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## Characterization of a Cu selective extraction chromatographic resin

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Cu isotopes (e.g. Cu-64) increasingly find use in radiopharmaceutical applications, accordingly fast and reliable methods for the production of these isotopes are needed. Aim of the presented project is the characterization of a Cu selective extraction chromatographic resin for the fast and selective separation of Cu radionuclides e.g. from irradiated Ni targets. The characterization of the resin includes the determination of  $k'$  values of Cu, Ni and other potentially interfering elements and impurities for varying acids and pH values, the influence of macro amounts of Ni on the extraction of Cu as well as the influence of other potential interferents. Based on the obtained results a method for the separation of Cu, and its purification, from irradiated Ni targets was developed and tested on simulated Ni targets.

**Primary authors:** Ms DIRKS, Carina (Radiochemie, FB Chemie, Philipps-Universität Marburg, Marburg, Germany); Dr HAPPEL, Steffen (TrisKem International)

**Co-authors:** Mr ZULAUF, Alexander (Radiochemie, FB Chemie, Philipps-Universität Marburg, Marburg, Germany); Prof. JUNGCLAS, Hartmut (Radiochemie, FB Chemie, Philipps-Universität Marburg, Marburg, Germany)

**Presenter:** Dr HAPPEL, Steffen (TrisKem International)

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