Isotope Charge to NSAC

Nuclear Science Advisory Committee Meeting
April 24, 2014

Dr. T. J. Hallman
Associate Director for Nuclear Physics
DOE Office of Science
Isotope Charge to NSAC

U.S. Department of Energy
and the
National Science Foundation

Dr. Donald Geesaman
Chair
DOE/NSF Nuclear Science Advisory Committee
Argonne National Laboratory
9800 South Cass Avenue
Argonne, Illinois 60439

Dear Dr. Geesaman:

This letter is to request that the Nuclear Science Advisory Committee (NSAC) establish an NSAC Isotope (NSACI) sub-committee to conduct a new study of the opportunities and priorities for isotope research and production. This effort should result in a long range strategic plan for the Department of Energy (DOE) Isotope Program, managed by the Office of Science for Nuclear Physics. It is envisioned that NSACI will be constituted for a period of two years.
Isotope Charge to NSAC

Stable and radioactive isotopes continue to play a critical role in enabling many basic research and applied programs in medicine, industry, and national security. They are vital to the mission of many Federal agencies. The new study by NSACI should articulate the scope and the scientific/technical challenges of isotope research and production today, what progress has been made since the last NSACI sub-committee published its recommendations, and the scientific and societal impacts of these accomplishments and ongoing activities. It should identify and prioritize the most compelling opportunities for the DOE Isotope Program to pursue over the next decade and articulate their impacts.

To be most helpful, the plan should indicate what resources would be needed in the timeframe 2016-2025 to increase the domestic availability of isotopes appropriate to the DOE Isotope Program portfolio and deemed to be critical for the Nation. Important aspects of this assessment should consider: existing technical capabilities and infrastructure, the robustness of current isotope production operations, research and development of production techniques for research and applied isotopes, production of research isotopes, and development of core competencies. As you know, the Isotope Program provides the facilities and capabilities for the production of research and commercial stable and radioactive isotopes only where there is no U.S. private sector capability or when other production capacity is insufficient to meet U.S. needs.
The plan should also consider other aspects of the DOE Isotope Program that are relevant and important to stakeholder communications and the effectiveness in the provision of critical isotopes to the Nation.

We request that you submit an interim report containing the essential components of NSACI’s recommendation to the DOE, followed by a final report by March 2015. We appreciate NSAC’s willingness to take on this vitally important task, and look forward to receiving its report.

Sincerely,

Patricia M. Dehmer
Acting Director
Office of Science

F. Fleming Crim
Assistant Director
Directorate for Mathematical and Physical Sciences