

COVER

A depiction of the interaction of an excess electron with the hydrogen-bonded complex $\text{NH}_3 \cdots \text{HCl}$, which induces formation of the ionic pair $\text{NH}_4^+ \text{Cl}^-$ solvated by the excess electron. The image shows the structures of three possible systems and highlights the areas that correspond to 10%, 30%, and 50% of the excess electron. See page 936.

Illustration: Maciej Haranczyk

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SCIENCE EXPRESS

www.sciencexpress.org

APPLIED PHYSICS

Sr Lattice Clock at 1×10^{-16} Fractional Uncertainty by Remote Optical Evaluation with a Ca Clock

A. D. Ludlow et al.

Two clocks based on optical transitions in single trapped ions set 4 kilometers apart are able to keep time within a fractional error of 1×10^{-16} , better than the standard atomic clock.

10.1126/science.1153341

MICROBIOLOGY

A Cholesterol Biosynthesis Inhibitor Blocks *Staphylococcus aureus* Virulence

C.-I. Liu et al.

A drug for controlling cholesterol may be useful as an antibiotic for multi-drug-resistant *Staphylococcus* because of unexpected structural similarities among critical proteins.

10.1126/science.1153018

MEDICINE

Neurokinin 1 Receptor Antagonism as a Possible Therapy for Alcoholism

D. T. George et al.

A drug that inhibits a neural signaling pathway linked to behavioral stress may be a useful therapy in preventing relapse in alcoholics.

10.1126/science.1153813

DEVELOPMENTAL BIOLOGY

Generation of Pluripotent Stem Cells from Adult Mouse Liver and Stomach Cells

T. Aoi et al.

Induced pluripotent stem cells are generated by direct reprogramming of adult liver and stomach cells without retroviral integration into specific sites in the genome.

10.1126/science.1154884

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Comment on "The Latitudinal Gradient in Recent Speciation and Extinction Rates of Birds and Mammals" 901

J. A. Tobias, J. M. Bates, S. J. Hackett, N. Seddon

[full text at www.sciencemag.org/cgi/content/full/319/5865/901c](http://www.sciencemag.org/cgi/content/full/319/5865/901c)

Response to Comment on "The Latitudinal Gradient in Recent Speciation and Extinction Rates of Birds and Mammals"

J. T. Weir and D. Schluter

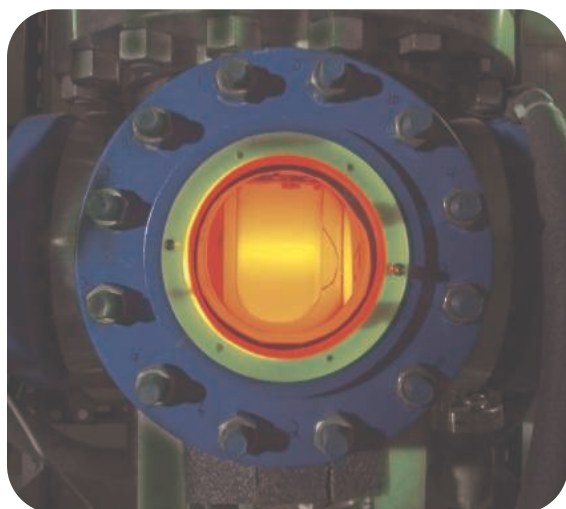
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The Tiredness of the Long-Distance Runner

Leaky calcium channels may cause muscle fatigue, and a new drug could boost performance.

I Hear You, My Monkey Brother

A region of the monkey brain responds preferentially to the voices of other monkeys.

Taking the Heat Off Coral

A natural ocean “thermostat” is counteracting the effects of climate warming.



Stopping cell death.

SCIENCE SIGNALING

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PERSPECTIVE: Cell Stress Gives a Red Light to the Mitochondrial Cell Death Pathway

M. E. Guicciardi and G. J. Gores

A prefoldin protein and insulin-like growth factor-binding protein act at the mitochondrion to inhibit apoptosis.

TEACHING RESOURCE: Quantitative Models of Mammalian Cell Signaling Pathways

R. Iyengar

Prepare a graduate-level class covering mathematical modeling of mammalian signaling pathways.



SCIENCE ONLINE FEATURE

THE GONZO SCIENTIST: Can Scientists Dance?

Our intrepid reporter organized the first-ever “Dance Your Ph.D.” contest to answer the question—and has video to show for it.

www.sciencemag.org/sciext/gonzoscientist



Overcoming that phony feeling.

SCIENCE CAREERS

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In Person: Finding Opportunities in a Dysfunctional Job Market

B. Allen

To find hidden value in the job market, you have to cast a wide net.

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L. Laursen

Getting over the feeling that you're a phony takes an accurate self-appraisal.

Tooling Up: Put Some Muscle Into Your Marketing Materials

D. Jensen

Powerful writing can move your job application to the top of the pile.

From the Archives: How to Get a Job in Academia

A. Fazekas

What the hiring committee is looking for depends on the type of institution.

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