

Immediate Release

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DULUTH--An article by Dr. Henry Lepp, UMD professor of geology, on "The Relation of Iron and Manganese in Sedimentary Iron Formations" is carried in the current issue of Economic Geology, the publication of the International Society of Economic Geologists.

The report reviews a study of iron formations made by Dr. Lepp and former UMD students William Groke, John Haigh and Lee Warren, all of Duluth, under a National Science Foundation (NSF) grant.

Purpose of the study was to determine whether the degree of separation of iron and manganese might be a clue to the original nature of an iron formation and to the chemical conditions which produced it.

"Preliminary findings indicate that the earth has acquired more oxygen since the Lake Superior iron formations were found and a separation of iron and manganese has resulted," according to Dr. Lepp. "In the Lake Superior region, iron and manganese appear together in the same proportion in which they exist in the earth's crust."

Under a new \$21,500 NSF grant announced last December, Dr. Lepp and his assistants have started a detailed study of the distribution of manganese in the Mesabi and Cuyuna iron ranges in Minnesota. It is hoped that selected samplings will reveal more clues as to the origin of iron formations and, also, where to look for additional manganese ores which the U. S. must import for the production of steel alloys.