



Scientific  
Instrument  
Commission



Ministério da  
Ciência, Tecnologia  
e Inovação



XXXI Symposium of the Scientific Instrument Commission

08-12 October 2012

Museum of Astronomy and Related Sciences; Ministry of Science, Technology  
and Innovation

Rio de Janeiro

Brazil

## - Programme -

**Monday, 08 October**

08.30 Buses to MAST

09.00 Registration  
Welcome coffee

10.00 Opening Session  
[National Observatory Auditorium]  
Marco Antonio Raupp, Ministry of Science, Technology and Innovation  
Maria Margaret Lopes, Director, Museum of Astronomy and Related Sciences/MCTI  
Paolo Brenni, President, Scientific Instrument Commission  
Marcus Granato, Chair SIC 2012, Museum of Astronomy and Related Sciences/MCTI

10.30 Welcome Note  
[National Observatory Auditorium]  
*Use and circulation of scientific instruments*  
Sílvia Figueirôa (UNICAMP/Brazil)  
Chair: Maria Margaret Lopes (MAST)

12.00 Lunch

Session 1 (plenary) - Instruments at the Heart of Global and National Politics  
Chair: Paolo Brenni, Fondazione Scienza e Tecnica, Italy  
[National Observatory Auditorium]

13.20 *Magnificent Instruments for a Magnificent King: mathematical instruments in the  
library of João V, Lisbon*  
Luís Tirapicos, Centre for the History of Science, University of Lisbon

13.40 *Instruments in Transit - The Santo Ildefonso Treaty and the Brazilian Border  
Demarcations*  
Isabel Malaquias, University of Aveiro

14.00 *Between Education and Politics: the transfer of the 'Ajuda Royal Cabinet of  
Physics' from Lisbon to Rio (1810-1812)*  
Marta C. Lourenço, Museums of the University of Lisbon  
Samuel Gessner, Centre for the History of Science, University of Lisbon

David Felismino, Museums of the University of Lisbon

- 14.20 *Province Engineers and the Use of Scientific Instruments during the Construction Process of Bridges and Roads in Minas Gerais (1835-1889)*  
Télio Cravo, University of São Paulo (Social History Postgraduate Program)
- 14.40 *The Use of the Laussedat's Phototheodolite in Brazil-Argentina Border in the Early Twentieth Century*  
Bruno Capilé, Museum of Astronomy and Related Sciences  
Moema de Resende Vergara, Museum of Astronomy and Related Sciences
- 15.00 Discussion (30 min)
- 15.30 **Coffee-Break**
- Session 2 (plenary) - Instruments Across the Atlantic: Astronomy instruments and astronomical observatories**  
Chair: Marta Lourenço, Museums of the University of Lisbon, Portugal  
[National Observatory Auditorium]
- 16.00 *Telescopes in Colonial & Federal America, 1620-1820*  
Sara Schechner, Harvard University
- 16.20 *America's Earliest Astronomical Institution: Georg Marcgraf's Observatory in Dutch Brazil (1638-1643) A. The setting, building, instruments, usage and importance*  
Oscar Toshiaki Matsuura, Museum of Astronomy and Related Sciences
- 16.40 *America's Earliest Astronomical Institution: Georg Marcgraf's Observatory in Dutch Brazil (.1638-1643) B. Recife's astronomical instruments and their relation with Marcgraf's earlier training at Leiden Observatory*  
Huib J. Zuidervaat, Huygens Institute for the History of the Netherlands
- 17.00 *Heaving a Little Ballast: seaborne astronomy in the late-eighteenth century*  
Richard Dunn, Royal Museums Greenwich
- 17.20 Discussion (30 min)
- 17.50 **Visit to MAST**  
Marcus Granato, MAST, MCTI
- 19.30 **Welcome Cocktail**
- 21.00 **Buses to Catete**

## **Tuesday, 09 October**

- 08.30 **Buses to MAST**
- Session 3 (plenary) - Instruments Across the Atlantic: An overview of exchanges through time**  
Chair: Sara Schechner, Harvard University, USA  
[National Observatory Auditorium]
- 09.30 *Between America and Europe: medical-surgical knowledge in transit (seventeenth and eighteenth century)*  
Roberto Poletto, UNISINOS (Postgraduate Program)

- 10.00 *The Use of Useless Instruments: The gnomonic inventions by V. Estancel (S.J.) in transit through the Portuguese empire (1650 - 1680)*  
Samuel Gessner, Centre for the History of Science, University of Lisbon
- 10.20 *Scientific Instruments in the Eighteenth Century Philosophical Travels*  
Alex Varela, Museum of Astronomy and Related Sciences
- 11.40 *Scientific Instruments Across the Atlantic Ocean: their identification and cultural symbologies in Rio de Janeiro according to Brazilian literature and journalistic reports (1850-1930)*  
Ricardo M. Figueiredo Filho, Federal University of Minas Gerais (History Postgraduate Program)
- 11.00 *On Creating International Markets for American Scientific Instruments in the Nineteenth Century*  
Richard L. Kremer, Dartmouth College
- 11.20 Discussion (20 min)
- 11.40 **Group Photo (MAST main historical building)**
- 12.00 **Lunch**
- 13.30 **Buses to technical visit 1**
- 14.00 **Visit to Museu Nacional**  
Claudia Rodrigues Carvalho and Luiz Fernando Duarte
- 15.30 **Buses to technical visit 2**
- 16.00 **Visit to Museu Histórico Nacional - MHN**  
Vera B. Tostes and Beatriz Caldeira
- 18.00 **Buses - return to Catete**

### **Wednesday, 10 October**

- 08.30 **Buses to MAST**
- 09.30 **Conference 1**  
**[MAST Auditorium]**  
**The 'Instrument of the Indies'. Lunar Eclipses and Longitude in the 16th c. Spanish Empire**  
María Portuondo, Johns Hopkins University, USA  
Chair: Christina Barboza, Museum of Astronomy and Related Sciences, Brazil
- 10.30 Discussion (30 min)
- Session 4 - Instruments and Collections Studies I**  
Chair: Marcio Rangel, Museum of Astronomy and Related Sciences, Brazil  
**[MAST Auditorium]**
- 11.00 *The So-Called "Chaucer Astrolabe": the Italian tale of a medieval English instrument*  
Giorgio Strano, Museo Galileo
- 11.15 *The Role Played by Mathematical Instruments in Renaissance Music Treatises*

Carla Bromberg, Simão Mathias Center of Studies in History of Science, Pontifical Catholic University of São Paulo

- 11.30 *Between Natural and Artificial: the nature of the distillation apparatuses in sixteenth century natural magic*  
Fumikazu Saito, Pontifical Catholic University of São Paulo
- 11.45 *Knowing and Doing Mathematics in the Seventeenth Century: a preliminary study on John Browne's triangular quadrant*  
Ana Rebeca Miranda Castillo, Pontifical Catholic University of São Paulo  
Fumikazu Saito, Pontifical Catholic University of São Paulo
- 12.00 *And Then There Were None: a review of John Dee's scientific instruments and their subsequent disappearance*  
Louise Devoy, British Museum

12.15 Discussion (30 min)

**Session 5 - Teaching Cabinets: instruments and the history of education (Parallel Session)**

Chair: Peter Heering, University of Flensburg, Germany

[Graduate Classroom (MAST building)]

- 11.00 *The Collection of Scientific Instruments of the Colégio Marista Arquidiocesano Museum in São Paulo*  
Katya Mitsuko Zuquim Braghini, School of Education, Federal University of Minas Gerais
- 11.15 *The Set of Physics Teaching Instruments at Pedro II High School, Rio de Janeiro, Brazil*  
Marcus Granato, Museum of Astronomy and Related Sciences  
Liliane Bispo dos Santos, Museum of Astronomy and Related Sciences
- 11.30 *Materials for Sciences' Teaching in Brazil: the case of Culto à Ciência high school of Campinas/São Paulo State, Brazil - 1899/1902*  
Reginaldo Meloni, São Paulo Federal University
- 11.45 *Scientific instruments in the Teaching of Physics in Brazilian Secondary Schools from 1931 to 1961*  
Maria Cristina de Senzi Zancul, São Paulo State University (UNESP)  
Elton de Oliveira Barreto, São Paulo State University (Master course in School Education)
- 12.00 *The Electrostatic Machines in the UFRJ Polytechnic School Museum*  
Antonio Carlos Moreirão de Queiroz, Polytechnic School, Federal University of Rio de Janeiro
- 12.15 *Preserving the Scientific and Technical Heritage of Education: the 'ASEISTE'*  
Francis Gires, Association de Sauvegarde et d'Etude des Instruments Scientifiques et Techniques de l'Enseignement  
Pierre Lauginie, Université Paris-Sud
- 12.30 Discussion (30 min)
- 13.00 **Lunch**

**Session 6 - Instruments and Collections Studies II**

Chair: Maria Lucia de Niemeyer M. Loureiro, MAST, Brazil

[MAST Auditorium]

- 14.00 *Photographing Microscopic Preparations in the Nineteenth Century: techniques and instrumentation*  
 Maria Estela Jardim, Centre for Philosophy of Science, University of Lisbon  
 Marília Peres, Centre for Molecular Sciences and Materials, University of Lisbon
- 14.15 *The Trajectory of the Telescope T. Cook & Sons in teaching and research in the Valongo Observatory*  
 Maria Alice Ciocca de Oliveira, Valongo Observatory, Federal University of Rio de Janeiro  
 Rundsthen V. Nader, Valongo Observatory, Federal University of Rio de Janeiro
- 14.30 *The Gas Chromatograph - Trajectory of Chromatography in Brazil*  
 Valeria Freitas, Museum of Astronomy and Related Sciences  
 Marcio Rangel, Museum of Astronomy and Related Sciences
- 14.45 *How Experiments Drag on - An Analysis of Pieter Zeeman's Apparatus for Measuring the Fizeau-Effect in Solids at the Museum Boerhaave, Leiden*  
 Beto Pimentel, Federal University of Rio de Janeiro  
 Ad Maas, Museum Boerhaave
- 15.00 *Drummond Light, Limelight*  
 Pierre Lauginie, Université Paris-Sud  
 Francis Gires, Association de Sauvegarde et d'Etude des Instruments Scientifiques et Techniques de l'Enseignement
- 15.15 *Surveying Results of Sets and Collections of Artifacts Related to Brazilian Federal Universities*  
 Marcus Granato, Museum of Astronomy and Related Sciences  
 Elias da Silva Maia, Museum of Astronomy and Related Sciences  
 Fernanda Pires Santos, Museum of Astronomy and Related Sciences  
 Glória Gelmini de Castro, Federal University of the State of Rio de Janeiro (Museology undergraduate course)  
 Mariana S. Damasceno, Federal University of the State of Rio de Janeiro (Museology undergraduate course)
- 15.30 Discussion (30 min)
- Session 7 - Scientific Instruments and the Understanding of Scientific Ideas (Parallel Session)**  
 Chair: Adriana Mortara, History Museum of Instituto Butantan, Brazil  
 [Graduate Classroom (MAST building)]
- 14.00 *Benjamin Martin: itinerant lecturer of Newtonian natural philosophy and scientific instrument maker in eighteenth-century England*  
 Luiz Carlos Soares, Fluminense Federal University
- 14.15 *Balancing Light and Heat - Rumford's Experiments with the Thermoscope and the photometer*  
 Peter Heering, University of Flensburg
- 14.30 *Scientific Objects and the Perception of Historical Time*  
 Ricardo Aguiar Pacheco, Federal Rural University of Pernambuco
- 14.45 *Filming Nineteenth Century Physics Demonstrations with Historical Instruments*  
 Paolo Brenni, Fondazione Scienza e Tecnica
- 15.00 *Stepping into the Past to Understand Time: explorations with astrolabes, clocks, and observation*  
 Elizabeth Cavicchi, Edgerton Center, MIT

- 15.15 *The Good, The Bad and The Pretty: diffraction gratings in museums*  
Tacye Phillipson, National Museums Scotland
- 15.30 Discussion (30 min)
- 16.00 **Coffee-Break**
- 16.30 **Conference 2**  
**Mr. Miller goes to Europe: gravity instruments and expertise in circulation 1920-1939"**  
Katharine Anderson, York University, Canada  
Chair: Richard Kremer, Dartmouth College, USA  
[MAST Auditorium]
- 17.30 Discussion (30min)
- 18.00 **Laboratorio Museotecnico Goppion and Museo Galileo presentations**  
*The museum display case as an instrument of conservation and communication*  
Andrea Sartori (Goppion)  
Presentation of the *Book: "Displaying Scientific Instruments: From the Medici Wardrobe to the Museo Galileo"*  
Filippo Camerota, Museo Galileo
- 18.30 **Poster session**  
Complete list of posters at the end of the Programme
- 19.00 **Cocktail by L. M. Goppion**
- 20.00 **Sky Observation through historical telescope**
- 20.30 **Buses - return to Catete**

## Thursday, 11 October

- 08.30 **Buses to MAST**
- 09.30 **Conference 3**  
[MAST Auditorium]  
*Charting the Empire. Enlightened Visions and Reified Theorems in Eighteenth-century Spanish Scientific Expeditions*  
Juan Pimentel Igea, Centro de Ciencias Humanas y Sociales, Consejo Superior de Investigaciones Científicas, Spain  
Chair: Giorgio Strano, Museo Galileo, Italy
- 10.30 Discussion (30min)
- Session 8 - Around Museums and Scientific Heritage: instrument preservation and display I**  
Chair: Tacye Phillipson, National Museums Scotland  
[MAST Auditorium]
- 11.00 *Museum Boerhaave: from junk to (almost) triple A*  
Hans Hooijmaijers, Boerhaave Museum
- 11.15 *Musealization of Science & Technology Objects*  
Maria Lúcia de Niemeyer M. Loureiro, Museum of Astronomy and Related Sciences  
Liliane Bispo dos Santos, Museum of Astronomy and Related Sciences  
Flávia B. Araújo da Silva, Federal University of the State of Rio de Janeiro

- (Museology undergraduate course)  
Mariane Aparecida N. Vieira, Federal University of the State of Rio de Janeiro  
(Museology undergraduate course)
- 11.30 *Museum Collection of Health: the case of Oswaldo Cruz Foundation*  
Pedro Paulo Soares, Museum of Life, Oswaldo Cruz House  
Inês Santos Nogueira, Museum of Life, Oswaldo Cruz House
- 11.45 *An Outlook of the Collection of Scientific Instruments of the Museu Dinâmico de Ciência e Tecnologia-UFJF (Brazil)*  
Patricia M. Mendes, Federal University of the State of Rio de Janeiro (Museology and Heritage Master Course)  
Marcio Rangel, Museum of Astronomy and Related Sciences  
Paulo Noronha, Museum of Astronomy and Related Sciences
- 12.00 *Scientific heritage in Brazil. Surveying Results of Sets and Collections of Artifacts Related to the Exact Sciences and Engineering*  
Marcus Granato, Museum of Astronomy and Related Sciences  
Elias da Silva Maia, Museum of Astronomy and Related Sciences  
Fernanda Pires Santos, Museum of Astronomy and Related Sciences  
Glória Gelmini de Castro, Federal University of the State of Rio de Janeiro  
(Museology undergraduate course)  
Mariana S. Damasceno, Federal University of the State of Rio de Janeiro (Museology undergraduate course)
- 12.15 *Instruments of Science and Technology: critical perspective of mutual relations*  
Renata Monteiro, Federal University of Rio de Janeiro ('Science and Health Education' Postgraduate Program)
- 12.30 Discussion (30 min)
- Session 9 - Scientific Instruments as Sources for the History of Research (Parallel Session)**  
Chair: Richard Dunn, Royal Museums Greenwich, UK  
[Graduate Classroom (MAST building)]
- 11.00 *History of the Geo Measure Lab "Theodoro Sampaio" (LGTS) of the Polytechnic School of the Federal University of Bahia (UFBA): the formation and challenges of a university collection*  
Ana Regina T. F. Teles, Polytechnic School, Federal University of Bahia  
Rimara M. Santos, Federal University of Bahia (Museology undergraduate course)
- 11.15 *Butantan Institute's First Electron Microscope*  
Adriana Mortara Almeida, History Museum of Butantan Intitute
- 11.30 *Materializing Physics in Mexico with Cosmic Rays Instruments*  
Adriana Minor Garcia, Universidad Nacional Autónoma de México (Postgraduate Program in History and Philosophy of Science)
- 11.45 *The Old Laboratory of the Instituto de Psicologia: from scientific legitimation to the foundation of an institution*  
Josiane Pawlowski, Psychology Institute, Federal University of Rio de Janeiro (UFRJ)  
Guilherme M. B. Souza, UFRJ (Psychology undergraduate course)  
Érika G. Ambrósio, UFRJ (Psychology undergraduate course)  
Hugo Leonardo R. S. da Rosa, UFRJ (Psychology undergraduate course)  
Rebeca Bartolote da Silva, UFRJ (Psychology undergraduate course)  
Júlia Matos da Fonseca, UFRJ (Psychology undergraduate course)  
Flávia Carolina S. Gomes, UFRJ (Psychology undergraduate course)  
Arthur Arruda Leal Ferreira, Psychology Institute, UFRJ



- 12.00 *Solar Observations and Solar Instruments*  
Eugenio Reis, Museum of Astronomy and Related Sciences  
Lise Marcelino Souza, Antares Observatory, Feira de Santana State University
- 12.15 *Research and Documentation of Museology and Seismology: history of seismographs and its performance in Brazil*  
Thomas F. S. Nizio, University of Brasilia (Museology undergraduate course)  
George Sand Leão A. França, Seismological Observatory, University of Brasilia
- 12.30 Discussion (30 min)
- 13.00 **Lunch**
- Session 10 - Around Museums and Scientific Heritage: instrument preservation and display II**  
Chair: Hans Hooijmaijers, Boerhaave Museum, Holland  
[MAST Auditorium]
- 14.00 *Legislation for the Protection of Science and Technology Heritage: the case of Brazil*  
Pedro Louvain de Oliveira, Fluminense Federal University  
Marcus Granato, Museum of Astronomy and Related Sciences
- 14.15 *The Historical Scientific Instruments of Petrography, Mineralogy and Chemistry from the Museu Nacional: a heritage to be preserved, researched and exhibited*  
Maria Elizabeth Zucolotto, National Museum, Federal University of Rio de Janeiro  
Andrea F. Costa, National Museum, Federal University of Rio de Janeiro
- 14.30 *3D Digitalization of Scientific Instruments - The Case of the Bamberg Meridian Circle*  
Ricardo Marroquim, Department of Systems Engineering and Computer Science, Federal University of Rio de Janeiro (UFRJ)  
Felipe Moura de Carvalho, UFRJ (Systems Engineering and Computer Science Postgraduate Program)  
Matteo Dellepiane, Visual Computing Laboratory, ISTI-CNR  
Antonio A. F. Oliveira, Computer Graphics Laboratory, UFRJ
- 14.45 *The Collection of Instruments at Instituto Benjamin Constant and the Constitution of a Museum for the Institution*  
Debora A. Rodrigues, Federal University of the State of Rio de Janeiro (PhD Museology and Heritage course)  
Marcus Granato, Museum of Astronomy and Related Sciences
- 15.00 *Time Measurement Through Historical Scientific Instruments and Exhibits*  
Flávia Requeijo, Museum of Astronomy and Related Sciences  
Andrea F. Costa, National Museum, Federal University of Rio de Janeiro  
Maria Esther A. Valente, Museum of Astronomy and Related Sciences  
Flávio F. Mendes da Costa, Museum of Astronomy and Related Sciences  
Leonardo Carvalho da Silva, Museum of Astronomy and Related Sciences  
T. B. Silva, Museum of Astronomy and Related Sciences
- 15.15 *Documenting the Theodoro Sampaio Laboratory Land Survey Collection (Department of Transportation / Polytechnic School / Federal University of Bahia - UFBA, Brazil)*  
Suely Moraes Ceravolo, Federal University of Bahia (UFBA)  
Diana Soares de Oliveira, UFBA (Museology undergraduate course)
- 15.30 Discussion (30 min)
- 16.00 **Coffee-Break**
- 16.30 Presentation of Network 'Recent Heritage of Science in Universities' (Universeum



Working Group)  
[Auditorium of the MAST]  
Roland Wittje, University of Regensburg, Germany  
Marta C. Lourenço, University of Lisbon, Portugal

- 17.00 SIC's plenary business meeting  
[MAST Auditorium]
- 17.30 Closing Session  
[MAST Auditorium]
- 18.00 Buses - return to Catete
- 20.00 Buses to Real Astoria Restaurant
- 20.30 Conference Dinner

## Friday, 12 October

- 09.00 Buses to Visit 3
- 09.30 Visit to Valongo Observatory  
Maria Alice Ciocca de Oliveira and Rundsthen Nader
- 11.00 Buses to Petrópolis
- 12.30 Arrival in Petrópolis
- Lunch
- 14.00 Visit to Imperial Museum  
Mauricio Vicente Ferreira Júnior
- 16.00 Sarau
- 17.00 Coffee break
- 18.00 Return to Rio de Janeiro
- 19.30 Arrival in Rio de Janeiro

## POSTERS

*Scientific Instruments in Personal Archives: acquisition policy and technical treatment*  
Maria Celina Soares de Mello e Silva, Museum of Astronomy and Related Sciences

*The Challenge of Scientific Collections: the Cruls commission' case*  
Bianca Mandarino Costa, Federal University of the State of Rio de Janeiro (Master's course in Museology and Heritage)  
Moema de Resende Vergara, Museum of Astronomy and Related Sciences

*Using Old Instruments for Physics Teaching in Secondary Schools in the Past and Present: focus on Newton's tube*  
Maria Cristina de Senzi Zancul, São Paulo State University  
Maria José P. Monteiro de Almeida, Campinas State University

*The Old Sextant as an Object of Higher Education Today*

Antonio de Campos Sachs, Laboratory of Computer Networks and Architecture, University of São Paulo

Maria José P. Monteiro de Almeida, Campinas State University

Maria Cristina de Senzi Zancul, São Paulo State University

*A Unique Nineteenth Century Brass Polarizing Microscope by Nachet at the Museu Nacional/UFRJ Collection*

Jeroen Meeusen, Private scholar, Belgium

Maria Elizabeth Zucolotto, National Museum, Federal University of Rio de Janeiro

*The Role of the Institute for Technological Research (IPT) in Brazilian Scientific and Technological Heritage*

Cristiane Alves de Sousa, Technological Researches Institute of São Paulo State

Mariana Marchesi, Technological Researches Institute of São Paulo State

Sonia Strotino, São Paulo State University

*The Steam Generators of Angra1 Nuclear Power Plant: from waste to registration*

Monica Penco Figueiredo, Museum of Astronomy and Related Sciences

*Scientific Instruments for the Construction of Territorial Knowledge: the petrographic microscopes of the Geographic and Geological Commission of São Paulo*

Maria Luiza Emi Nagai, Geological Institute of the State of São Paulo

José Maria Azevedo Sobrinho, Geological Institute of the State of São Paulo

*The Geological Museum Exhibition and Geographical and Geological Commission in the State of São Paulo*

José Barcellos Ramos, Valdemar Lefèvre Geological Museum,

Fernando Alves Pires, Valdemar Lefèvre Geological Museum

*Agricultural Sciences from Objects: the Memorial of Federal Rural University of Pernambuco (Brazil) in 100 Years of Teaching, Research and Outreach*

Bruno Melo de Araújo, Federal Rural University of Pernambuco (History Master's course)

Ricardo de Aguiar Pacheco, Federal Rural University of Pernambuco

Emanuela Sousa Ribeiro, Department of Anthropology and Museum Studies, Federal University of Pernambuco

*Identification of the Collection of Scientific Instruments of the Museum of Minerals and Rocks, Federal University of Pernambuco, Brazil*

Maria da Conceição S. Wanderley, Federal University of Pernambuco (Museology undergraduate course)

Tiago R. da Silva, Federal University of Pernambuco (Geology undergraduate course)

Sandra de Brito Barreto, Geology Department, Federal University of Pernambuco

Emanuela S. Ribeiro, Department of Anthropology and Museum Studies, Federal University of Pernambuco

*About the Material Culture of Bell's Early Experimental Tests: an analysis of techniques and instruments (1972-1982)*

Wilson Fábio Oliveira Bispo, Bahia Federal Institute of Education, Science and Technology

*Conservation of the Scientific Instruments of the Museum of Minerals and Rocks, Federal University of Pernambuco, Brazil*

Maria da Conceição S. Wanderley, Federal University of Pernambuco (Museology undergraduate course)

João Pedro S. Bezerra, Federal University of Pernambuco - UFPE (Geology undergraduate course)

Sandra de Brito Barreto, Geology Department, UFPE

Emanuela S. Ribeiro, Department of Anthropology and Museum Studies, UFPE

*First Glimpses on the Management of the Federal University of Pernambuco Science and Technology Heritage*

Arlindo Francisco da Silva Filho, UFPE (Master's course in Public Management)  
Emanuela Souza Ribeiro, Department of Anthropology and Museum Studies, UFPE  
Sylvana Maria Brandão de Aguiar, Department of Anthropology and Museum Studies, UFPE

*Material Culture of a Secondary School: instruments for science teaching*

Wanderlice da Silva Assis, University of South Mato Grosso (PhD Education Postgraduate Program)  
Eurize Caldas Pessanha, Federal University of South Mato Grosso

*Introducing Teaching Laboratory Equipment from Europe in a Brazilian Secondary School at the End of the Nineteenth Century*

Josilândia de Oliveira Beiral, Northern Rio de Janeiro State University (Master's course on History of Education)  
Silvia Alicia Martínez, Social Policy Program, Northern Rio de Janeiro State University  
Fernando José Luna de Oliveira, Northern Rio de Janeiro State University

*The Museum of the History of Cartography and Topography, Federal University of Pernambuco, Brazil*

Heloisa Montenegro Braboza, Federal University of Pernambuco (Museology undergraduate course)  
Daniel Carneiro da Silva, Department of Cartographic Engineering, Federal University of Pernambuco  
Arthur Emir Clifford Valença, Federal University of Pernambuco (BSc course in History)

*Initiatives for the Preservation of the Heritage of S&T at the Museum of Science and Technology, University of Ouro Preto, Brazil*

Gilson Antônio Nunes, Department of Museology, Museum of Science and Technology, Federal University of Ouro Preto (UFOP)  
Mercedes Estela G. Rainho, UFOP (Museology undergraduate course)  
Carlos Augusto R. Jotta, UFOP (Museology undergraduate course)  
Felipe Eleutério Hoffman, UFOP (Museology undergraduate course)

*The Astronomical Observatory at the Federal University of Rio Grande do Sul, Brazil: the collection of instruments and a case study in restoration*

Cesar Papini Araújo, Federal University of Rio Grande do Sul (Museology undergraduate course)  
Claudio M. Bevilacqua, Astronomical Observatory, Federal University of Rio Grande do Sul

*The Breguet Telegraph Set and the Beginning of Telegraphy in Brazil*

Mauro Costa da Silva, Pedro II High School