

State Center Community College District
Faculty International Development Program

United Kingdom

June 2 - 15, 2014



Days 1 & 2 – London!

Day 1 – A private coach bus will take our group from the airport to our accommodations in London. We'll be spending 8 nights in studio apartments with kitchenettes. A representative from CEPA will meet us and give each participant a travel pass for use on buses and underground trains in the central zone (1 and 2) for the duration of our stay in London. We'll have an orientation, walking tour of London, and end with a special Welcome Dinner at a local restaurant.

Parliament



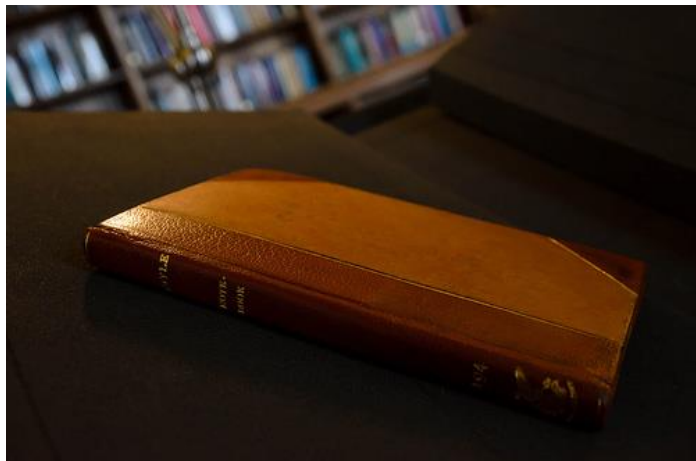
Big Ben and the London Eye

Day 2 – We'll begin our first full day with a private guided tour of the British Museum followed by a visit to Westminster Abbey.

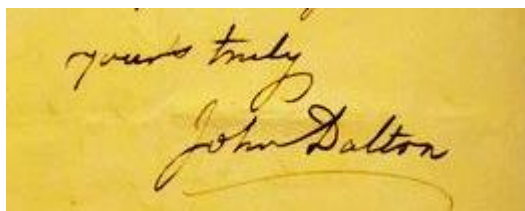
Day 3 – Royal Society and Royal Institution

Day 3 – This day we'll visit the Royal Society and meet with Rupert Baker, Library Manager. You'll get special access to view and actually hold the writings of Sir Robert Boyle, John Dalton, Sir Isaac Newton, and other noted scientific luminaries!

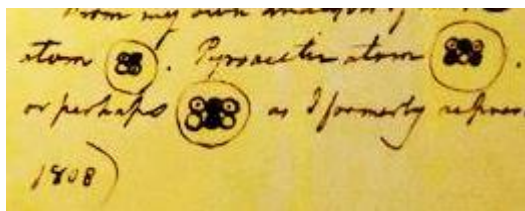
Robert Boyle's Notebook



John Dalton's Letter to Gay Lussac



Postscript on atomic theory



It's a Royal day! After the Royal Society, we'll head to the Royal Institution where we'll meet with Professor Frank James, Professor of the History of Science (University College London) and Head of Collections for the Royal Institution. We'll learn about the history of the RI and view Michael Faraday's lab along with numerous important scientific artifacts belonging to Davy, Volta, Tyndall, Faraday, and others.

Day 4 – University of Oxford and the Museum of the History of Science



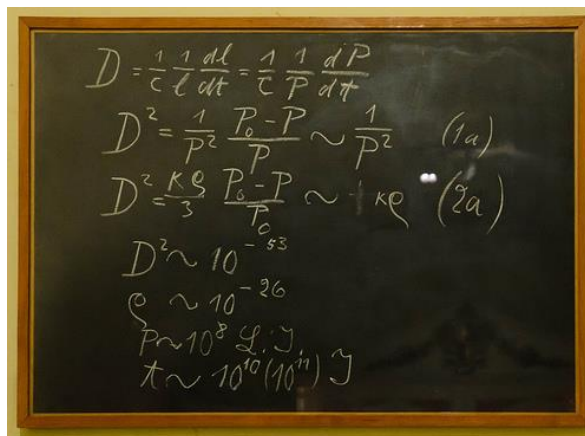
**Lewis Carroll's
Photographic
Development Kit**

Later we'll be met by Drs. Malcolm Stewart & Fabrice Birembaut for a tour of the Oxford Department of Chemistry. You'll see the oldest dedicated undergraduate chemistry teaching lab in the world along with state-of-the-art scientific research equipment. We'll also have a discussion on the differences and similarities between the English and American systems of education.

It's off to historic Oxford, home to the world-renowned University of Oxford. Your trip includes round-trip standard class train tickets, a guided walking tour of Oxford by a professional guide, and entrance to an Oxford College.

We'll also have a guided tour of the Museum of the History of Science by Stephen Johnston, curator and Assistant Keeper. You'll see a world-class display of alchemical artifacts along with "Einstein's chalkboard", Lewis Carroll's photography equipment, heavy water from the WWII raid on Telemark, and equipment belonging to Alexander Fleming and Henry Moseley.

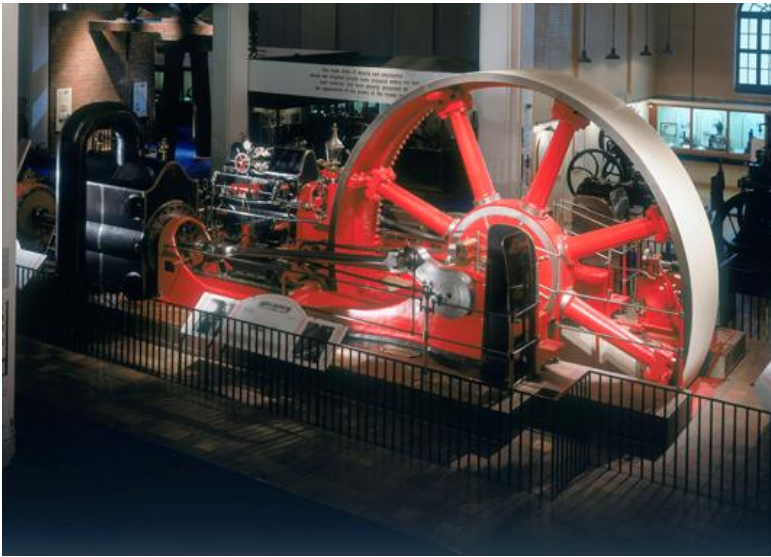
Einstein's Chalkboard



**Stolen from his lecture in 1931
(and then returned!)**

Day 5 – London Science Museum and Fuller’s Brewery

Steam Engines at the Science Museum



Back in London, we'll start our day with a visit to the Science Museum, home to over 300,000 items of scientific significance!

In the afternoon, we'll take a tour of Fuller's Brewery with one of their experienced brewers. You'll see how Fuller's turns hops and barley into a variety of different beers, while also learning some of the chemistry behind it straight from the mouth of the brewer. You'll even get to sample a few of their brews yourself!

Fuller's Brewery Tour & Tasting



Kirk Kawagoe

Day 6 – Stonehenge and Avebury



On day 6, we'll take a guided daytrip to the stone circles at Stonehenge and Avebury. Our trip includes round-trip transfers by private coach, entrances to Stonehenge and Avebury stone circles, a pub lunch and the services of a professional guide.

Day 7 – Cambridge and Cavendish Labs

Next stop, Cambridge! Your trip includes round-trip standard class train tickets, a guided walking tour of Cambridge by a professional guide with entrance to a Cambridge College.

While there, we'll visit world-famous Cavendish Laboratories at the Department of Physics. You'll see important artifacts related to the history of science that belonged to J.J. Thompson, Ernest Rutherford, Lawrence Bragg, Watson & Crick, and other notables.

The Structure of DNA



Francis Crick



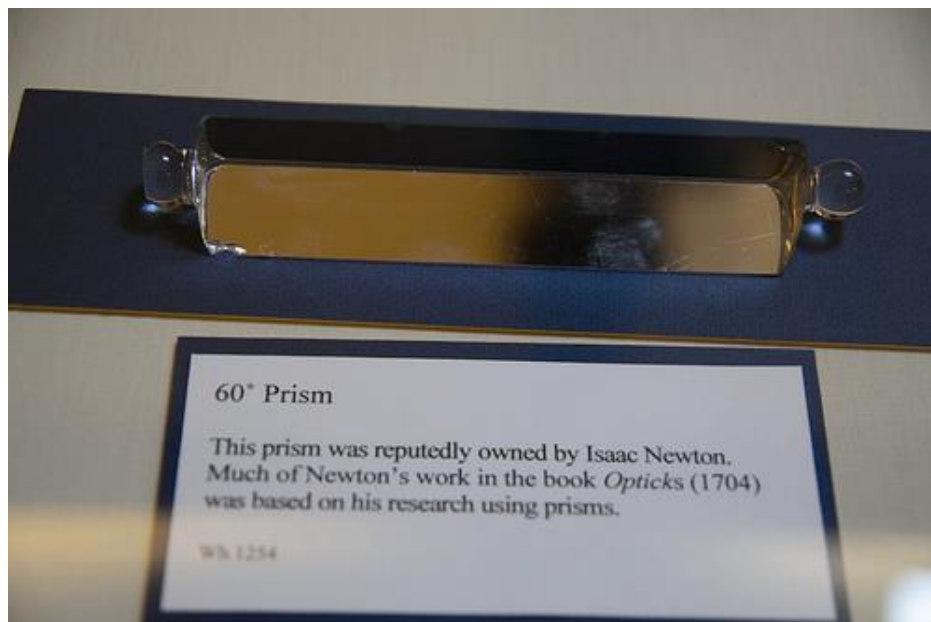
James Watson



Maurice Wilkins



Rosalind Franklin



60° Prism

This prism was reputedly owned by Isaac Newton. Much of Newton's work in the book *Opticks* (1704) was based on his research using prisms.

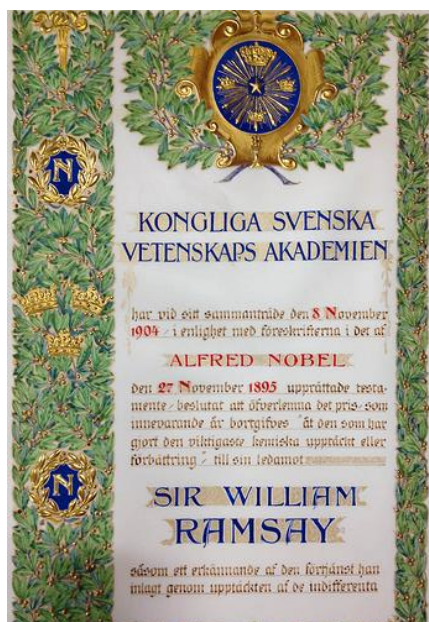
Wb 1254

Whipple Science Museum (Cambridge)

Day 8 – University College London & Tower of London

Back in London, we'll head to University College London where we'll be met by Professor Emeritus Alwyn Davies. He'll show us around the Department of Chemistry and share with us on Sir William Ramsay, former UCL faculty member, Nobel Laureate, and discoverer of the noble gases.

Sir William Ramsay's Nobel Prize for Discovery of the Noble Gases



Tower Of London



In the afternoon, it's off to the historic Tower of London – home to the Crown Jewels, Beefeaters, and once the residence of Sir Isaac Newton, Master of the Mint.

Day 9 – The Wedgwood Visitors Center

Josiah Wedgwood's Motto

Everything gives way to experiment

Josiah Wedgwood

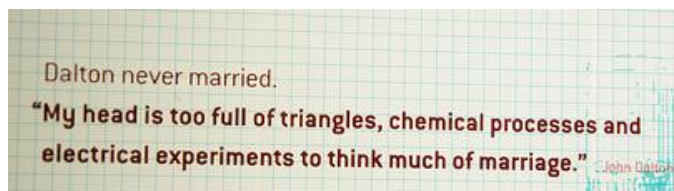
Artisan at the Wedgwood Visitor's Center



We finally bid farewell to London as we head northwest by train (included) to Stoke-on-Trent. While there we'll visit the Wedgwood Visitors Centre for a factory tour. In addition to seeing master artisans at work, you'll also learn about founder Josiah Wedgwood's experimental background and his 18th century patronage of such English scientists as Joseph Priestley. After our visit, it's off to Manchester where we'll spend two nights in a hotel on a bed and breakfast basis.

Day 10 – University of Manchester and the Museum of Science and Industry (MOSI)

Chemistry Display at the MOSI



During our full day in Manchester we'll visit the Museum of Science and Industry where the science curator will show us around, highlighting numerous artifacts related to the development of the Industrial Revolution, along with hometown heroes and scientists John Dalton and James Joule.

We'll also visit Manchester City Hall for some additional history on the lives of Dalton & Joule.

Additionally, we'll head to the University of Manchester to tour the Department of Chemistry and meet with faculty for another dialogue on the differences between the English and American educational systems. We'll also meet with Dr. James Sumner, Professor of the History of Science, who will share about John Dalton as well as his research into the history of brewing.

John Dalton's Statue at the Manchester City Hall



Day 11 – University of Edinburgh

We'll hop a morning train and head to Edinburgh, Scotland! Upon our arrival we'll visit Edinburgh University where we'll meet with Drs. Eleanor Campbell (Chair) and Andy Alexander. In addition to touring the Department of Chemistry, they'll share with us on their recently celebrated 300th year anniversary of their Chemistry Chair (1713-2013).

The Chemistry Department Original Chair's Chair (Joseph Black)



Edinburgh's Royal Mile



After lunch, you'll have the afternoon free to explore Edinburgh! You may consider a visit to the Royal Mile, a succession of streets forming the main thoroughfare of the old town of the city of Edinburgh.

Days 13 – Edinburgh Castle & Glenkinchie Distillery

Historic Edinburgh Castle



We'll begin our last day with a visit to historic Edinburgh Castle.

After lunch, we'll board our private bus and visit Glenkinchie Distillery where they've been crafting Lowland whiskeys since 1825. Our visit includes transfers by private coach, entrance to the exhibition, a tour, and whiskey tasting.

That evening we'll have a farewell dinner before heading to the airport the following morning by private coach.

If any of these services are unavailable a suitable substitute will be made in consultation with the State Center Community College District faculty

Whiskey Tasting at Glenkinchie Distillery



Kirk Kawagoe

Fees

Based on an enrollment of **15 or more paying individual participants with 2 group leaders**, for the services specified above, the fee per person is **\$3,075** (€2,280).

Based on an enrollment of **12 to 14 paying individual participants with 2 group leaders**, for the services specified above, the fee per person is **\$3,278** (€2,430).

Amounts quoted in US Dollar are provided as a courtesy only. The above-mentioned US Dollar price above was calculated at the exchange rate at the time this offer was made. 1 Euro = 1.3493 US Dollar

Payment Schedule:

You will be required to pay the program costs in accordance with the following payment schedule:

- 90 days prior to departure date (non-refundable deposit) 10% of program costs
- 60 days prior to departure date (second payment) 50% of program costs
- 30 days prior to departure date (final payment) remaining balance due

This fee excludes airfare, passport or visa fees if applicable, meals other than those indicated on the itinerary, personal expenses, any State Center Community College District tuition or administrative fees, textbooks, additional fieldtrips or excursions required by the State Center Community College District faculty and anything not specified.

Questions?

Contact the group leaders:

Dr. Kent McCorkle, kent.mccorkle@fresnocitycollege.edu

Dr. Kirk Kawagoe, kirk.kawagoe@fresnocitycollege.edu.