

英国皇家化学学会化学新星挑战赛 (RSC3)

Royal Society of Chemistry Rising Star

China Chemistry Challenge (RSC3)

全球权威的化学组织——英国皇家化学学会主办
源于英国20年历史的著名Top of the Bench 化学竞赛
新颖的高低年级搭配4人团体赛形式激发同学化学学习兴趣
预赛笔试与决赛实验结合，英国皇家化学学会会员亲临实验现场打分
进入决赛选手将有机会获邀参加世界顶级科学类活动
主办方：英国皇家化学学会 (RSC: www.rsc.org)

**Hosted by The Royal Society of Chemistry - one of the World's
leading science communities**

Originated from "Top of the Bench" held in the UK for over 20 years

Team-based competition with different grades of students

Preliminary round (written test) and final round (experiments)

**Participants of the final round have the chance to attend some of the
world's top science activities**

Organizer: Royal Society of Chemistry (RSC: www.rsc.org)

英国皇家化学学会化学新星挑战赛 (RSC₃)

一、比赛简介

英国皇家化学学会（简称RSC）：总部位于伦敦市中心，1848年获得英国皇家宪章，1972年四个著名的英国化学学术机构化学学会、分析化学学会、皇家化学协会和法拉第学会开始合并，并在1980年成立新的英国皇家化学学会。RSC拥有3万多名会员，汇聚了130多个国家化学界的著名科学家和化学研究人员，为全球最有影响力的化学学术组织之一。

英国皇家化学学会主办的化学竞赛“Top of the Bench”至今有20年的历史，是英国中学历史最长，覆盖范围最广，最受欢迎的理科竞赛之一。为了适应中国国际学校的学生水平和组织形式，英国皇家化学学会基于“Top of the Bench”的比赛形式和命题规则，专门针对中国地区学生组织了“化学新星挑战赛”。该赛事由英国皇家化学学会命题和评审，分笔试预赛和实验决赛，英国皇家化学学会官方对结果予

以认证（获奖证书和进入决赛证明由英国皇家化学学会授权颁发）。优胜者将有机会获得英国国际顶级中学生科学论坛邀请。对于该赛事的官方说明请参见英国皇家化学学会官方网站：www.rsc.org

Royal Society of Chemistry

Rising Star China Chemistry Challenge (RSC3)

Introduction

The Royal Society of Chemistry (RSC), with headquarters in central London, was awarded the Royal Charter in 1848.

The RSC was merged together from four famous British chemistry institutions—the Chemical Society, the Society for Analytical Chemistry, the Royal Institute of Chemistry and the Faraday Society. RSC now has more than 30,000 members, and has brought together more than 130 famous scientists and chemical researchers. RSC is one of the world's most influential chemistry academic organizations.

The chemistry competition "Top of the Bench" hosted by the RSC is the oldest and most well-known chemistry competition of its kind in the UK.

This competition is academically organized and judged by the RSC with results fully recognized by the RSC. Participants of the national final have the chance to attend some of the world's top scientific activities.

二、比赛规则

1. 比赛语言：英文

2. 组队方式：以 4 人为一个团队比赛，每个团队必须包涵 2 至 4 名低年级学生，以及 0 至 2 名高年级学生。例如可以是 4 名低年级学生、或 3 名低年级学生加 1 名高年级学生、或 2 名低年级学生加 2 名高年级学生，但是团队不能够有 3 名或者 4 名高年级学生（低年级：AP10 年级，高一年级，GCSE 的 G1/G2 年级，IB10 年级；高年级：AP11 年级，高二年级，ALEVEL 的 AS 年级，IB11 年级）

3. 预赛：笔试

100 道单项选择题，60 分钟完成，包含高、中、低三个级别难度题型，每个级别分值各不同，团队 4 人共同完成，答对加分，答错扣分。比赛时团队可以内部讨论。低、中难度适合高一年级（IB 10 年级，GCSE），高难度适合高二年级和部分优秀高一年级（IB11 年级，A-Level）

4. 决赛：实验

- 全国五个赛区，每个赛区预赛成绩前 6 名团队进入决赛
- 除赛区前 6 名团队之外，全国余下所有团队预赛成绩统一排名，前 30 名团队进入决赛，全国总共 60 个团队进入决赛
- 决赛包含三轮化学实验竞赛，每轮持续 90 分钟。每轮侧重点不同。一轮侧重考察实验过程中学生对化学知识的运用与试验操作逻辑与规范，剩余则侧重考察实验结果。每个组有一个评委老师对试验的每个步骤进行详细评分

Competition Rules

Language: English

Team Rules: The competition requires a team of 4 people to work together as a unit. Each team must have 2-4 lower grade students (AP/IB Grade 10, GCSE or other equivalent grades), and 0-2 higher grade students (AP/IB Grade 11, AS-Level, or other equivalent grades).

We encourage an equal number of higher and lower grade students.

Preliminary: Written test

This examination lasts for 40 minutes and consists of 100 multiple choice questions. The examination includes 3 different levels of questions - easy, medium and difficult.

Each level of questions has different scores. Answering all questions in 40 minutes is unlikely, therefore students are encouraged to work efficiently as a team to get the most correct answers.

For wrong answers, points will be deducted from the result.

Final: Experiments

- The top 60 teams from the preliminary round are invited to attend the final competition
- 30 teams are chosen from the top 6 teams from each competition region and the other 30 teams are selected according to the national ranking list.
- The final examination includes 3 rounds of experiment-based challenges with each round lasting for 90 minutes. Each round focuses on different topics, such as experiment design, scientific phenomena presentation etc. Judges will grade teams on every experimental step.

三、赛区划分

- 华东赛区：上海、浙江、江苏
- 华南赛区：广东、广西、福建、海南、香港、澳门
- 华西赛区：重庆、四川、云南、贵州、陕西、甘肃、青海、西藏、宁夏、新疆
- 华北赛区：北京、天津、黑龙江、吉林、辽宁、河北、内蒙、山西、山东
- 华中赛区：湖南、湖北、安徽、江西、河南

Competition regional division

- **Eastern China:** Shanghai, Zhejiang, Jiangsu
- **Southern China:** Guangdong, Guangxi, Fujian, Hainan, Hong Kong, Macao
- **Western China:** Chongqing, Sichuan, Yunnan, Guizhou, Shaanxi, Gansu, Qinghai, Tibet, Ningxia, Xinjiang
- **Northern China:** Beijing, Tianjin, Heilongjiang, Jilin, Liaoning, Shanxi, Shandong
- **Central China:** Hunan, Hubei, Anhui, Jiangxi, Henan

四、奖项设置

1. 预赛

- 金奖：决赛入围团队
- 银奖：全国排名前15%
- 铜奖：全国排名前30%
- 区域优秀奖：区域前10名（不含全国奖项获得者）

2. 决赛

- 全国冠军：第一名团队
- 全国亚军：第二名团队

- 全国季军：第三名团队
- 全国前十名团队

(注：全国前三名团队将获得全球最顶尖的高中生科学论坛 - “伦敦国际青年科学论坛”的参会名额和邀请)

Awards

Preliminary:

- **Gold: Finalists** (30 teams from the top 6 from five competing regions and 30 teams from the national overall ranking list)
- **Silver: Top 15%**
- **Bronze: Top 30%**
- **Regional honorable award: Regional Top 10**

Final:

- **National awards for 1st, 2nd and 3rd**
- **National top 10 teams awards**
- **National competition participation awards**

(All the final competitors will have the opportunity to attend the London International Youth Science Forum (LIYSF).)