

The Ernest Orlando Lawrence Award Laureates

2006

A. Paul Alivisatos Malcolm J. Andrews Moungi G. Bawendi Arup K. Chakraborty My Hang V. Huynh Marc Kamionkowski John M. Zachara Steven John Zinkle

2004 Nathaniel J. Fisch Bette Korber Claire E. Max Fred N. Mortensen Richard J. Savkally Ivan K. Schuller Gregory W. Swift

2002 C. Jeffrey Brinker Claire M. Fraser Bruce T. Goodwin Keith O. Hodgson Saul Perlmutter Benjamin D. Santer

Dan Gabriel Cacuci Joanna S. Fowler Laura H. Greene Steven E: Koonin Mark H. Thiemens Ahmed H. Zewail

Paul J. Turinsky

1996 Charles Roger Alcock Mina J. Bissell Thom H. Dunning, Jr. Charles V. Jakowatz, Jr. Sunil K. Sinha Theofanis G. Theofanous Jorge Luis Valdes

1994 John D. Boice, Jr. E. Michael Campbell Gregory J. Kubas Edward William Larsen John D. Lindl Gerard M. Ludtka George F. Smoot John E. Till

James G. Anderson Robert G. Bergman Alan R. Bishop Yoon I. Chang Robert K. Moyzis John W Shaner Carl Wieman

Zachary Fisk Richard Fortner Rulon Linford Peter Schultz Richard E. Smalley J. Pace Vandevender

John J. Dorning James R. Norris S. Thomas Picraux Wayne J. Shotts Maury Tigner F. Ward Whicker

1988 Mary K. Gaillard Richard T. Lahey, Jr. Chain Tsuan Liu Gene H. McCall Alexander Pines

James W Gordon Miklos Gyulassy Sung-Hou Kim James L. Kinsey J. Robert Merriman David E. Moncton

Joseph S. Wall

James J. Duderstadt Helen T. Edwards Joe W. Gray C. Bradlev Moore Gustavus J. Simmons

Anthony P. Malinauskas William H. Miller David R. Nygren Gordon C. Osbourn Betsy Sutherland Thomas A. Weaver

James L. Smith

1984 Robert W. Conn John J. Dunn Peter L. Hagelstein Siegfried S. Hecker Robert B. Laughlin Kenneth N. Raymond

James F. Jackson Michael E. Phelps Paul H. Rutherford Mark S. Wrighton George B. Zimmerman

George F. Chapline, Jr. Mitchell J. Feigenbaum Michael J. Lineberry Nicholas Turro Raymond E. Wildung

Martin Blume Yuan Tseh Lee Fred R. Mynatt Paul B. Selby Lowell L. Wood

1980 Donald W. Barr B. Grant Logan Nicholas P Samios Benno P. Schoenborn Charles D. Scott

James D. Bjorken John L. Emmett F. William Studier Gareth Thomas Dean A. Waters

A. Philip Bray James W. Cronin Kaye D. Lathrop Adolphus L. Lotts Edwin D. McClanahan

Evan H. Appelman Charles E. Elderkin William A. Lokke Burton Richter Samuel C. Ting

Joseph Cerny Harold Paul Fourth Henry C. Honeck Charles A. McDonald Chester R.Richmond

Louis Baker Seymour Sack Thomas E. Wainwright James Robert Weir Sheldon Wolff

Charles C. Cremer Sidney D. Drell Marvin Goldman David A. Shirley Paul F Zweifel

Thomas B. Cook Robert L. Fleischer Robert L. Hellens P. Buford Price Robert M. Walker

William J. Bair James W. Cobble Joseph M. Hendrie Michael M May Andrew M. Sessler

Geoffrey F. Chew Don T. Cromer Ely M. Gelbard F. Newton Hayes John H. Nuckolls

1968 James R. Arnold E. Richard Cohen Val L. Fitch Richard Latter John B. Storer

Mortimer M. Elkind John M. Googin Allen F. Henry John O. Rasmussen Robert N. Thorn

1966 Harold M. Agnew Ernest C. Anderson Murray Gell-Mann John R. Huizenga Paul R. Vanstrum

George A. Cowan Floyd M. Culler Milton C. Edlund Theodore B. Taylor Arthur C. Upton

Jacob Bigeleisen Albert L. Latter Harvey M. Pratt Marshall N. Rosenbuth Theos J. Thompson

1963 Herbert J.C. Kouts L. James Rainwater Louis Rosen James M. Tauh Cornelius A. Tobias

1962 Andrew A. Benson Richard P. Fevnman Herbert Goldstein Anthony L. Turkevich Herbert F. York

Leo Brewer Henry Hurwitz, Jr. Conrad L. Longmire Wolfgang K. H. Panofsky Kenneth E. Wilzbach

1960 Harvey Brooks John S. Foster, Jr. Isadore Perlman Norman F. Ramsey, Jr. Alvin M. Weinberg

Office of Science U.S. Department of Energy 1000 Independence Avenue, SW Washington, D.C. 20585 http://www.science.doe.gov/lawrence



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THE 2009 ERNEST ORLANDO LAWRENCE AWARD Call for Nominations An award given by the

U.S. Department of Energy

OFFICE OF SCIENCE U.S. DEPARTMENT OF ENERGY 1000 Independence Avenue. SW Washington, DC 20585



January 30, 2009

Dear Colleague:

The Department of Energy invites you to nominate candidates for the Ernest Orlando Lawrence Awards, which are among the longest running and most prestigious science and technology awards given by the U.S. Government.

The Lawrence Awards honor U.S. scientists and engineers at mid-career for exceptional contributions in research and development supporting the Department of Energy and its mission to advance the national, economic, and energy security of the United States.

Nominees must be U.S. citizens in mid-career and show promise for continued exceptional achievements. We encourage the nomination of a diverse pool of candidates.

The Lawrence Award was established in 1959 by the Atomic Energy Commission and President Dwight D. Eisenhower in honor of the scientist who helped to elevate American physics to world leadership. President Eisenhower stated,

"Such an award would seem to me to be most fitting, both as a recognition of what he has given to our country and to mankind, and as a means of helping to carry forward his work through inspiring others to dedicate their lives and talents to scientific effort."

The first Lawrence Awards were conferred in 1960 and have since been awarded to 202 recipients, all of whom are listed on the Lawrence Award's webpage: http://www.sc.doe.gov/lawrence. These men and women are among this country's most brilliant and productive scientists and engineers. It is in this spirit of inspiration and dedication that the Lawrence Awards continue to be given today.

Nominations for the 2009 Lawrence Awards must be submitted by April 1, 2009. The Lawrence Award's webpage: http://www.sc.doe.gov/lawrence delineates the nomination guidelines and process. Please note the revisions and updates to prior announcements, and that all nominations are made via an electronic process.

Thank you for participating in this prestigious award program.

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Sincerely,

Patricia Dehmer Acting Director Office of Science U.S. Department of Energy



The Ernest Orlando Lawrence Award is presented by the Secretary of the U.S. Department of Energy to scientists and engineers, at mid-career, for exceptional contributions to the development, use, control, or production of energy in basic and applied research supporting the Department of Energy and its mission to advance the national, economic and energy security of the United States. (This is broadly interpreted as encompassing all science and technology supported by the U.S. Department of Energy and its programs.)

Nominations for the Lawrence Award are solicited annually in each of the following seven fields:

- Chemistry
- Materials Research
- Environmental Science and Technology
- Life Sciences (including Medicine)
- Nuclear Technologies (Fission and Fusion)
- National Security and Non-Proliferation
- High Energy and Nuclear Physics

The nomination materials will be peer reviewed by panels representing each of the above seven categories. If worthy candidates are identified in the peer review, a selection recommendation will be forwarded to the Secretary of Energy. The final selection of any awardees is made at the discretion of the Secretary of Energy.

Criteria

- Recipients must be in the middle of their careers (defined as within 20 years of receiving their terminal degree, typically a Ph.D. or M.D.).
- The award is given for an outstanding contribution of an exceptionally creative or innovative character. Such
 achievements typically (i) demonstrate significant innovation and discovery; (ii) are identifiable as transformative; (iii)
 hold prominent scientific or technical leadership; and are (iv) distinguishable from an evolutionary collection of steady,
 long-term, career-integrated contributions.
- Recipients must be citizens of the United States.
- Recipients are recognized only for achievement in research principally funded by the U.S. Department of Energy.
- Individuals nominated will be judged primarily on the scientific impact and technical significance of their work relative to its discipline and/or related mission.
- Business management and stewardship acumen, while valued, is not a significant qualification factor used when evaluating a nominee's worthiness.

The objectives of the Ernest Orlando Lawrence Awards are:

- to encourage excellence in energy science and technology;
- to inspire people to dedicate their lives and talents to scientific effort, through the examples of Ernest O. Lawrence
 and the Lawrence Award laureates; and
- to highlight for the general public the accomplishments of the U.S. scientific community associated with the U.S. Department of Energy.

Each Lawrence Award category award winner receives:

- a citation signed by the Secretary of Energy;
- a 14 karat gold medal bearing the likeness of Ernest O. Lawrence; and
- a \$50,000 honorarium. (The prize shall ordinarily be awarded to one person but may be shared when all the
 recipients have contributed to the same accomplishment. If there are co-winners in a category, the honorarium is
 shared equally.)

Nomination Materials and Deadline

Nomination is made by a letter of justification, a statement explaining the nominee's connection to DOE support, a separate bibliography comprising no more than five significant publications related to the achievement, and a curriculum vitae. Please omit any secondary publications and non-archival materials from this bibliography. Do not include complete articles by the nominee.

Indicate clearly the category in which the person is being nominated (Chemistry, Materials Research, Environmental Science and Technology, Life Sciences, Nuclear Technologies (Fission and Fusion), National Security and Non-Proliferation, High Energy and Nuclear Physics). Please also note that any individual's nomination is limited to a single category.

A nomination must be accompanied by at least three and not more than six letters of support from individuals who are familiar with the work

A suggested citation, thirty-five words or less, summarizing and highlighting the nominee's achievement, must be submitted. The citation should make clear the specific reason for making this award to the nominee. The award citation may be based on this summary.

Submission of all nomination materials, including letters of support, in PDF format, is made online at http://www.orau.gov/lawrence.

Nomination materials and support letters for the 2009 Ernest Orlando Lawrence Awards are due by April 1, 2009. No materials will be accepted after the submission deadline has passed.

For more information please visit: http://www.sc.doe.gov/lawrence