

Engaging the next generation: An IYCN outreach competition

Engaging the next generation: An IYCN outreach competition, is a competition that seeks to recognize exemplary contributions to chemistry outreach.

Applicants are invited to submit chemistry experiments that can be used for outreach and public engagement under a specific theme. The 2022 theme is Affordable and Clean Energy, related to the UN Sustainable Development Goal "Affordable and Clean Energy". The competition will open on March 26, 2022 in conjunction with the Earth Hour. The deadline is May 24, 2022 which marks the death of Francis Thomas Bacon 1992 who developed the first practical hydrogen-oxygen fuel cell. Experiments will be assessed according to their accessibility, repeatability, and suitability for the suggested audience. Prizes will be awarded to the winning submissions, and the winning submissions have the opportunity to publish their experiments in the IYCN experiment database.

The competition is coordinated and managed by the Public Outreach Committee of the [International Younger Chemists' Network \(IYCN\)](#).

2022 deadlines

Competition opens	Saturday 26 March
Competition closes	Tuesday 24 May

Conditions of the Award

The theme for the 2022 competition is **Affordable and Clean Energy**; all experiments should reflect this. The competition seeks to recognize those partaking in chemistry outreach. Applicants are encouraged to submit their favourite experiments, projects and demonstrations using the template provided. The final experiment must include:

- The target audience for the experiment
- A complete list of equipment and materials needed for the experiment
- Safety and risk assessment for the experiment (including waste disposal)
- Learning objectives for the audience and a clear and concise description of the background chemistry knowledge needed to successfully explain the experiment to the audience
- Instructions for conducting the experiment, project, or demonstration

Applications will be assessed according to the scoring criteria outlined later in this document.

All applications should be in English. The quality of the English will not be judged during the adjudication process; we will only assess the science. The winning experiment will receive a full English language editing service, if necessary.

Applicants are encouraged to provide images and/or videos of their experiment. Any images and/or video provided must have the relevant copyright permissions and consent to use (if necessary).

The winning experiment will be translated into multiple languages. The experiment will be published in the IYCN Public Outreach Committee experiment Database for use in chemistry outreach by chemistry volunteers around the globe.

In the event of a tie, the IYCN Public Outreach Committee will adjudicate and their decision will be final.

Depending on the overall quality and number of submissions, a list of semi-finalists might be created. These applicants will be awarded Honourable Mention certificates and contacted for permission to publish their experiments in the IYCN Public Outreach Committee experiment database. English language editing services will be offered to all semi-finalists, if necessary.

Competition Rules

- The 2022 theme for the IYCN Outreach Experiment award is **Affordable and Clean Energy**. All experiments should pertain to the topic of Energy.
- Applications must be submitted in English using the prepared experiment template that is available from <https://iycnglobal.wixsite.com/competition>. The quality of the written English will not be judged, however the science must be clear.
- Applications must be submitted before midnight GMT 24 May 2022 via the online portal: <https://iycnglobal.wixsite.com/competition>. Applications received after the deadline will not be considered.
- Submissions should clearly state which audience the experiment is targeting, i.e. the general public or an audience with a science background, and submissions will be judged on appropriateness of content for the suggested audience, according to the criteria described below.
- Decisions will be communicated to applicants within eight weeks of the close of the competition.
- The winning applicant(s) will receive a prize. English language editing and translation costs will be paid for by the IYCN Public Outreach Committee.

Judging criteria

Scoring

Experiments will be judged and scored out of 80 based on a set of six categories, outlined below. In the event that multiple experiments receive the same high score, the award will go to the experiment that is judged to be most innovative and creative as judged by the IYCN Public Outreach Committee. Their decision will be final.

Scoring Criteria

Category	Explanation	Points
Chemistry concepts	Concepts covered by the experiment are relevant to the experiment, thoroughly explained and are suitable for the audience.	20
Theme	The relevance of the experiment to the theme <i>Affordable and Clean Energy</i> is clearly outlined in the experiment, and the experiment uses innovative ways to connect chemistry to <i>Energy</i> .	20
Accessibility	How accessible is the experiment for the presenter? <ul style="list-style-type: none">- Are specialised materials necessary to perform the experiment?- Is the information provided in the experiment sufficient for a presenter without a chemistry background to understand and convey the learning objectives?- Is there sufficient information for the audience provided for the presenter to use?- Are any resources that were used as inspiration for the experiment or that are relevant for the presenter included in the experiment?	10
Suitability to audience	Experiment should be tailored to the audience (e.g. use of language, safety requirements, teaching points, etc.).	10
Safety and practical information	The safety instructions are appropriate for the level of the experiment and cover the relevant safety concerns.	10
Originality	The experiment conveys chemistry concepts in unique ways that are not already published or easily available.	10

Data Protection

IYCN will collect the personal information of applicants (name, job title, institution, email address) for the purpose of managing the award. If necessary, additional details will be collected from the winning applicant(s) in order to transfer the prize. Personal information will be stored on a password protected cloud platform for the duration of the competition cycle. Applications will be anonymised by the IYCN Public Outreach Committee before being sent to the judges; judges will delete applications after assessment.

The personal information (name, institution, country, and photo) of any semi-finalists and winning authors will be announced and used for promotion through the IYCN social media channels and by CAS. Names of all the contributing authors will be affiliated with experiments published in the IYCN Public Outreach Committee experiment Database.

The personal information of unsuccessful applicants will be deleted after the competition cycle. These applicants can choose to deposit their experiment in the IYCN Public Outreach Committee experiment Database; submission to the Database will require the applicant to agree to the terms of use for the Database.

IYCN will not sell your information but may use third party service providers to support the provision of the award, including (without limitation) hosting data on cloud platforms, legal, accounting, audit, consulting and other professional service providers, and providers of other services related to IYCN activities.