

veterans who have paid a price beyond the call of duty and never fully repaid.

Mr. Speaker, I ask my colleagues to support this resolution and to take seriously the challenge of personally hiring a disabled veteran for their office. I ask them to support H. Res. 1016.

Mr. BRADY of Pennsylvania. Mr. Speaker, it is my pleasure to yield to Mr. FATTAH from the great State of Pennsylvania for such time as he may consume.

Mr. FATTAH. Mr. Speaker, I thank the gentleman from Pennsylvania, and also the chairman of my former committee, the House Administration Committee, for their fine work in bringing this resolution to the floor.

On Sunday I spoke at the VFW post in my district, the Charles Young Post, as they celebrated 76 years of providing a service to veterans, returning veterans from a host of wars and conflicts, in Philadelphia.

I have been over to Walter Reed visiting with soldiers who have been wounded in the Iraqi war, and it is true that they are receiving great medical care, but they do need employment. And I thank the gentleman who is the prime sponsor of this who I have also served with for many years, for fighting for this to come to the floor because it is something that is tangible that we can do.

I just wanted to rise in support of it. House Administration is a committee where these issues are dealt with, and I think the committee should be commended for bringing this to the floor. And I hope all Members heed what I think is a reasonable challenge, that each of us should reach out to returning veterans.

Many have disabilities that are visible, and others have other challenges. We do know, as has been stated by a former President, Ronald Reagan, that one of the best things that could ever happen in terms of addressing some of the social challenges that people face is a good job. So providing a good job for veterans who return, many of whom are disabled, I think is a rightful thing for this House to consider, in all of its various offices both here on the Hill and at home in our district offices.

I thank the gentleman for yielding me this time, and I thank the chairman for the great guidance he has given to my former committee.

Mr. EHLERS. Mr. Speaker, I reserve the balance of my time.

Mr. BRADY of Pennsylvania. Mr. Speaker, I thank Mr. ROHRBACHER for the resolution and the chairman of our committee. It is a pleasure working with you.

Mr. Speaker, I yield back the balance of my time.

Mr. EHLERS. Mr. Speaker, I yield myself such time as I may consume.

I once again reiterate the requests that various individuals have made here, that every Member of this Congress take this resolution seriously, that they vote for it; and, furthermore, that they act on it and hire a disabled veteran to work in their offices.

I thank the gentleman from California for bringing this to our attention. I urge support by every Member of the House for this resolution.

Ms. JACKSON-LEE of Texas. Mr. Speaker, I rise today to support H. Res. 1016 to encourage all offices of the House of Representatives to hire disabled veterans.

The men and women of our Armed Forces play a central role in preserving our Nation's freedom. In this role, these men and women gain very valuable skills, and knowledge which is crucial to the successful operations and functions of our military. The vast array of valuable skills that disabled veterans possess include those in intelligence, medicine, law and beyond. Such knowledge is not to be undervalued.

There are over 3 million living disabled veterans in this country, a number which unfortunately continues to rise as we remain engaged in the Iraq and Afghanistan conflicts. Let us respect and honor the invaluable service of all past and future disabled veterans by ensuring that they may continue to use their unique talents, knowledge and skills.

Congress relies on knowledgeable staff to help formulate policy. Disabled veterans provide unique perspectives on a range of issues, especially regarding national security.

Disabled veterans have sacrificed greatly for this country. It is indeed no sacrifice at all for us to take advantage of the unique education and experience that our veterans will bring as administrative, legislative and support staff to the House offices.

This Nation can repay its debt to those disabled veterans by helping disabled veterans continue to support the many important functions of our government, as well as continue to serve their country. Such a partnership is a win-win situation, and yet I am inclined to think that it is we who will benefit most from the contributions.

Mr. Speaker, we must ensure that when our veterans become disabled as a result of their military service, their service and skills do not dry up like a raisin in the sun but continue to bear fruit that can serve this great Nation well. By employing disabled veterans, we show that we have confidence in and value their skills.

We all know that it is exceedingly difficult to gain employment as a disabled individual, let alone as a veteran adjusting to civilian life. This is simply one step we can make as a legislative body to ease the transition and assist a population in need.

I am virtually certain that we all value the time and service of all of our veterans who have faithfully served to protect the interests of this great Nation and its citizens. We certainly would like to express that sentiment here today by passage of H.R. 1016 to encourage all offices of the House of Representatives to hire disabled veterans.

I urge my colleagues to support this resolution.

Mr. EHLERS. Mr. Speaker, I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Michigan (Mr. EHLERS) that the House suspend the rules and agree to the resolution, H. Res. 1016.

The question was taken; and (two-thirds having voted in favor thereof) the rules were suspended and the resolution was agreed to.

A motion to reconsider was laid on the table.

GENERAL LEAVE

Mr. EHLERS. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to revise and extend their remarks and include extraneous material on the subject of this bill.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Michigan?

There was no objection.

GREEN CHEMISTRY RESEARCH AND DEVELOPMENT ACT OF 2005

Mr. EHLERS. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 1215) to provide for the implementation of a Green Chemistry Research and Development Program, and for other purposes, as amended.

The Clerk read as follows:

H.R. 1215

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Green Chemistry Research and Development Act of 2005".

SEC. 2. DEFINITIONS.

In this Act—

(1) the term "green chemistry" means chemistry and chemical engineering to design chemical products and processes that reduce or eliminate the use or generation of hazardous substances while producing high quality products through safe and efficient manufacturing processes;

(2) the term "Interagency Working Group" means the interagency working group established under section 3(c); and

(3) the term "Program" means the Green Chemistry Research and Development Program described in section 3.

SEC. 3. GREEN CHEMISTRY RESEARCH AND DEVELOPMENT PROGRAM.

(a) *IN GENERAL.*—The President shall establish a Green Chemistry Research and Development Program to promote and coordinate Federal green chemistry research, development, demonstration, education, and technology transfer activities.

(b) *PROGRAM ACTIVITIES.*—The activities of the Program shall be designed to—

(1) provide sustained support for green chemistry research, development, demonstration, education, and technology transfer through—

(A) merit-reviewed competitive grants to individual investigators and teams of investigators, including, to the extent practicable, young investigators, for research and development;

(B) grants to fund collaborative research and development partnerships among universities, industry, and nonprofit organizations;

(C) green chemistry research, development, demonstration, and technology transfer conducted at Federal laboratories; and

(D) to the extent practicable, encouragement of consideration of green chemistry in—

(i) the conduct of Federal chemical science and engineering research and development; and

(ii) the solicitation and evaluation of all proposals for chemical science and engineering research and development;

(2) examine methods by which the Federal Government can create incentives for consideration and use of green chemistry processes and products;

(3) facilitate the adoption of green chemistry innovations;

(4) expand education and training of undergraduate and graduate students, and professional chemists and chemical engineers, including through partnerships with industry, in green chemistry science and engineering;

(5) collect and disseminate information on green chemistry research, development, and technology transfer, including information on—

- (A) incentives and impediments to development and commercialization;
- (B) accomplishments;
- (C) best practices; and
- (D) costs and benefits;

(6) provide venues for outreach and dissemination of green chemistry advances such as symposia, forums, conferences, and written materials in collaboration with, as appropriate, industry, academia, scientific and professional societies, and other relevant groups;

(7) support economic, legal, and other appropriate social science research to identify barriers to commercialization and methods to advance commercialization of green chemistry; and

(8) provide for public input and outreach to be integrated into the Program by the convening of public discussions, through mechanisms such as citizen panels, consensus conferences, and educational events, as appropriate.

(c) **INTERAGENCY WORKING GROUP.**—The President shall establish an Interagency Working Group, which shall include representatives from the National Science Foundation, the National Institute of Standards and Technology, the Department of Energy, the Environmental Protection Agency, and any other agency that the President may designate. The Director of the National Science Foundation and the Assistant Administrator for Research and Development of the Environmental Protection Agency shall serve as co-chairs of the Interagency Working Group. The Interagency Working Group shall oversee the planning, management, and coordination of the Program. The Interagency Working Group shall—

(1) establish goals and priorities for the Program, to the extent practicable in consultation with green chemistry researchers and potential end-users of green chemistry products and processes; and

(2) provide for interagency coordination, including budget coordination, of activities under the Program.

(d) **AGENCY BUDGET REQUESTS.**—Each Federal agency and department participating in the Program shall, as part of its annual request for appropriations to the Office of Management and Budget, submit a report to the Office of Management and Budget which identifies its activities that contribute directly to the Program and states the portion of its request for appropriations that is allocated to those activities. The President shall include in his annual budget request to Congress a statement of the portion of each agency's or department's annual budget request allocated to its activities undertaken pursuant to the Program.

(e) **REPORT TO CONGRESS.**—Not later than 2 years after the date of enactment of this Act, the Interagency Working Group shall transmit a report to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate. This report shall include—

(1) a summary of federally funded green chemistry research, development, demonstration, education, and technology transfer activities, including the green chemistry budget for each of these activities; and

(2) an analysis of the progress made toward achieving the goals and priorities for the Program, and recommendations for future program activities.

SEC. 4. MANUFACTURING EXTENSION CENTER GREEN SUPPLIERS NETWORK GRANT PROGRAM.

Section 25(a) of the National Institute of Standards and Technology Act (15 U.S.C. 278k(a)) is amended—

(1) by striking “and” at the end of paragraph (4);

(2) by striking the period at the end of paragraph (5) and inserting “; and”; and

(3) by adding at the end the following:

“(6) the enabling of supply chain manufacturers to continuously improve products and processes, increase energy efficiency, identify cost-saving opportunities, and optimize resources and technologies with the aim of reducing or eliminating the use or generation of hazardous substances.”.

SEC. 5. UNDERGRADUATE EDUCATION IN CHEMISTRY AND CHEMICAL ENGINEERING.

(a) **PROGRAM AUTHORIZED.**—(1) As part of the Program activities under section 3(b)(4), the Director of the National Science Foundation shall carry out a program to award grants to institutions of higher education to support efforts by such institutions to revise their undergraduate curriculum in chemistry and chemical engineering to incorporate green chemistry concepts and strategies.

(2) Grants shall be awarded under this section on a competitive, merit-reviewed basis and shall require cost sharing in cash from non-Federal sources, to match the Federal funding.

(b) **SELECTION PROCESS.**—(1) An institution of higher education seeking funding under this section shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include at a minimum—

(A) a description of the content and schedule for adoption of the proposed curricular revisions to the courses of study offered by the applicant in chemistry and chemical engineering; and

(B) a description of the source and amount of cost sharing to be provided.

(2) In evaluating the applications submitted under paragraph (1), the Director shall consider, at a minimum—

(A) the level of commitment demonstrated by the applicant in carrying out and sustaining lasting curriculum changes in accordance with subsection (a)(1); and

(B) the amount of cost sharing to be provided.

(c) **AUTHORIZATION OF APPROPRIATIONS.**—In addition to amounts authorized under section 8, from sums otherwise authorized to be appropriated by the National Science Foundation Authorization Act of 2002, there are authorized to be appropriated to the National Science Foundation for carrying out this section \$7,000,000 for fiscal year 2006, \$7,500,000 for fiscal year 2007, and \$8,000,000 for fiscal year 2008.

SEC. 6. STUDY ON COMMERCIALIZATION OF GREEN CHEMISTRY.

(a) **STUDY.**—The Director of the National Science Foundation shall enter into an arrangement with the National Research Council to conduct a study of the factors that constitute barriers to the successful commercial application of promising results from green chemistry research and development.

(b) **CONTENTS.**—The study shall—

(1) examine successful and unsuccessful attempts at commercialization of green chemistry in the United States and abroad; and

(2) recommend research areas and priorities and public policy options that would help to overcome identified barriers to commercialization.

(c) **REPORT.**—The Director shall submit a report to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate on the findings and recommendations of the study within 18 months after the date of enactment of this Act.

SEC. 7. PARTNERSHIPS IN GREEN CHEMISTRY.

(a) **PROGRAM AUTHORIZED.**—(1) The agencies participating in the Program shall carry out a joint, coordinated program to award grants to institutions of higher education to establish

partnerships with companies in the chemical industry to retrain chemists and chemical engineers in the use of green chemistry concepts and strategies.

(2) Grants shall be awarded under this section on a competitive, merit-reviewed basis and shall require cost sharing from non-Federal sources by members of the partnerships.

(3) In order to be eligible to receive a grant under this section, an institution of higher education shall enter into a partnership with two or more companies in the chemical industry. Such partnerships may also include other institutions of higher education and professional associations.

(4) Grants awarded under this section shall be used for activities to provide retraining for chemists or chemical engineers in green chemistry, including—

(A) the development of curricular materials and the designing of undergraduate and graduate level courses; and

(B) publicizing the availability of professional development courses of study in green chemistry and recruiting graduate scientists and engineers to pursue such courses.

Grants may provide stipends for individuals enrolled in courses developed by the partnership.

(b) **SELECTION PROCESS.**—(1) An institution of higher education seeking funding under this section shall submit an application at such time, in such manner, and containing such information as shall be specified by the Interagency Working Group and published in a proposal solicitation for the Program. The application shall include at a minimum—

(A) a description of the partnership and the role each member will play in implementing the proposal;

(B) a description of the courses of study that will be provided;

(C) a description of the number and size of stipends, if offered;

(D) a description of the source and amount of cost sharing to be provided; and

(E) a description of the manner in which the partnership will be continued after assistance under this section ends.

(2) The evaluation of the applications submitted under paragraph (1) shall be carried out in accordance with procedures developed by the Interagency Working Group and shall consider, at a minimum—

(A) the ability of the partnership to carry out effectively the proposed activities;

(B) the degree to which such activities are likely to prepare chemists and chemical engineers sufficiently to be competent to apply green chemistry concepts and strategies in their work; and

(C) the amount of cost sharing to be provided.

SEC. 8. AUTHORIZATION OF APPROPRIATIONS.

(a) **NATIONAL SCIENCE FOUNDATION.**—(1) From sums otherwise authorized to be appropriated by the National Science Foundation Authorization Act of 2002, there are authorized to be appropriated to the National Science Foundation for carrying out this Act—

(A) \$7,000,000 for fiscal year 2006;

(B) \$7,500,000 for fiscal year 2007; and

(C) \$8,000,000 for fiscal year 2008.

(2) The sums authorized by paragraph (1) are in addition to any funds the National Science Foundation is spending on green chemistry through its ongoing chemistry and chemical engineering programs.

(b) **NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.**—From sums otherwise authorized to be appropriated, there are authorized to be appropriated to the National Institute of Standards and Technology for carrying out this Act—

(1) \$5,000,000 for fiscal year 2006;

(2) \$5,500,000 for fiscal year 2007; and

(3) \$6,000,000 for fiscal year 2008.

(c) **DEPARTMENT OF ENERGY.**—From sums otherwise authorized to be appropriated, there are authorized to be appropriated to the Department of Energy for carrying out this Act—

- (1) \$7,000,000 for fiscal year 2006;
 (2) \$7,500,000 for fiscal year 2007; and
 (3) \$8,000,000 for fiscal year 2008.

(d) ENVIRONMENTAL PROTECTION AGENCY.—
 From sums otherwise authorized to be appropriated, there are authorized to be appropriated to the Environmental Protection Agency for carrying out this Act—

- (1) \$7,000,000 for fiscal year 2006;
 (2) \$7,500,000 for fiscal year 2007; and
 (3) \$8,000,000 for fiscal year 2008.

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Michigan (Mr. EHLERS) and the gentleman from Oregon (Mr. WU) each will control 20 minutes.

The Chair recognizes the gentleman from Michigan.

GENERAL LEAVE

Mr. EHLERS. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to revise and extend their remarks and include extraneous material on the subject of this bill.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Michigan?

There was no objection.

Mr. EHLERS. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, today I rise in support of H.R. 1215, the Green Chemistry Research and Development Act. I would like to thank the gentleman from Georgia (Mr. GINGREY) for his leadership on this important legislation which passed the House in the 108th Congress by an overwhelming vote of 402-14. In fact, I appreciate it so much I am sorry I didn't think of introducing the bill myself.

When I was a college student studying science, the only green chemistry I ever saw was the mold that grew on the neglected food in our dorm refrigerator. Today, we know that green chemistry is about doing chemistry cleaner and smarter in an environmentally sound way.

When businesses innovate by using green chemical processes, they cannot only save money, but also avoid the cost of cleaning up toxic pollutants, providing a safer work environment for their employees, and providing safer products to consumers. Everyone wins.

However, the adoption of green chemistry by the traditional chemical industry has been slow because there are only a few widely accepted processes and a shortage of trained experts in green chemistry. And for too long, the Federal investments in green chemistry research and development have been too small and too unfocused.

To provide that much-needed focus, H.R. 1215, the Green Chemistry Research and Development Act, will establish a research and development program to promote and coordinate Federal green chemistry, research, development, demonstration, education and technology transfer activities within the National Science Foundation, the Environmental Protection Agency, the National Institute of Standards and Technology, and the Department of Energy.

The program will support research and development grants including grants for university-industry-non-profit partnerships, support green chemistry research at Federal labs, promote education through curricula development and fellowships, and serve as a green chemistry information resource.

H.R. 1215 does not authorize the expenditure of new money. Instead, the bill obtains funding for the program from sums already authorized to be appropriated at the four agencies involved.

H.R. 1215 is an important first step in focusing Federal support for green chemistry. It expands green chemistry education, develops more green chemistry processes, and modestly and responsibly increases the Federal investment in green chemistry.

The emphasis on both training the next generation of chemical professionals and retraining conventional chemists and chemical engineers is critical to innovation in the traditional chemical manufacturing sector.

I am pleased to support the Green Chemistry Research and Development Act. Again, I thank Mr. GINGREY for his hard work on this important piece of legislation, and I urge my colleagues to support H.R. 1215.

Mr. Speaker, I reserve the balance of my time.

Mr. WU. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I am pleased to support H.R. 1215, the Green Chemistry Research and Development Act. This legislation codifies the ongoing efforts throughout the Federal Government to encourage the development of products and manufacturing processes that are safer, contain fewer toxic compounds, and make better use of recycled materials. I am especially pleased that the bill includes my amendment to authorize a training program at the National Science Foundation. This new program creates partnerships between companies in the chemical industry and colleges and universities to provide professional development training to practicing chemists and chemical engineers in the use of green chemistry concepts and strategies.

During our committee's hearing on last year's version of this bill, it became clear that too few professionals in these fields are exposed to green chemistry in their undergraduate and graduate courses. This lack of training becomes an important barrier to the adoption and use of green chemistry in industrial products and processes.

The partnerships between the academic community and industry that this bill promotes will ensure the courses of study that are put in place are relevant to industry and are designed to provide practicing chemists and chemical engineers with the skills and knowledge they will need to employ green chemistry concepts in their work.

The requirement for cost sharing helps to reinforce the engagement and

commitment of companies to the program.

H.R. 1215 provides a good starting point for a Federal effort to promote green chemistry. I urge Members to support this legislation.

Mr. Speaker, I reserve the balance of my time.

Mr. EHLERS. Mr. Speaker, at this time I am pleased to yield 5 minutes to the gentleman from Georgia, the author of the bill, Mr. GINGREY.

Mr. GINGREY. Mr. Speaker, I rise today to support H.R. 1215, a bill that provides for the implementation of a Green Chemistry Research and Development program.

First, I want to take this opportunity to thank Dr. EHLERS, Mr. WU, Chairman BOEHLERT, Ranking Member GORDON, and all of the Science Committee members and staff who worked hard to bring this important bipartisan legislation through committee and to the House floor today.

Mr. Speaker, chemists can design chemicals to be safe just like they can design them to have other properties, like color and texture. As chemists design products and the processes by which those products are manufactured, they can and should factor in the possible creation of any hazardous by-products.

This technique of considering not only the process in which products are produced but also the environment in which they are created is the basic definition of green chemistry. It is a method of designing chemical products and processes that at the very least reduce the use or generation of hazardous substances.

Green chemistry represents an ever-growing field of science that is demonstrating much promise. This legislation gives Congress the opportunity to support these important efforts by encouraging additional research and enhanced collaboration.

I want to take a moment to outline several reasons why I believe my colleagues should support this legislation. The first is the simple fact that preventing pollution and waste from the start of a design process is often cheaper than cleaning it up later.

Developing new products and processes are an integral component of a variety of industries.

□ 2245

Industries that span fabrics to fuel cells and the innovation created by this enhanced research will subsequently spur economic growth.

Mr. Speaker, since the heart of green chemistry is design processes that utilize as many benign materials as possible as well as designing them to be conducted at or near room temperature and pressure, working conditions and safety for our employees can be vastly improved.

Unfortunately, despite all the promise of green chemistry, the Federal Government invests very little in this area. This legislation allows coordination of Federal green chemistry research and development within several

Federal agencies such as the National Science Foundation, the Environmental Protection Agency, the National Institute of Standards and Technology, and the Department of Energy.

H.R. 1215 will encourage universities and academic institutions, as Mr. WU just mentioned, to train future workers in this exciting technology. This coordinated program will support research and development grants for partnerships between universities, industry and nonprofits. It will also promote education through curriculum development and fellowships that will collect and disseminate information about green chemistry.

Finally and most importantly, Mr. Speaker, H.R. 1215 is a fiscally responsible piece of legislation in step with the current reality of our budgetary constraints. This legislation funds these programs by obtaining sums already authorized to the above-mentioned agencies. It does not authorize the expenditure of any new money. Let me say that again. This legislation does not appropriate new funds but rather refocuses the budget of these agencies.

Chemical companies, pharmaceutical corporations, carpet and rug manufacturers and biotechnology businesses have endorsed H.R. 1215, showing a broad range of support for the merits of this legislation. All of these companies and corporations realize the advancement of green chemistry is a positive not only for their businesses but also our country's environment, our economy, and our Nation's health.

Mr. Speaker, I encourage my colleagues to vote for this innovative, insightful, and responsible piece of legislation that will show the American public that Congress and the business community are committed to preserving our Nation's environment.

Mr. WU. Mr. Speaker, I have no further requests for time, and I yield back the balance of my time.

Mr. EHLERS. Mr. Speaker, I yield myself the balance of my time.

I am very proud of our system of free enterprise in America. It has led to a considerable amount of innovation in every area. But I find, surprisingly, once in a while tradition trumps innovation, and that is the situation that we have here with green chemistry.

I commend the gentleman from Georgia for offering this bill because, frankly, we have to wake up the chemical industry to this promising new field and overcome the tradition and take up the ideas of green chemistry.

In all the experience I have in viewing the cases where it has been used, we have had better products, less pollution, and the manufacturers make more money. There is no reason not to do it. It is just that we simply have to use innovation to break tradition.

So, Mr. Speaker, while the full potential of green chemistry has yet to be realized, H.R. 1215 will place us on the right path to reaching that potential.

I urge all my colleagues to support the Green Chemistry Research and Development Act.

Ms. JACKSON-LEE of Texas. Mr. Speaker, the Green Chemistry Research and Development Program is intended to promote and coordinate Federal green chemistry research, development, demonstration, education, and technology transfer activities.

1. Prevent waste: Design chemical syntheses to prevent waste, leaving no waste to treat or clean up.

2. Design safer chemicals and products: Design chemical products to be fully effective, yet have little or no toxicity.

3. Design less hazardous chemical syntheses: Design syntheses to use and generate substances with little or no toxicity to humans and the environment.

4. Use renewable feedstocks: Use raw materials and feedstocks that are renewable rather than depleting. Renewable feedstocks are often made from agricultural products or are the wastes of other processes; depleting feedstocks are made from fossil fuels (petroleum, natural gas, or coal) or are mined.

5. Use catalysts, not stoichiometric reagents: Minimize waste by using catalytic reactions. Catalysts are used in small amounts and can carry out a single reaction many times. They are preferable to stoichiometric reagents, which are used in excess and work only once.

6. Avoid chemical derivatives: Avoid using blocking or protecting groups or any temporary modifications if possible. Derivatives use additional reagents and generate waste.

7. Maximize atom economy: Design syntheses so that the final product contains the maximum proportion of the starting materials. There should be few, if any, wasted atoms.

8. Use safer solvents and reaction conditions: Avoid using solvents, separation agents, or other auxiliary chemicals. If these chemicals are necessary, use innocuous chemicals.

9. Increase energy efficiency: Run chemical reactions at ambient temperature and pressure whenever possible.

10. Design chemicals and products to degrade after use: Design chemical products to break down to innocuous substances after use so that they do not accumulate in the environment.

11. Analyze in real time to prevent pollution: Include in-process real-time monitoring and control during syntheses to minimize or eliminate the formation of byproducts.

12. Minimize the potential for accidents: Design chemicals and their forms (solid, liquid, or gas) to minimize the potential for chemical accidents including explosions, fires, and releases to the environment.

This bill provides for sustained support for green chemistry research, development, demonstration, education, and technology transfer through merit-reviewed competitive grants to individual investigators and teams of investigators, including young investigators.

The legislation includes grants to fund collaborative research and development partnerships among universities, industry, and nonprofit organizations. Additionally, provisions provide for green chemistry research, development, demonstration, and technology transfer conducted at Federal laboratories.

H.R. 1215 will establish an Interagency Working Group, which will include representatives from the National Science Foundation, the National Institute of Standards and Technology, the Department of Energy, the Environmental Protection Agency, and any other

agency that the President designates. The Director of the National Science Foundation and the Assistant Administrator for Research and Development of the Environmental Protection Agency will serve as co-chairs of the Interagency Working Group. The Interagency Working Group shall oversee the planning, management, and coordination of the Program.

As part of the Program activities under Section 3, the Director of the National Science Foundation shall carry out a program to award grants to institutions of higher education to support efforts by such institutions to revise their undergraduate curriculum in chemistry and chemical engineering to incorporate green chemistry concepts and strategies.

It is important to encourage sustainable and environmentally sound research goals, and I encourage my colleagues to support this measure.

Mr. BOEHLERT. Mr. Speaker, I rise in strong support of H.R. 1215, and I want to congratulate our colleague, Dr. GINGREY, for having introduced it. Dr. GINGREY was one of the most active and effective members of the Science Committee during the 108th Congress, and, while he is no longer with the committee, we continue to work closely with him on a variety of issues, including this green chemistry R&D legislation before us today.

There's really only one unfortunate thing about the green chemistry bill—and that is that none of us thought of doing this before. Green chemistry is such an obvious area on which to focus that it should be clear to anyone—and everyone—that more needs to be done in this field.

The majority of environmental protection laws passed by Congress focus on command and control activities—limiting the spread of pollutants, cleaning up waste, or assessing fines to polluters. These are all necessary approaches to environmental challenges. But I believe in the old adage—"an ounce of prevention is worth a pound of cure." If we reduce to ounces the quantity of toxic chemicals we use and produce in the first place, then we won't have to worry as much about cleaning up pounds of toxics downstream.

But while the environmental benefits of applying this approach to our industrial processes are clear, green chemistry innovations provide more than just environmental benefits—they can save companies money and give them a competitive edge as well. With the right ideas applied in the right areas, green chemistry is truly a win-win strategy.

A good example is the work of Pfizer, which won a 2002 Presidential Green Chemistry Challenge Award for redesigning the manufacturing processes used to produce the anti-depression drug "Zoloft." By applying green chemistry principles to the manufacture of Zoloft, Pfizer was able to eliminate 730 metric tons of toxic chemicals from the production process. The result: improved worker and environmental safety, reduced energy and water use, and a doubling of overall product yield that contributed significantly to the economic bottom line.

This is just one example. There are dozens of other creative and exciting environmental solutions that are being driven by the application of green chemistry principles. Companies like Dow, DuPont, and Kodak are leading industry into a new era of the way it thinks about chemical and manufacturing processes.

And with a relatively small amount of Federal effort, we can leverage industry efforts and significantly accelerate development and application of green chemistry solutions.

This bill does just that. It takes a sensible, targeted approach to putting some Federal dollars behind green chemistry pollution prevention efforts. It builds on existing programs at a number of Federal agencies to transform those small and scattered efforts into a focused, coordinated, and enhanced national program.

The result of that program should be the generation and dissemination of new ideas and new people, leading to the adoption of more green chemistry practices and the creation of more green chemistry products, by industry.

Now I know some would like this bill to go further. And there's no doubt that there are additional barriers to green chemistry that the government action could help attack. But those government actions are complex and controversial and should be taken up in other bills.

For now, let's take care of first things first. Let's make sure that the government is doing everything possible to ensure that green chemistry research and development is getting the attention it deserves, to ensure that education programs are designed to teach more students and practicing chemists and chemical engineers about green chemistry, and to ensure that new ideas are broadly disseminated.

This is a thoughtful and effective piece of legislation that takes a step we should have taken long ago—making sure that government R&D and education programs promote the kind of chemistry that is in the national interest.

I urge everyone to support Dr. GINGREY's bill.

Mr. EHLERS. Mr. Speaker, I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Michigan (Mr. EHLERS) that the House suspend the rules and pass the bill, H.R. 1215, as amended.

The question was taken; and (two-thirds having voted in favor thereof) the rules were suspended and the bill, as amended, was passed.

A motion to reconsider was laid on the table.

NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM ACT OF 2006

Mr. EHLERS. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 5136) to establish a National Integrated Drought Information System within the National Oceanic and Atmospheric Administration to improve drought monitoring and forecasting capabilities, as amended.

The Clerk read as follows:

H.R. 5136

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "National Integrated Drought Information System Act of 2006".

SEC. 2. DEFINITIONS.

In this Act:

(1) **DROUGHT.**—The term "drought" means a deficiency in precipitation—

(A) that leads to a deficiency in surface or subsurface water supplies (including rivers, streams, wetlands, ground water, soil moisture, reservoir supplies, lake levels, and snow pack); and

(B) that causes or may cause—

(i) substantial economic or social impacts; or
(ii) substantial physical damage or injury to individuals, property, or the environment.

(2) **UNDER SECRETARY.**—The term "Under Secretary" means the Under Secretary of Commerce for Oceans and Atmosphere.

SEC. 3. NIDIS PROGRAM.

(a) **IN GENERAL.**—The Under Secretary, through the National Weather Service and other appropriate weather and climate programs in the National Oceanic and Atmospheric Administration, shall establish a National Integrated Drought Information System.

(b) **SYSTEM FUNCTIONS.**—The National Integrated Drought Information System shall—

(1) provide an effective drought early warning system that—

(A) is a comprehensive system that collects and integrates information on the key indicators of drought in order to make usable, reliable, and timely drought forecasts and assessments of drought, including assessments of the severity of drought conditions and impacts;

(B) communicates drought forecasts, drought conditions, and drought impacts on an ongoing basis to—

(i) decisionmakers at the Federal, regional, State, tribal, and local levels of government;

(ii) the private sector; and

(iii) the public,

in order to engender better informed and more timely decisions thereby leading to reduced impacts and costs; and

(C) includes timely (where possible real-time) data, information, and products that reflect local, regional, and State differences in drought conditions;

(2) coordinate, and integrate as practicable, Federal research in support of a drought early warning system; and

(3) build upon existing forecasting and assessment programs and partnerships.

(c) **CONSULTATION.**—The Under Secretary shall consult with relevant Federal, regional, State, tribal, and local government agencies, research institutions, and the private sector in the development of the National Integrated Drought Information System.

(d) **COOPERATION FROM OTHER FEDERAL AGENCIES.**—Each Federal agency shall cooperate as appropriate with the Under Secretary in carrying out this Act.

SEC. 4. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to carry out this Act—

(1) \$11,000,000 for fiscal year 2007;

(2) \$12,000,000 for fiscal year 2008;

(3) \$13,000,000 for fiscal year 2009;

(4) \$14,000,000 for fiscal year 2010;

(5) \$15,000,000 for fiscal year 2011; and

(6) \$16,000,000 for fiscal year 2012.

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Michigan (Mr. EHLERS) and the gentleman from Colorado (Mr. UDALL) each will control 20 minutes.

The Chair recognizes the gentleman from Michigan.

GENERAL LEAVE

Mr. EHLERS. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to include extraneous material on H.R. 5136, as amended, the bill now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Michigan?

There was no objection.

Mr. EHLERS. Mr. Speaker, I yield myself such time as I may consume.

Today, I rise in support of H.R. 5136, the National Integrated Drought Information System Act. I would like to thank Mr. HALL and Mr. UDALL for their leadership on this important legislation. It is truly a bipartisan bill in every way.

Drought is a pernicious disaster. It can creep up on you in the form of pleasantly cloudless days. But once it has arrived it can destroy livelihoods, damage valuable ecosystems, and even threaten human health. The National Oceanic and Atmospheric Administration, better known as NOAA, estimates that we lose approximately \$7 billion each year to this slowly emergent but devastating natural disaster. In 2002, drought killed over three-quarters of all of the Christmas tree saplings in my home State of Michigan. In 2005 and 2006, drought left 60 Michigan counties eligible for the U.S. Department of Agriculture relief programs. And my State got off easy.

Since we cannot manufacture more water, our best defense against this creeping threat is knowledge. We must provide clear and accurate warnings of coming droughts so that we can seek appropriate solutions and take appropriate action. Drought information should include enough details to make it useful to the people who work so hard to manage water resources and minimize the effects of drought on our daily lives. The National Integrated Drought Information System Act seeks to provide just that kind of information.

This bill authorizes the National Integrated Drought Information System, or NIDIS, in NOAA. The system would include a comprehensive drought forecasting and monitoring system and the research and development programs to support it. The bill requires NIDIS to build upon existing forecast and monitoring efforts and to do so in broad consultation with relevant Federal, State, tribal, and local agencies, as well as public and private organizations. H.R. 5136 emphasizes the importance of timely, preferably real-time, drought-related information that reflects local and regional differences in drought conditions.

In summary, this bill gives farmers, utilities, forest managers, waterway operators, tourism companies, reservoir managers, and the general public the tools they need to make thoughtful and informed choices about how to limit the impact of drought on our economy, our environment, and our quality of life.

I am pleased to support H.R. 5136, the National Integrated Drought Information System Act. Again, I commend Mr. HALL and Mr. UDALL for this important and bipartisan legislation; and I urge all my colleagues to support H.R. 5136.