AMENDMENT NO._______ Calendar No._____

Purpose: To provide for Federal coordination of chemistry research and development.

IN THE SENATE OF THE UNITED STATES—114th Cong., 2d Sess.

S. 3084

To invest in innovation through research and development, and to improve the competitiveness of the United States.

Referred to the Committee on ____________ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT intended to be proposed by Mr. UDALL to the amendment (No. _______) proposed by

Viz:

1 On page 53, between lines 3 and 4, insert the following:

3 SEC. 115. FEDERAL COORDINATION OF SUSTAINABLE CHEMISTRY RESEARCH AND DEVELOPMENT.

5 (a) IMPORTANCE OF SUSTAINABLE CHEMISTRY.—It is the sense of Congress that—

7 (1) the science of chemistry is vital to improving the quality of human life and plays an important role in addressing critical global challenges, including water quality, energy, health care, and agriculture;
(2) sustainable chemistry can reduce risk to human health and the environment, reduce waste and improve pollution prevention, promote safe and efficient manufacturing, and promote efficient use of resources in developing new materials, processes, and technologies that support viable long-term solutions;

(3) sustainable chemistry can stimulate innovation, encourage new and creative approaches to problems, create jobs, and save money; and

(4) a coordinated national effort on sustainable chemistry will allow for a greater return on Federal research investment in this space.

(b) NATIONAL COORDINATION FOR SUSTAINABLE CHEMISTRY.—

(1) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Director of the Office of Science and Technology Policy shall convene an entity under the National Science and Technology Council with the responsibility to coordinate Federal programs and activities in support of sustainable chemistry, including, as appropriate, at the National Science Foundation, the Department of Energy, the Department of Agriculture, the Environmental Protection Agency, the National Institute
of Standards and Technology, the Department of
Defense, the National Institutes of Health, and
other related Federal agencies.

(2) CHAIRS.—The entity described in para-
graph (1) shall be chaired by representatives from
the National Science Foundation, the Environmental
Protection Agency, or other agencies, as appropriate.

(3) DUTIES.—

(A) IN GENERAL.—The entity described in
paragraph (1) shall—

(i) develop a working definition of sus-
tainable chemistry, after seeking advice
and input from stakeholders as described
in clause (iv);

(ii) coordinate and support existing
Federal research, development, education,
and training efforts in sustainable chem-
istry;

(iii) develop a strategic plan to guide
Federal programs and activities in support
of sustainable chemistry research, develop-
ment, technology transfer, education, and
training as described in subsection (e), in-
cluding support for public-private partner-
ships; and
(iv) as appropriate, consult and coordinate with stakeholders qualified to provide advice and information on the development of the definition of sustainable chemistry and the strategic plan.

(B) STAKEHOLDERS.—In choosing the stakeholders described in subparagraph (A)(iv), the entity described in paragraph (1) is strongly encouraged to include representatives from—

(i) industry (including small- and medium-sized enterprises from across the value chain);

(ii) the scientific community (including the National Academy of Sciences, scientific professional societies, and academia);

(iii) the defense community;

(iv) State, tribal, and local governments;

(v) State or regional sustainable chemistry programs;

(vi) non-governmental organizations; and

(vii) other appropriate organizations.

(e) STRATEGIC PLAN.—
(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the entity described in subsection (b)(1) shall submit to the Committee on Science, Space, and Technology and the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works and the Committee on Commerce, Science, and Transportation of the Senate, a 5-year strategic plan that shall include—

(A) a summary of Federally funded sustainable chemistry research, development, demonstration, technology transfer, commercialization, education, and training activities;

(B) a summary of the financial resources allocated to sustainable chemistry activities;

(C) an evaluation of best practices and coordination among participating agencies; and

(D) a framework for advancing sustainable chemistry, including strategies for and benefits of Federal support for—

(i) sustainable chemistry research and development conducted at Federal and national laboratories, Federal agencies, and public and private institutions of higher education;
(ii) technology transfer and commercialization of sustainable chemistry, including incentives and impediments to development of sustainable chemicals, best practices, and costs and benefits;

(iii) education and training of undergraduate and graduate students and professional scientists and engineers, including through partnerships with industry, in sustainable chemistry science and engineering;

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

(v) public-private partnerships in support of sustainable chemistry research, development, education, and training.

(2) SUBMISSION TO GAO.—The entity described in subsection (b)(1) shall submit the strategic plan described in paragraph (1) to the Government Accountability Office for consideration in future Congressional inquiries.

(d) SUSTAINABLE CHEMISTRY BASIC RESEARCH.—Subject to the availability of appropriated funds, the Di-
rector of the National Science Foundation shall continue to carry out the Sustainable Chemistry Basic Research program authorized under section 509 of the National Science Foundation Authorization Act of 2010 (42 U.S.C. 1862p–3).