To: Unicode Technical Committee

From: Tamara Lopez (Programmer/Analyst)

Date: 30 October 2006

RE: Proposal on Newton Symbols

Dear Sir or Madam:

I am Tamara Lopez, the project manager and developer for the Chymistry of Isaac Newton, a digital humanities project at Indiana University

(http://www.dlib.indiana.edu/collections/newton). The Chymistry of Isaac Newton is producing a scholarly online edition of Isaac Newton's alchemical manuscripts as one part of an integrated project that includes new research on Newton's chymistry. Currently, the project focus is to build a repository of XML encoded transcriptions with page images.

I am writing to inform you of work we are doing to propose the addition of alchemical symbols to the Unicode standard. Like other alchemists, Isaac Newton made use of symbols in his writings, representing the known metals with planetary symbols and employing other icons to represent common substances such as sal ammoniac, salt of tartar, and vitriol. In addition, Newton created many of his own symbols to represent alchemical concepts. We propose to add to Unicode only those symbols used both by Newton and other alchemists in order to facilitate the development of tools like ours and others working with historical and modern alchemical texts.

Our progress to-date includes the identification, tentative labeling and assignment to Private Use Area codepoints of symbols found in the 700 manuscript pages the project has so far transcribed. In addition, research performed by the principal investigator for the project, Professor William Newman, and other scholars (Boas, M. & Hall, A.R. Newton's Chemical Experiments. *Archives internationales d'histoire des sciences*, 1958, pp. 113-152.) has been used to distinguish standard symbols from Newton's own inventions. Finally, we are using a modern lexicon (Schneider, W. *Lexikon alchemistisch-pharmazeutischer Symbol*. Verlag Chemie, GmbH. 1962.) and an index (Lüdy-Tenger, F. *Alchemistische und chemische Zeichen*. Jal-Reprint: Würzurg, 1973.) to corroborate our analysis and to derive non-Newtonian examples for our formal proposal.

Outstanding tasks include completing an examination of Newton's remaining alchemical texts to locate additional symbols and drafting and reviewing the proposal document. We anticipate that we will be able to complete this work in 2007, with a goal to produce a draft for committee review by May or June of next year.

Please feel free to contact me directly with any questions about our project or this effort.

Regards,

Tamara

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