



Report on the Royal Society of Chemistry Analytical Division's 28th National Schools' Analyst Competition Final 2017

The 28th Final of the National Schools' Analyst Competition was held on the 21 / 22 June 2017 at Sussex University. All attendees were welcomed to the Competition by the Pro-Vice-Chancellor (Learning and Teaching) Professor Clare Mackie, Dr Shane Lo Fan Hin (Competition organiser) and Professor John R Dean (on behalf of the RSC/AD and ACTF). Sussex University offers a range of successful degree programmes in Chemistry (BSc(H) and MChem) and Chemistry and Drug Discovery (MChem). In addition, the MChem programme (Chemistry) has the option for an industrial placement year. For this year's final, Dr Shane Lo Fan Hin devised a programme of experiments around an environmental and pollution theme. The teams had to carry out four experiments: determination of the concentration of copper using using UV-visible spectroscopy; determination of the concentration of salicylaldoxime using high performance liquid chromatography with UV detection; determination of sulfuric acid concentration by titration; and, identification of plastics from their densities. While the judging was taking place, the teams and accompanying teachers, were entertained by Professor Wendy Brown with a lecture entitled "surface science in outer space".

The winning team of year 12 students came from Sir John Deane's College, representing the North West Region of the Analytical Division. The photograph below shows the winning team comprising Amelia Whitehead, Ben Mayoh and Alison Hutchinson accompanied by their teacher Anne Thomas with the local organiser (Dr Shane Lo Fan Hin) and Prof. John R. Dean (on behalf of the RSC/AD and ACTF).



(L-R): Prof. John R. Dean (RSC/AD and ACTF), Dr Shane Lo Fan Hin (Sussex University), the winning team of Amelia Whitehead, Ben Mayoh and Alison Hutchinson accompanied by their Teacher (Anne Thomas).

The School received a prize of £3000 together with Amazon Vouchers of £75 to each of the three team members. The School was presented with an engraved glass trophy on behalf of the sponsors the Analytical Chemistry Trust Fund.

The runners-up were the team from Withington Girls' School, representing the North West Region. The school received £2000 with the team members (Lorna Mayo, Isobel McIntyre and Georgia Yiasoumi) receiving £50 vouchers each. The team coming third was Strode's College, representing the South East Region, and they received £1000 and £25 vouchers to each of the team members (Willow Rolls, Joshua Passey and Kerry Turcsi). The judges for this year's competition were Dr Ian

Crossley, Mr Kevin Clark, Prof. John Newberry (RSC AD South East Region) and Prof. John R. Dean (on behalf of the Royal Society of Chemistry Analytical Division), who also chaired the judging panel and awarded the prizes.

On behalf of the Royal Society of Chemistry Analytical Division I would like to thank Sussex University for agreeing to host the Competition and for providing an excellent venue with facilities that show case analytical chemistry. In particular, I would like to thank staff at Sussex for their organization of the Final, specifically, Chris Dadswell, Chris Davis, Dan Guest, Abigail Guy, Jennifer Hollands, Verity Holmes, Dr Eddy Viseux and Alethea Wimble for making the whole event memorable for each of the 21 teams who attended (see photograph below). A special thanks to Katie Nuttall, from the RSC Education Department, who held a workshop with the visiting teachers during the competition.



The Competition is sponsored by the Analytical Chemistry Trust Fund, however during the 27 heats in which 306 Schools' participated throughout the UK and Republic of Ireland, many other organisations also provided financial sponsorship to support this national event. Without their help, the costs involved would be too prohibitive and some heats may not have been feasible. To all of the sponsors, the Analytical Division expresses its gratitude. The regional organisers consistently receive a range of complementary comments from schools who participated, saying how much their teams enjoyed the experience. So if you would like to get involved please contact your local Analytical Division Committee to find out more about where the heats are held in your region or contact me directly.

I would like to thank all the Analytical Division Regions for participating in this year's competition in this flagship event of the Royal Society of Chemistry. Also, without the agreement of the Universities to allow us to use their premises, the enthusiasm of the staff, both academic and technical, to develop and validate experiments and the additional help provided by the administrative staff in these Universities, the Competition would not exist.

Thank you for making the 2017 competition the most successful ever with 306 schools' participating. Thank you to the 918 year 12 students for their enthusiasm in actively engaging in analytical chemistry, and the teachers who have supported their students in attending the competition. I hope that some of the year 12 students who participated in the competition, either during the heats and the final, will have been enthused by their experiences to go on to study Chemistry at University, and maybe choose Analytical Science as a future career.

Finally, heats of the competition start again in early 2018 throughout each of the Analytical Division Regions and culminate in the final. In 2018 we are delighted that Bangor University has agreed to host the final on Wednesday 20 & Thursday 21 June 2018.

John R. Dean

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