Foreword to the special issue on I Reunión Argentina de Geoquímica de la Superficie (I RAGSU) (First Argentine meeting on geochemistry of the earth's surface)

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Received: 2 March 2011 / Accepted: 23 August 2011 / Published online: 6 September 2011
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Geochemical understanding can be traced as far back as prehistory with the development of bronze and iron tools. This initiated a path that eventually led to the current knowledge on metal identification and processing. The geochemical discipline, however, has its origin hand-in-hand with geological science; first, during the 19th century when analytical chemistry and later physical chemistry promoted the superlative geochemical knowledge growth seen today.

As is generally known, there are a number of diverse specialties within the wide field encompassed by geochemistry. One of them is the geochemistry of earth's surface processes, which is mainly oriented to understand the chemical mechanisms that take place in the “critical zone”, the relatively thin layer where the interaction of the atmosphere, biosphere, hydrosphere, and lithosphere, takes place. On the other hand, the current environmental crisis has triggered a large number of scientific studies worldwide, which mainly seek to unveil anthropogenic environmental problems and find corrective measures to minimize undesirable impacts.

The first meeting, I RAGSU, was envisioned to probe into the geochemical nature of the processes occurring on the surface of the earth and took place at the city of Córdoba (Argentina), between the 27th and the 30th of September, 2009. The meeting was hosted by Argentina's Academia Nacional de Ciencias (<http://www.acad.uncor.edu/>) and was jointly organized by the Academy and the Centro de Investigaciones en Ciencias de la Tierra (CICTERRA, <http://www.cicterra-conicet.gov.ar/>) and the

Centro de Investigaciones Geoquímicas y de Procesos de la Superficie (CIGeS, <http://www.efn.unc.edu.ar/investigacion/ciges/>). Although organized by earth scientists, the goal was to assemble as many environmental scientists as possible (e.g., biologists, agronomists, chemists, geologists).

Almost 90 scientists and advanced students attended the meeting at Argentina's Academia Nacional de Ciencias. Sixty-two research papers were presented, either as oral presentations (27) or as posters (35). Initially conceived as a national get-together of Argentine surface geochemists, it was expanded to include attendees from neighboring nations (e.g., Brazil, Chile), Europe (France, Switzerland), and the Americas (e.g., USA, Venezuela). Daniel Ariztegui (University of Geneva, Switzerland); Jay A. Brandes and Herbert L. Windom (Skidaway Institute of Oceanography, Savannah, Georgia, USA); Luis Felipe Niencheski (FURG, Rio Grande, Brazil); Sandor Muslow (Universidad Austral de Chile, Concepción, Chile); and Christine Vallet-Coulomb (Aix-Marseille Université, Aix en Provence, France) were in charge of six key presentations.

Seven oral and poster presentations covered the following topics: (1) environmental geochemistry, (2) hydrogeochemistry, (3) biogeochemistry, (4) marine geochemistry, (5) isotopic geochemistry, (6) sedimentary and soil geochemistry, (7) analytical geochemistry.

Within the framework of the meeting, three short actualization courses were given: “Introduction to weathering processes”, “Geochemistry of the solid–liquid interface”, and “Biogeochemistry: origins and global cycles”.

Discussions were interesting and lively, and the initial icebreaker as well as the final dinner gave the opportunity to exchange views, socialize, and program future joint-ventures. I RAGSU was the initial step in what is visualized as the beginning of a long sequence of regional

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meetings. Moreover, II RAGSU will take place in Bahía Blanca (Argentina) in 2012.

In this issue of Environmental Earth Sciences, a series of papers have been gathered from authors that prepared manuscripts and were willing to submit them to the peer-

review process. Finally, the editors would like to thank Jim LaMoreaux, Editor-in-Chief of Environmental Earth Sciences for his willingness to support the production of this issue of journal.