

2007 REQUEST FOR APPLICATIONS SCIENCE FELLOWS PROGRAM

CALFED Science Program
California Sea Grant College Program

"FELLOWSHIPS for Predoctoral Students and Postdoctoral Researchers"

The Science Fellows Program brings together young scientists, CALFED agency scientists and senior research mentors in collaborative data analysis and research projects relevant to ecosystem management and water supply reliability questions. The CALFED Science Program, in collaboration with California Sea Grant, is seeking applications from qualified individuals to compete for fellowship opportunities in 2007.

The 2007 CALFED Science Fellows Program will be sponsoring at least seven Science Fellows (predoctoral and postdoctoral) in all disciplines of environmental science addressing the following 2007 priority topics:

- Environmental Water
- Aquatic Invasive Species
- Population Trends and Patterns of Key Species
- Habitat Availability and Response to Change

or CALFED Implementing Agency Science Needs.

For further information about the 2007 Request for Applications - Science Fellows Program, please visit:

<http://www.csg.ucsd.edu/EDUCATION/SgEducationIndx.html>

All applications are due by June 1, 2007, 5:00 pm
at the California Sea Grant College Program Office



Drs. Fox and Hill respond:

We are gratified that our article has generated general interest.

Dr. Donahoe's suggestion was included in our list of acceptable perfect cubes, and known by us to be prime, but we had a slight preference for the cube closest to the center of the known range of values. As we stated, any of the ten cubes in that range will serve equally well. Dr. Williams' suggestion that 2^{79} is a simpler choice is true enough, but 6.024×10^{23} is well outside the current accepted range of values of $6.0221415(10) \times 10^{23}$.

Dr. Csuha made interesting remarks about crystal structure. However, each of Dr. Csuha's divisors follows from the prime factors of $84,446,888 = 2 \times 2 \times 2 \times 17 \times 620,933$ that are connected to the crystal lattice. But we prefer a number that is not linked to any particular lattice structure, simply because the defining base element (currently carbon-12) has been changed before, and may well be changed again, in which case the corresponding lattice structure may change. Also, the suggestion of a number based on crystal structures presupposes that

one day it may be possible to assemble N_A^* atoms of a pure isotope into the required arrangement. Imagine a process that self-assembles the atoms at a rate of a billion per second. It would take 10 million years to finish. Thus, choosing a particular integer for N_A^* is sufficient to remove the artifact, *Le Gran K*, from further usage as a mass standard and consequently redefines the kilogram.

How to Write to American Scientist

Brief letters commenting on articles that have appeared in the magazine are welcomed. The editors reserve the right to edit submissions. Please include a fax number or e-mail address if possible. Address: Letters to the Editors, American Scientist, P.O. Box 13975, Research Triangle Park, NC 27709 or editors@amsci.org.

Errata

In "An Exact Value for Avogadro's Number" (*Macroscope*, March-April), and accent is missing from *Le Système International d'Unités*.

In the Table of Contents of the March-April issue, the first author of *Macroscope* should have been Ronald F. Fox.

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ILLUSTRATION CREDITS

Macroscope

Pages 201-202 Barbara Aulicino

Computing Science

Pages 201-204 Brian Hayes

Science Observer

Page 213 David Schneider

Liquid-Mirror Telescopes

Figures 5, 6 and page 221 Barbara Aulicino

Extreme Microbes

Figures 2 (left), 5, 8 Barbara Aulicino

Soot: Giver and Taker of Light

Figure 4 Stephanie Freese

The Uniqueness of Human Recursive Thinking

Figures 2-4, 6, 8 and page 248 Tom Dunne

The Most Dangerous Equation

Figures 3-5, 7 Stephanie Freese

