

UNIVERSIDAD DE CHILE  
FACULTAD DE CIENCIAS FISICAS Y MATEMATICAS  
DEPARTAMENTO DE GEOLOGIA

Edición especial  
III SOUTH AMERICAN SYMPOSIUM  
ON ISOTOPE GEOLOGY

Abbreviated Abstracts Volume

Edited by  
Andrew Tomlinson

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## CONVENTIONAL LEACHING TECHNIQUE AND PARTIAL DIGESTION IN MICROWAVE OVEN: TREATMENT PROCEDURES FOR U-Pb DATING OF OVERGROWN ZIRCON RIMS BY THERMAL IONIZATION MASS SPECTROMETRY (TIMS)

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This article presents the results of U-Pb dating of overgrown zircon rims, using conventional leaching techniques and partial digestion in microwave oven as sample preparation methods. The ages obtained cluster around 2300 Ma and are close to those obtained by other techniques such as Evaporation and SHRIMP. For metamictic and microfractured zircons the ages obtained are interpreted as resulting from mixtures between rim and core leachates. The ages of the final fractions (around 3000 Ma) indicate the age of the cores of the crystals and in this case are close to those obtained for grains that did not undergo any type of abrasion. This age is interpreted as an average age, as the ages obtained by SHRIMP indicate multiple events occurring during the Archean between 3080 and 2900 Ma. It was observed that the  $^{207}\text{Pb}/^{235}\text{U}$  and  $^{206}\text{Pb}/^{238}\text{U}$  ratios in a general way show for the first leached fractions a reverse discordance that soon after becomes a normal discordance for the final portions. This reverse discordance was also verified for some zircons using SHRIMP.