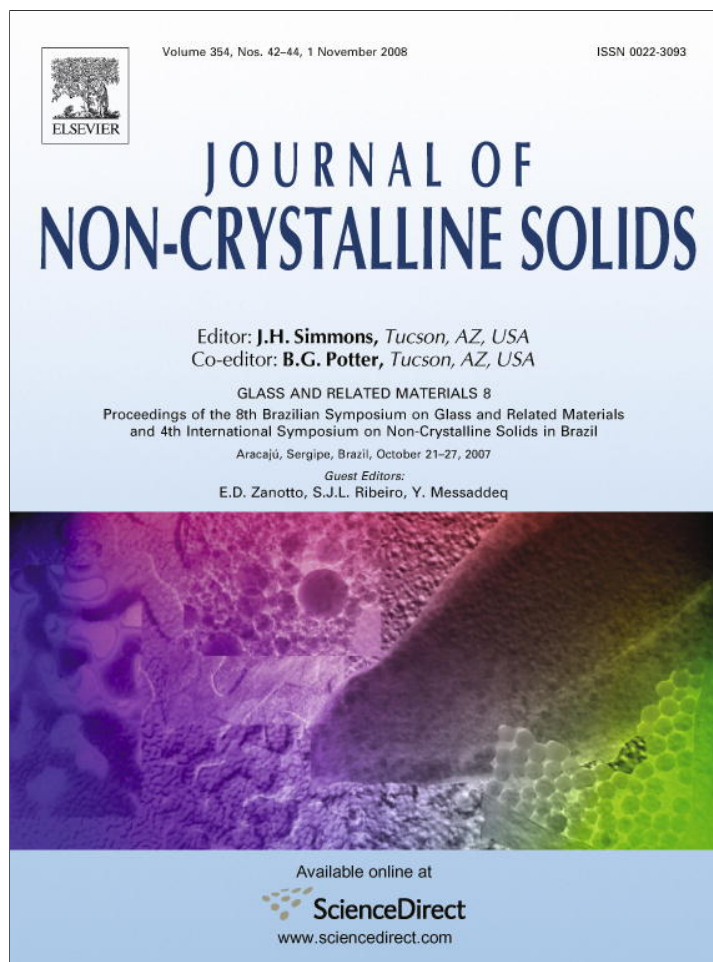


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# Journal of Non-Crystalline Solids

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## Preface

The 4th International Symposium on Non-Crystalline Solids and the 8th Brazilian Symposium on Glass and Related Materials (ISNCS 2007) were held in the beautiful city of Aracajú, state of Sergipe, Brazil, from October 21 to 27, 2007.

This series of symposia was started by Professor Shigueo Watanabe back in 1995. Originally organized as a national meeting, the Brazilian Symposium on Glass and Related Materials acquired an international profile in 2001, when it was organized jointly with the 1st International Symposium on Non-Crystalline Solids. The list of previous meetings is:

- 1st Brazilian Symposium (1995): Águas de Lindóia, SP, chaired by Prof. Shigueo Watanabe;
- 2nd Brazilian Symposium (1996): Florianópolis, SC, held jointly with the 5th International Symposium on Glass Crystallization, chaired by Professor Edgar D. Zanotto;
- 3rd Brazilian Symposium (1998): Bonito, MS, chaired by Professor Younes Messaddeq;
- 4th Brazilian Symposium (1999): Ouro Preto, MG, chaired by Professor Wander L. Vasconcelos;
- 5th Brazilian Symposium (2001): Foz do Iguaçu, PR, held jointly with the 1st International Symposium on Non-Crystalline Solids in Brazil, chaired by Professor Valmor R. Mastelaro;
- 6th Brazilian Symposium (2003): Campos do Jordão, SP, held jointly with the Annual Meeting of the ICG and the 2nd International Symposium on Non-Crystalline Solids, chaired by Professor Edgar D. Zanotto; and
- 7th Brazilian Symposium (2005): Maringá, PR, held jointly with the 3rd International Symposium on Non-Crystalline Solids, chaired by Professor Mauro L. Baesso.

At the first symposium, in 1995, approximately 80 communications were presented. By the seventh event (2005), this number had expanded to about 220. While delegates from only four countries participated in 1995, scientists from 20 countries attended the 8th symposium in Aracajú in 2007. The scientific program was based on 13 topics covering important subjects of glass science and technology and related applications: glass science, glass structure, glass formation and crystallization, glass properties, glass surfaces, sol-gel glasses, bioglasses, non-oxide glasses, glass-ceramics, optical fibers, metallic glasses, environmental issues (recycling, residues), and miscellaneous topics.

One keynote lecture, 39 invited talks, 40 oral presentations and more than 200 posters were presented over four days. More than 280 contributions were received from about 1000 authors in 20

different countries. Special issues of the Journal of Non-Crystalline Solids (JNCS), containing selected papers presented in the symposia, have been published since the third meeting held in 1998. This strategy was of the utmost importance to emphasize the international profile of this series of symposia. The state of the art and future challenges were addressed in Aracajú by a considerable number of invited scientists from all over the world; this has proved to be a key to the success of these meetings. Nevertheless, the presence of a significant number of young researchers and students has always been emphasized to ensure the productive and brilliant future of glass research in Brazil.

This special issue of the Journal of Non-Crystalline Solids contains 37 selected papers, which have been subjected to the usual peer review process. The reader will find the contents broad in scope and up to date, covering a plethora of aspects from the preparation and characterization of non-crystalline solids to new developments, including nanoscale phenomena and bioglasses. Fourteen years after its first edition, the substantial increase in the number and breadth of the international attendance and the presented papers has established this meeting on the agenda of the international glass community.

Special thanks are due to the São Paulo State University – UNESP, the Federal University of Sergipe – UFS, the local organizing committee, the advisory board, and the numerous on-site assistants for their tireless efforts in preparing this world-class event. Financial support from the Brazilian agencies CNPq (National Council for Scientific and Technological Development), CAPES and FAPESP is also acknowledged.

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