

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

DEPARTMENTS

- 871 Science Online
- 873 This Week in *Science*
- 878 Editors' Choice
- 880 Contact *Science*
- 881 Random Samples
- 883 Newsmakers
- 969 New Products
- 970 Science Careers

EDITORIAL

- 877 "Glocal" Science Advocacy
by Alan I. Leshner

NEWS OF THE WEEK

- Deaths in Diabetes Trial Challenge a Long-Held Theory 884
- Alien Planetary System Looks a Lot Like Home 885
- >> Report p. 927

- Biodefense Watchdog Project Folds, Leaving a Void 886
- U.S. Prepares to Launch Flawed Satellite 886
- Senate Bill Would Scale Up Forest Restoration 887

SCIENCE SCOPE 887

- Back-to-Basics Push as HIV Prevention Struggles 888
- Another Side to the Climate-Cloud Conundrum Finally Revealed 889

NEWS FOCUS

- Wolves at the Door of a More Dangerous World 890
- Framework Materials Grab CO_2 and Researchers' Attention 893
- >> Report p. 939

- In South Africa, XDR TB and HIV Prove a Deadly Combination 894
- Research Project Mimics TB Transmission

- Joint Mathematics Meeting 898
- Number Theorists' Big Cover-Up Proves Harder Than It Looks
- A Woman Who Counted
- Exact-Postage Poser Still Not Licked



890

LETTERS

- Climate Change: A Titanic Challenge S. C. Sherwood 900
- In Defense of Bed Nets A. Y. Kitua et al.
- Grant Approval and Risky Research: A Nobel Story J. M. Berg Response M. R. Capecchi
- Making Sense of Scrambled Genomes D. Speijer Response L. F. Landweber

CORRECTIONS AND CLARIFICATIONS 901

BOOKS ET AL.

- Opting Out?** Why Women Really Quit Careers and Head Home P. Stone, reviewed by P. Moen 903
- Bending the Rules** Morality in the Modern World from Relationships to Politics and War R. A. Hinde, reviewed by B. W. Heineman Jr. 904
- A Taste of the Gonzo Scientist** 905
- >> Online Feature p. 871

POLICY FORUM

- Transforming Environmental Health Protection 906
- F. S. Collins, G. M. Gray, J. R. Bucher

PERSPECTIVES

- Making Strong Fibers** 908
- H. G. Chae and S. Kumar
- Homo economicus Evolves** 909
- S. D. Levitt and J. A. List
- Combating Impervious Bugs** 910
- R. P. Novick
- >> Report p. 962 and Science Express Report by Liu et al.
- On Mixing and Demixing** 912
- J. M. Ottino and R. M. Lueptow
- Green with Complexity** 913
- S. Naeem >> Report p. 952
- Sidestepping Mutational Meltdown** 914
- E. A. Shoubridge and T. Wai >> Report p. 958



903



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

TECHNICAL COMMENT ABSTRACTS

EVOLUTION

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

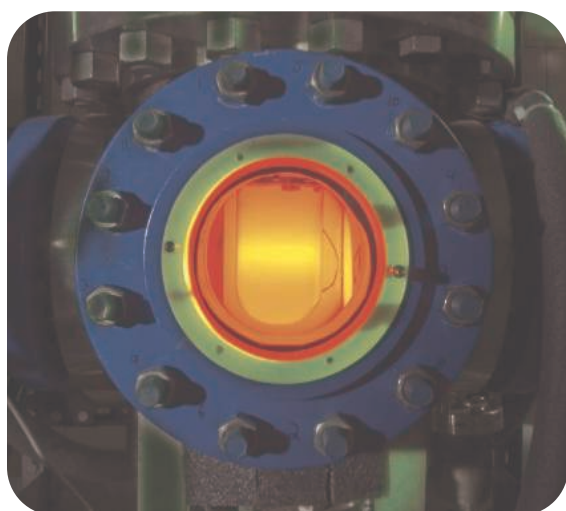
[full text at www.sciencemag.org/cgi/content/full/319/5865/901d](http://www.sciencemag.org/cgi/content/full/319/5865/901d)

REVIEW

CELL BIOLOGY

Adapting Proteostasis for Disease Intervention 916

W. E. Balch, R. I. Morimoto, A. Dillin, J. W. Kelly



933

BREVIA

CLIMATE CHANGE

Emergence of Anoxia in the California Current Large Marine Ecosystem 920

F. Chan et al.

Extreme oxygen deficits in the northern California Current system caused widespread anoxia, killing benthic invertebrates on the continental shelf of Oregon during 2006.

RESEARCH ARTICLE

MEDICINE

Identification of Host Proteins Required for HIV Infection Through a Functional Genomic Screen 921

A. L. Brass et al.

An RNAi screen identified 237 new and 38 known human proteins required for HIV infection, including ones used in Golgi transport and in viral integration and transcription.

REPORTS

ASTRONOMY

Discovery of a Jupiter/Saturn Analog with Gravitational Microlensing 927

B. S. Gaudi et al.

A system of two giant planets orbiting a star has been discovered through their gravitational deflection of light from more distant stars.

>> *News story p. 885*

APPLIED PHYSICS

Imaging Phonon Excitation with Atomic Resolution 930

H. Gawronski, M. Mehlhorn, K. Morgenstern

Maps of the second derivative of the scanning tunneling microscope current with respect to voltage reveal atomic-scale variations in the surface vibrational modes of metals.

CONTENTS continued >>

REPORTS CONTINUED...

PHYSICS

Spin-Dependent WIMP Limits from a Bubble Chamber 933

E. Behnke et al.

Experiments with a stabilized bubble chamber, consisting of a buried superheated liquid, limit the abundance of weakly interacting massive particles, a dark-matter candidate.

CHEMISTRY

Electron-Driven Acid-Base Chemistry: Proton Transfer 936 from Hydrogen Chloride to Ammonia

S. N. Eustis et al.

Spectroscopy and simulations show that binding an excess electron to HCl helps it fully transfer its proton to ammonia, facilitating this type of acid-base reaction in a vacuum.

CHEMISTRY

High-Throughput Synthesis of Zeolitic Imidazolate Frameworks and Application to CO₂ Capture 939

R. Banerjee et al.

Microporous metallic-organic frameworks with two types of linkers between the metal atoms in a tetrahedral lattice can take up large amounts of CO₂ at ambient conditions. >> *News story p. 893*

GEOCHEMISTRY

Rogue Mantle Helium and Neon 943

F. Albarède

Anomalously high ratios of ³He to ⁴He in the recycled basalts under ocean islands may result from helium diffusing in from more pristine, primitive mantle.

EVOLUTION

The Premetazoan Ancestry of Cadherins 946

M. Abedin and N. King

A close unicellular relative of metazoans unexpectedly contains 23 genes for a cell adhesion protein, suggesting a role for the protein in the evolution of multicellularity.

ECOLOGY

A Global Map of Human Impact on Marine Ecosystems 948

B. S. Halpern et al.

A meta-analysis shows that human activities have altered virtually all ocean ecosystems, at least to some extent, documenting those areas needing the most protection.

ECOLOGY

Effects of Predator Hunting Mode on Grassland Ecosystem Function 952

O. J. Schmitz

An ecosystem containing actively hunting spiders shows lower plant diversity but higher primary production than one with spiders that sit and wait to ambush their prey.

>> *Perspective p. 913*

BIOCHEMISTRY

Axle-Less F₁-ATPase Rotates in the Correct Direction 955

S. Furuike et al.

A molecular rotary motor continues to rotate in the correct direction even when its shaft is deleted, leaving only the rotor head sitting on top of the shaft housing.

GENETICS

A Mouse Model of Mitochondrial Disease Reveals 958 Germline Selection Against Severe mtDNA Mutations

W. Fan et al.

Developing mouse oocytes that harbor highly deleterious mitochondrial DNA mutations are eliminated, minimizing negative impact on population fitness.

>> *Perspective p. 914*

MEDICINE

Metal Chelation and Inhibition of Bacterial Growth 962 in Tissue Abscesses

B. D. Corbin et al.

An immune cell-derived protein binds metal ions in infected abscesses, depriving the bacteria of the essential nutrients magnesium and zinc and reducing their growth.

>> *Perspective p. 910*

PSYCHOLOGY

The Critical Importance of Retrieval for Learning 966

J. D. Karpicke and H. L. Roediger III

Students recalled words they had learned the previous week more effectively if they were tested repeatedly in the interim than if they spent the time studying.



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CONTENTS continued >>>

SCIENCE NOW

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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

www.stke.org THE SIGNAL TRANSDUCTION KNOWLEDGE ENVIRONMENT

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

www.sciencecareers.org CAREER RESOURCES FOR SCIENTISTS

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.

No, You're Not an Impostor

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.

SCIENCE PODCAST

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