Member Networks Annual Report Form  
Reporting events held in 2017 and those planned for 2018

In line with the rules for member networks and to enable us to better support our networks and their activities all member networks (Local Sections, Interest Groups and Analytical Division Regions) are asked to complete this form and return it to networks@rsc.org or by post to; Networks Team, Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, CB4 0WF.

**Deadlines**
Deadline for receipt of Financial Accounts by RSC Finance Team: **9th February 2018**
Deadline for receipt of Annual Report by Networks Team: **26th February 2018**

If there is any reason that your committee will not be able to meet either or both of these deadlines please inform networks@rsc.org as soon as possible.

This report will be uploaded to your web page to share with the members of your network. Staff will also share a digest of all member networks activities taken solely from these annual reports with appropriate staff and governance boards and committees including Division Councils with similar interests.

<table>
<thead>
<tr>
<th>Committee</th>
<th>Chemical Education Research Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed by</td>
<td>Michael Seery</td>
</tr>
<tr>
<td>Date</td>
<td></td>
</tr>
</tbody>
</table>

Please list below the dates of all of your planned committee meetings and, if held, AGM.

**Annual General Meeting (if being held)**

<table>
<thead>
<tr>
<th>Date:</th>
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<tbody>
<tr>
<td>Venue:</td>
<td>We are not hosting an AGM in 2018</td>
</tr>
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</table>

**Proposed Committee Meetings Dates**

<table>
<thead>
<tr>
<th>Date</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>22/5/17</td>
<td>Burlington House</td>
</tr>
<tr>
<td>8/11/17</td>
<td>Online</td>
</tr>
</tbody>
</table>
2017 Events

Please append electronic copies of any meeting reports, newsletters or relevant materials to this report.

Please report below on activities undertaken in the past year. If you have more detailed information about any particularly successful events, or advice to share please use a separate sheet. For more events continue as necessary.

EVENT KEY:
- Education Event (including outreach activities for school students or the general public)
- Public Lecture
- Retired Members Event
- Scientific Conference - 1 day
- Scientific Conference - multi day
- Social Event
- Training/workshop
- Award Lecture
- Other

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Methods in Chemistry Education Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event Type (key)</td>
<td>Scientific Conference - 1 day</td>
</tr>
<tr>
<td>Comments</td>
<td>This one day conference is being organised in response to a growing demand and interest in chemistry education research in the UK. The meeting will focus in particular on methods; the practicalities of how to do chemistry education research. Invited speakers with experience of completing and publishing discipline-based education research will give talks on particular methods, relating the methods to a theoretical framework, the research question, and discussing the practicalities of gathering data. Approaches to publication will be outlined. Each speaker will be followed by an extended structured discussion so that attendees have time to discuss further issues that arise. The meeting is being organised with the journal Chemistry Education Research and Practice and is also supported by the Tertiary Education Group. Details of the 2017 meeting are at: <a href="https://micerportal.wordpress.com/">https://micerportal.wordpress.com/</a> 60 people attended, including some school teachers (A discounted price was available for school teachers).</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Event Name</th>
<th>Webinar: Prof Alison Flynn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event Type (key)</td>
<td>Scientific Conference - 1 day</td>
</tr>
<tr>
<td>Comments</td>
<td>Prof Alison Flynn (University of Ottawa) delivered an online seminar (webinar) on the topic “Organic reaction mechanisms: symbolism, patterns, and explanations”. Over 120 people registered for the webinar, with 75 attending online on the evening of the presentation. The webinar was very well received; a feedback survey was completed by about 1/3 of those attending and it was overwhelmingly positive. Details of our webinar series are at: <a href="https://rsccerg.wordpress.com/group-activities/cegerg/">https://rsccerg.wordpress.com/group-activities/cegerg/</a></td>
</tr>
</tbody>
</table>
**Event Name**
Webinar: Prof Keith Taber

**Event Type (key)**
Scientific Conference - 1 day

**Comments**
Prof Keith Taber (University of Cambridge) delivered an online seminar (webinar) on the challenges of experimental approaches in educational research. Over 130 people registered for the webinar. The webinar raised some challenging questions and as with all of webinars, is logged on our YouTube channel (linked from website) so as to be a very useful resource for those conducting education research.

Details of our webinar series are at: [https://rsccerg.wordpress.com/group-activities/ceginar/](https://rsccerg.wordpress.com/group-activities/ceginar/)

**Awards and Bursaries**

Please list any awards or bursaries presented by your committee in the past 12 months and indicate any which will be open for nomination/application in the next calendar year.

Please ensure that all members of your network are notified of any awards or bursaries for general application.

We funded 5 education research fellows thanks to the support of RSC Networks, liaising with the RSC Educational Techniques Group.

Subject to securing funding, we intend to continue with another funding call in 2018 for 2019 Fellows.

**Other information/comments:**

We have launched a new website, which has been a useful platform for our activities. We intend to continue to use this to engage with our membership.
**Future Activities**

When planning any activities please remember to ensure that all events are logged on our events database and ensure that all contracts are sent to our Legal Team with enough time for amendments and, where necessary, approval by the Board.

Please outline any activities already in planning for the next calendar year.

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td><strong>Webinar Series</strong></td>
<td>Our webinar series continues til May 2018, with one on the last Wednesday of each month. We will review the webinars at that stage.</td>
</tr>
</tbody>
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### CERG Webinar Series Autumn - Spring 2017 - 2018

**Event** | **Webinar Details** | **Speakers** |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Oct 25, 2017: Alison Flynn, University of Ottawa</td>
<td>Organic reaction mechanisms: symbolism, patterns, and explanations</td>
<td></td>
</tr>
<tr>
<td>Dec 6, 2017: Keith Tabor, University of Cambridge</td>
<td>The challenge of doing experimental studies in science education</td>
<td></td>
</tr>
<tr>
<td>Jan 24, 2018: Nathaniel Grove, University of North Carolina</td>
<td>What can cognitive science teach us about Lewis structures?</td>
<td></td>
</tr>
<tr>
<td>Feb 21, 2018: Donald Wink, University of Illinois</td>
<td>The role of process of case studies: How frameworks support rich descriptions of chemistry education</td>
<td></td>
</tr>
<tr>
<td>Mar 21, 2018: Nicole Graulich, University of Giessen</td>
<td>Capturing students' mechanistic reasoning: approaches and challenges in organic chemistry</td>
<td></td>
</tr>
<tr>
<td>Apr 25, 2018: Ginger Shultz, University of Michigan</td>
<td>Writing to learn science: Research and practice informed by sociocultural theory</td>
<td></td>
</tr>
<tr>
<td>May 23, 2018: Vincente Talanquer, University of Arizona</td>
<td>Controlling reaction</td>
<td></td>
</tr>
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</table>

Registration and details on CERG website: <rsccerg.wordpress.com>

Queries: michael.seery@ed.ac.uk

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<table>
<thead>
<tr>
<th>Event Name</th>
<th>Comments</th>
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<tbody>
<tr>
<td><strong>ASE</strong></td>
<td>We have returned to ASE in 2018, after an interregnum, with our Chair Jane Essex giving a presentation.</td>
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<table>
<thead>
<tr>
<th>Event Name</th>
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<tbody>
<tr>
<td><strong>MICER</strong></td>
<td>We will again support MICER18, being held at Burlington House. Support involves funding the travel expenses of some speakers.</td>
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</table>
Committee

This information will be used to update our membership database and your web page. Please ensure that any changes to the committee are sent to networks@rsc.org as soon as possible.

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Dates on committee (20xx – 20xx)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair</td>
<td>Jane Essex</td>
<td>2018 - present</td>
</tr>
<tr>
<td>Secretary</td>
<td>Michael Seery</td>
<td>2017 - present</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Saima Salehjee</td>
<td>2018 - present</td>
</tr>
<tr>
<td>Ordinary Members</td>
<td>Raj Randev</td>
<td>2015 – present</td>
</tr>
<tr>
<td></td>
<td>Sarah Masters</td>
<td>2015 – present</td>
</tr>
<tr>
<td></td>
<td>Gan Shermer</td>
<td>2015 – present</td>
</tr>
<tr>
<td></td>
<td>Simon Rees</td>
<td>2015 – present</td>
</tr>
<tr>
<td></td>
<td>Suzanne Fergus</td>
<td>2017 – present</td>
</tr>
<tr>
<td>Chemists’ Community Fund Representative (if relevant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-opted members and their affiliation</td>
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</tr>
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Diversity & Inclusion

Our trustees are aiming to embed diversity and inclusion in all of our activities and networks. Our online network handbook contains more information to support our networks in achieving this.

Please comment on how your group is showing that it has embraced Diversity and Inclusion within its practices.

The committee has a good balance of female:male members. We intend that all but one of our committee meetings in 2018 will be held online to facilitate those who cannot travel. Our activities such as webinars have enabled members to engage with our events without the need to travel, which may be restricted for a variety of personal reasons. Both our invited speakers and applicants funded show a good distribution of gender, age, and location.
Appendix

Flyers for 2017 Events

The CERG Webinar Series #CERGinar

Alison Flynn
3M National Teaching Fellow
Associate Professor & Chair in University Teaching
University of Ottawa

Organic reaction mechanisms:
symbolism, patterns, and explanations

25 OCT
7 - 8 PM GMT
8 - 9 PM BST

The CERG Webinar Series #CERGinar

Keith S Taber
Professor of Science Education
University of Cambridge

The challenge of doing experimental
studies in science education research

2017
6 Dec
4.30 - 5.30 PM
GMT

Webinar is open to all
Log in details will be posted on CERG website: rscerg.wordpress.com
Queries: michael.seery@ed.ac.uk

Webinar is open to all
Registration and details on CERG website: rscerg.wordpress.com
Queries: michael.seery@ed.ac.uk
2018 Education Research Fellowship Scheme

In a joint initiative with our sister interest group, the Educational Techniques Group, we have secured funding from the RSC to support classroom based education research. Support comes in the form of a financial stipend, a mentor, and a critical friend, with the purpose of building a community of practice for those pursuing education research in their classroom.

Congratulations to our 2018 Awardees:

Robert Campbell  Evaluating ‘flipped learning’ approaches to GCSE practical work
Joanna Haywood  Evaluation of the use of British Sign Language to support the learning of Chemistry
Naomi Hennah  Using oracy to reduce cognitive load in the laboratory
Susan Jones  Identifying and disseminating best practice with regards to teaching Chemistry through the medium of Welsh and bilingually
David Paterson  Evaluation of an ‘integrated diagram’ format for practical work

CERG Committee Members acting as mentors and critical friends include: Jane Essex, Suzanne Fergus, Sarah Masters, Rajan Randev, Simon Rees, Michael Seery, Gan Shennan.

We will be receiving updates about these projects over the course of 2018. Keep an eye on our website for details: rscerg.wordpress.com

Annual Report 2017

Promoting and disseminating research at all levels of chemistry education

THE COMMITTEE

Jane Essex (Chair)
Saima Sulehjee (Treasurer)
Michael Seery (Secretary)
Suzanne Fergus
Sarah Masters
Raj Randev
Simon Rees
Gan Shennan

Organised

2 Committee Meetings
May (London)
Nov (Online)

NEW WEBSITE

SINCE SEPT
LAUNCH
1,824 VISITORS FROM 50 COUNTRIES WITH 3,448 VIEWS LOGGED

CERG SUPPORTED EVENT

Methods in Chemistry Education Research 2017
Burlington House, London

60 Participants

Speakers included
RSC HE Award Winner
RSC Education Award Winners

EDUCATION RESEARCH SUPPORT

5 Education Research Fellows

awarded grants to support classroom based research projects monitored by CERG Committee establishing a Community of Practice.

Funding from RSC Networks in collaboration with RSC Educational Techniques Group.

LAUNCH OF CERG WEBINAR SERIES

October: Alison Flynn | Organic Mechanisms
December: Keith Taber | Experimental Studies in CER

261 Registrants from 12 Countries

Get involved: rsccerg.wordpress.com

www.rsc.org
Registered Charity Number 207890