

**Scientific Basis for Nuclear Waste  
Management XXXV**

MATERIALS RESEARCH SOCIETY  
SYMPOSIUM PROCEEDINGS VOLUME 1475

# Scientific Basis for Nuclear Waste Management XXXV

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## PREFACE

These are proceedings from the 35<sup>th</sup> Symposium on the Scientific Basis for Nuclear Waste Management that was held on 02-07 October 2011 in Buenos Aires, Argentina. About 180 participants from 25 countries were registered to attend the Symposium, which featured 147 presentations including oral and posters, covering: national research programs; advanced fuel cycles; behavior of spent nuclear fuel; nuclear waste glasses and vitrification; ceramic wasteforms; engineered barrier systems and the near field; cementitious wasteforms; geological disposal; container corrosion; wasteform performance and natural analogues; migration and colloids. The last day of the meeting was dedicated to a visit to the site of the construction of the Atucha II nuclear power plant.

The success of the 35<sup>th</sup> Symposium and the publication of this volume, which contains 93 peer reviewed manuscripts, is the result of contributions from many people. We thank the session Chairs for their assistance in delivering the Symposium: Elvira Maset, Christophe Poinssot, Rod Ewing, Damien Féron, Peter Swift, David Shoesmith, Michael Ojovan, Neil Hyatt, Boris Burakov, Pablo Zuloaga, Tito Bonano, Lara Duro, and Claude Degeldre. We are grateful to our hard working local committee including Silvia Farina, Martín Rodríguez, Alejandro Arva, Mauricio Rincón Ortiz, Fátima Schulz, María Laura Ungaro, Damián Vázquez, Mabel Giordano, Natalia Zadorozne, Santiago Sosa Haudet, Cristina Delfino, Domingo Trucco, and Roberto Haddad. We especially thank Laura Baez, who designed and maintained the beautiful web page of the Symposium. We are grateful to Fundación Balseiro who handled the always difficult overseas payments. We also thank Summit Travel for their high quality and impeccable organization of the technical and social events in downtown Buenos Aires.

We wish to record our particular thanks to Chairman Neil C. Hyatt and the Scientific Basis for Nuclear Waste Management Symposium Steering Committee for their unwavering support. Finally, we gratefully acknowledge the generous support of our main Symposium sponsors, including:

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Consejo Nacional de Investigaciones Científicas y Técnicas (Argentina)  
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We are dedicating this volume to the memory of Gustavo A. Cragolino who was a passionate participant of these Symposia series for many years.



We look forward to meeting again in Boston in December 2012 for the 36<sup>th</sup> Symposium and in Barcelona in October 2013 for the 37<sup>th</sup> Symposium.

Ricardo M. Carranza

Gustavo S. Duffó

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February 2012

## MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS

- Volume 1371 — Nanostructured Materials and Nanotechnology, C. Gutiérrez-Wing, J.L. Rodríguez-López, O.A. Graeve, J.J. Boeckl, P. Soukiassian, 2012, ISBN 978-1-60511-348-7
- Volume 1372 — Structural and Chemical Characterization of Metals, Alloys, and Compounds — 2011, R. Pérez Campos, A. Contreras Cuevas, R.A. Esparza Munoz, 2012, ISBN 978-1-60511-349-4
- Volume 1373 — Advanced Structural Materials — 2011, H.A. Calderon, A. Salinas Rodriguez, H. Balmori Ramirez, 2012, ISBN 978-1-60511-350-0
- Volume 1374 — Cultural Heritage and Archaeological Issues in Materials Science, J.L. Ruvalcaba Sil, J. Reyes Trujeque, A. Velazquez Castro, M. Espinosa Pesqueira. 2012, ISBN 978-1-60511-351-7
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