. Cash prizes totalling £350/€525 will be awarded to the winning schools and members of the winning teams will additionally receive individual prizes and certificates.

**Entry is restricted to one team of four students from:-**

Years 7 and/or 8 in England and Wales

Years P7 and/or S1 in Scotland

Years 8 and/or 9 in Northern Ireland

Final year primary school and/or Year 1 secondary school in the Republic of Ireland

If you would like to enter a team from your school, please complete and return this form to: -

**The Salters' Festivals of Chemistry, Salters' Hall, Fore Street, London, EC2Y 5DE** or by fax to **020 7638 3679** or alternatively e-mail via our web-site [www.salters.co.uk](http://www.salters.co.uk)

A list of Festival venues and dates is shown overleaf. If we are unable to offer you a place at your preferred choice, we may offer a place at the nearest alternative. Places will be allocated in the order in which entries are received. **To secure a place at the Festival of your choice you are advised to apply as early as possible.**

Please note that schools who cancel within fourteen days of the Festival, or who fail to show up on the day, will be charged a cancellation fee of £20. (€30)

Name of School .....

Address .....

..... Post code .....

Telephone .....Fax .....E-mail .....

Name of Teacher supervising entry  
(in BLOCK CAPITALS) .....

Position in School .....

Preferred Festival Venue (see overleaf) .....

I agree to abide by the above conditions of entry. (Please photocopy this form for your records)

Signature .....Name (in BLOCK CAPITALS) .....

**THE CLOSING DATE FOR ENTRIES IS 31 DECEMBER 2003**

## Salters' Festivals of Chemistry 2004

**SALTERS'**  
Festivals  
*of Chemistry*

| University   | Festival Date           |
|--|-------------------------|
| University of Aberdeen                                     | Wednesday 31 March      |
| Anglia Polytechnic University, Cambridge                   | Wednesday 9 June        |
| Aston University   | Wednesday 26 May        |
| University of Birmingham                                   | Wednesday 5 May         |
| University of Bradford                                     | <b>NEW!</b>             |
| University of Brighton                                     | Wednesday 24 March      |
| University of Bristol                                      | Wednesday 31 March      |
| University of Bristol                                      | Thursday 25 March       |
| University College Cork                                    | Wednesday 5 May         |
| Coventry University  | Wednesday 5 May         |
| University of Dublin, Trinity College                      | Wednesday 5 May         |
| University of Durham (Stockton Campus)                     | Saturday 22 May         |
| University of Durham (Stockton Campus)                     | Wednesday 24 March      |
| University of East Anglia, Norwich                         | Wednesday 28 April      |
| University of Exeter                                       | Wednesday 24 March      |
| University of Glasgow                                      | <b>NEW!</b>             |
| Glasgow Caledonian University                              | <i>*To be confirmed</i> |
| Glasgow Caledonian University                              | <b>NEW!</b>             |
| Heriot-Watt University, Edinburgh                          | <i>*To be confirmed</i> |
| Heriot-Watt University, Edinburgh                          | Wednesday 16 June       |
| University of Keele  | <b>NEW!</b>             |
| University of Keele  | Friday 23 April         |
| University of Kent at Canterbury                           | Tuesday 8 June          |
| University of Leeds  | Tuesday 8 June          |
| University of Leeds  | Thursday 25 March       |
| University of Leicester                                    | <b>NEW!</b>             |
| University of Leicester                                    | Thursday 25 March       |
| University of Limerick                                     | Thursday 25 March       |
| University of Limerick                                     | Saturday 15 May         |
| University of Liverpool                                    | Wednesday 26 May        |
| Liverpool John Moores University                           | Wednesday 26 May        |
| Liverpool John Moores University                           | Tuesday 18 May          |
| Imperial College of Science, Technology & Medicine, London | Tuesday 18 May          |
| Imperial College of Science, Technology & Medicine, London | Monday 29 March         |
| Queen Mary University of London                            | <i>*To be confirmed</i> |
| University College, London                                 | <i>*To be confirmed</i> |
| University College, London                                 | Wednesday 12 May        |
| University of Luton  | Wednesday 12 May        |
| University of Luton  | Wednesday 9 June        |
| University of Manchester                                   | Tuesday 8 June          |
| University of Manchester                                   | Tuesday 8 June          |
| UMIST, Manchester  | Wednesday 9 June        |
| University of Newcastle                                    | Wednesday 9 June        |
| University of Newcastle                                    | Tuesday 30 March        |
| University of Nottingham                                   | Tuesday 30 March        |
| University of Nottingham                                   | Wednesday 24 March      |
| University of Plymouth                                     | <b>NEW!</b>             |
| University of Plymouth                                     | Wednesday 17 March      |
| University of Reading                                      | Wednesday 17 March      |
| University of Reading                                      | Wednesday 21 April      |
| University of Sheffield                                    | Wednesday 21 April      |
| University of Sheffield                                    | Tuesday 8 June          |
| South Bank University, London                              | Tuesday 8 June          |
| South Bank University, London                              | Wednesday 19 May        |
| University of Southampton                                  | Wednesday 19 May        |
| University of Southampton                                  | Wednesday 24 March      |
| University of Surrey                                       | Wednesday 24 March      |
| University of Surrey                                       | Tuesday 30 March        |
| Institute of Technology, Tallaght                          | Tuesday 30 March        |
| Institute of Technology, Tallaght                          | Saturday 15 May         |
| University of Ulster at Coleraine                          | Saturday 15 May         |
| University of Ulster at Coleraine                          | Tuesday 25 May          |
| University of Wales, Aberystwyth                           | <b>NEW!</b>             |
| University of Wales, Aberystwyth                           | Wednesday 31 March      |
| University of Wales, Bangor                                | Wednesday 31 March      |
| University of Wales, Bangor                                | Tuesday 30 March        |
| University of Wales, Cardiff                               | Tuesday 30 March        |
| University of Wales, Cardiff                               | Thursday 1 April        |
| University of Wales, Swansea                               | Thursday 1 April        |
| University of Wales, Swansea                               | Friday 26 March         |
| University of Warwick, Coventry                            | Friday 26 March         |
| University of Warwick, Coventry                            | Wednesday 24 March      |
| University of York   | Wednesday 24 March      |
| University of York   | Thursday 25 March       |

*\*Please submit an entry form and we will let you know the date as soon as it is confirmed*