

COLORUR

Augustana Annual Theme 2016/17

FACULTY TALKS

Monday, September 19, 2016, Room C167, 12:30—1:10 p.m.

The Jean Hachborn Common Room 1:20—2:00 p.m.



**James Kariuki,
Brian Rempel &
Elizabeth McGinitie**

*Colour in Our World: Using Colour Changes
to Visualize Chemical Reactions*



Our presentation will involve several reactions that involve colour changes. The colour change will be used as visual evidence that a chemical reaction has occurred. The experiments performed will include acid-base and other reactions that, in many cases, can be done with household reagents. The chemistry behind each of the observed colour changes will be explained. It is our hope that the audience will be able to try at home some of the reactions learned during our demonstrations.



Richard Guy and Jeremy Sylvestre

Map Colouring, Graph Theory, and Rare Centennials

This presentation addresses the famous four-colour problem, which asks whether four colours are sufficient for making a geographical map such that no two regions sharing a common boundary on the map have the same colour, regardless of the complexity of the borders marking the boundaries of the map's regions. A computer-assisted proof answered this question in 1976: yes, four colours are always sufficient. Graph colouring (a rigorous way, easily accessible to a general audience, for representing the four-colour problem), the nature of mathematical proof, and the 100th birthday of University of Calgary Emeritus Richard Guy (an expert on graph colouring and active researcher) are highlighted.

