

E I N L A D U N G

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S E M I N A R V O R T R A G

von

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**Novel concepts for using stable isotope techniques in  
mineral and trace element nutrition research**

Over the past decades, isotopic techniques established themselves as indispensable tools to study mineral and trace element metabolism *in vivo*. However, the potential of isotopic techniques has yet not been fully explored. Recent developments in inorganic mass spectrometry (RIMS, AMS, MC-ICP-MS and TIMS) have opened up new possibilities in this field of research including

- magnesium absorption studies in humans based on the incorporation of stable isotope labels into red blood cells
- labelling of bone calcium using  $^{41}\text{Ca}$  and  $^{84}\text{Sr}$  to monitor calcium losses from the skeleton
- iron isotope variations in the human body as a new tool to identify long-term differences in iron metabolism between individuals

The interdisciplinary nature of the research subject will address the interests of the different research areas involved (mass spectrometry, human nutrition and medicine).

**Donnerstag, 20. März 2003, 16:30 Uhr**

**1090 Wien, Währingerstr. 17, "Kavalierstrakt",  
1. Stock, Seminarraum von VERA**