Patriotic Phenolphtalein

Joe Moore
Keystone Area Education Agency

Follow this and additional works at: https://scholarworks.uni.edu/istj

Part of the Science and Mathematics Education Commons

Let us know how access to this document benefits you

Copyright © Copyright 1977 by the Iowa Academy of Science

Recommended Citation
Available at: https://scholarworks.uni.edu/istj/vol14/iss2/38

This Article is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Iowa Science Teachers Journal by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.
Quickies

If you have an idea that facilitates science teaching, jot it down and send to Editor, *Iowa Science Teachers Journal*, Biology Department, University of Northern Iowa, 50613. Be sure to include the name of your school and position. Here are some recent contributions.

* * *

Patriotic Phenolphthalein

Joe Moore, Science Consultant, Keystone Area Education Agency
Dubuque, Iowa

To illustrate the "patriotic nature" of phenolphthalein, prepare a dilute solution by dissolving 0.1 gm of phenolphthalein in 100 ml of ethyl alcohol and dilute with 50 ml of water. Mix the prepared solution in an aqueous solution of ammonia (10 ml/100 ml of water) and a red color will appear. Add the same indicator solution to a lead nitrate solution (2 g/100 ml of water) and a white color will appear. Do the same with a copper sulphate solution (2 g/100 ml of water) and you will get a blue color. What makes phenolphthalein so "patriotic"? Does it exhibit its "patriotism" in other solutions?

* * *

The Welk Effect

Joe Moore, Science Consultant, Keystone Area Education Agency
Dubuque, Iowa

To get a Niagra Falls of bubbles, place about 5 gm of manganese in 100 ml graduated cylinder, fill the cylinder three-fourths full of a "Halo" type shampoo solution and add about 5 ml of hydrogen peroxide. Won'eful! Won'eful!


* * *

What Makes Your Garden Grow?

Joe Moore, Science Consultant, Keystone Area Education Agency
Dubuque, Iowa

To illustrate crystal formation, dissolve 35 ml of sodium silicate into 150 ml of water placed in a 400 ml beaker. Growth of crystals is initiated when water-soluble compounds containing copper, cobalt, nickel, iron and aluminum are added to the solution.