

Preface

The idea to document the discovery of all isotopes was not an ad hoc decision, but it developed over several years. In 2003, I was asked to write a review article about the drip-lines which was published a year later (Rep. Prog. Phys. **67** (2004) 1187). The article contained tables of the most neutron- and proton-rich known nuclides at the drip-lines covering elements from magnesium through berkelium and from beryllium through calcium for the proton- and neutron-rich nuclides, respectively.

In the fall semester of 2007, I gave Josh Ginepro—an undergraduate student in the Professorial Assistantship Program of the Honors College (PAPHC) at Michigan State University—the task to search the Nuclear Science References (NSR) data base of the National Nuclear Data Center (NNDC) for the earliest experimental papers for all isotopes. In the following summer four undergraduate students from the Research Experience for Undergraduates (REU) program and one student from the MSU High School Honors Science Program each selected one element and wrote short paragraphs describing the discovery of its isotopes. Only then did we realize the momentous task of covering all of the almost 3000 isotopes of the 118 elements.

For each element these paragraphs were subsequently published in a series of papers in Atomic Data and Nuclear Data Tables. In the following years several other MSU as well as REU students contributed to the project and the last manuscript was submitted in November 2011 and published in 2013.

A summary of the project has been published in another review article in 2013 covering all discoveries until the end of 2012 (Rep. Prog. Phys. **76** (2013) 056301). An overview of the project and the latest discoveries are available online: <http://www.nscl.msu.edu/~thoennes/isotopes/>.

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