

Encontro da X SBPMat

Gramado-RS

25 to 29 | september
2011

Conference Details and Registration

All attendees are encouraged to visit the conference website <http://www.sbpmat.org.br/x-meeting> for further and updated information such as registration, submission of abstracts, important links for traveling (visas, travel agencies) and hotel reservation.

Symposia

- A) Magnetic and Superconducting Materials
- B) Biodegradable Polymer Materials
- C) Electronic Materials
- D) Surface Engineering: Fabrication, Characterization, Properties and Applications of Protective Coatings and Modified Surfaces
- E) Materials with Negative Properties
- F) Nanostructured Functional Materials for Advanced Energy and Environmental Applications
- G) Molecular Modeling Materials Science
- H) Structure-property Relationship of Advanced Metallic Materials
- I) Sol-gel Route to Prepare New Inorganic, Hybrid and Multifunctional Materials
- J) Solidification of Metals and Alloys
- K) Supramolecular Organic Materials for Electronic, Photonics and Nanotechnology
- L) Structure-Property Relationship of Ceramic Materials: Theoretical and Experimental Aspects
- M) Advances and Applications of Electron Microscopy
- N) Prospects for Materials Science with Synchrotron Radiation in Brazil
- O) 1st Brazilian Symposium in Friction Stir Welding and Processing Graphene

Official Travel Agency: Liga Turismo

Agency provides excellent hosting, airline tickets (20% discount), Gramado-PoA airport shuttle options and sightseeing suggestions.

Liga Turismo also provides travel-hosting-tour combo options! Get in touch!

Phone: +55 51 3085-4466 or +55 54 3286-4048
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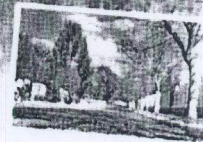
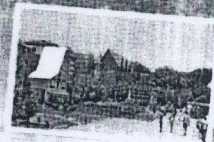
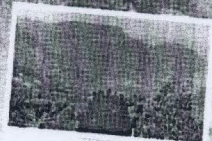


X Brazilian
MRS Meeting

SBPMat
Brazil-MRS

Brazilian Materials
Research Society

X Brazilian MRS Meeting



16 symposia with oral, poster and invited lecture presentations

Plenary lectures

Exhibits

Celebration of 10 years of Brazilian MRS

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*10 years of excellence in
the congregation of science
and research in materials
technology in Brazil*

Contact

Secretariat
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(55) (51) 3231-0311

Conference Chairs

Paulo F. P. Fichtner - UFRGS - RS
Naira M. Balzaretto - UFRGS - RS

Important Dates

April, 5th - Registrations open
May, 30th - Submissions deadline
June, 13th - Acceptance

Support


UFRGS
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CAPES


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FAPESP

Credit of photos: Leonid Streltsov

Multicomposites of Dendrimers and Vanadium Pentoxide Nanostructures: application as pH sensors

A. Figueiredo, N.C.S. Vieira, W. Avanci Jr., C. Ribeiro, V. R. Mastelaro, V. Zucolotto and F.E.G. Guimarães

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Vanadium pentoxide (V_2O_5) is a conducting oxide with interesting physical chemical properties to be applied as catalyst material, electrochromic devices, or sensors. Nanostructures of V_2O_5 have been obtained from various methods and used to construct LbL composites combined with linear polymers as polyaniline or chitosan to form electroactive materials [1, 2]. This study describes the fabrication of LbL films based on PAMAM and nanostructures of V_2O_5 synthesized by a hydrothermal route which possibilities the control of intrinsic oxide characteristics [3]. Electrostatic layer by layer (LbL) was employed to construct the PAMAM/ V_2O_5 nanostructures multicomposites. PAMAM/ V_2O_5 multicomposites were applied as pH sensor in FET based devices presenting Nernstian behavior. Further applications comprise enzyme FET-Based biosensors using immobilized enzymes.

Keywords: Biosensor, Vanadium Pentoxide, LbL

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[1] M. Ferreira, V. Zucolotto, et al. *Journal of Nanoscience and Nanotechnology* **2**, 1 (2002).

[2] F. Huguenin, D. S. dos Santos, et al. *Advanced Functional Materials* **14**, 10 (2004).

[3] W. Avansi Jr, C. Ribeiro, et al *Crystal Growth & Design* **9**, 8 (2009).

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