

Radiochemistry and nuclear chemistry workforce in the United States

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The disciplines of radiochemistry and nuclear chemistry have direct applications in the fields of national security, nuclear medicine, nuclear power production, and environmental management. Although, often, nuclear and radiochemistry are grouped together and many experts work in both areas, the definition for each field is slightly different. For example, radiochemistry may be defined as the application of the phenomena of radioactive decay and techniques common to nuclear physics so as to solve problems in the field of chemistry. In contrast, nuclear chemistry may be defined as the application of procedures and techniques common to chemistry to study the structure of the atomic nucleus. This chapter provides a brief update of the current state of, and critical U.S. needs for, nuclear chemistry and radiochemistry expertise as the *Assuring a Future U.S.-Based Nuclear and Radiochemistry Expertise* report was published by National Academy of Sciences (NAS) in 2012.¹

USTUR-0596-21

1 National Academy of Sciences. *Assuring a Future US-Based Nuclear and Radiochemistry Expertise*. National Academies Press; 2012.