

Professional summary

Personal information

Surname(s) / First name(s)

Address(es)

Telephone(s)

Email(s)

Nationality(-ies)

Date of birth

Gender

Physicist.

Hering, Eduardo Novaes

Please email me and I'll send it.

+55 83 3034-9070 Mobile: +55 83 999.689.520

enhering@gmail.com

Brazilian and Swiss

March 15th, 1973

Male



Work Experience

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

Type of business or sector

01/2013-12/2014

Post doctoral Fellow.

Research on condensed matter physics, studying the RTm_2Al_{20} (R: Rare Earth, Tm: Transition metal) systems under very high pressures and low temperatures. Using diamond anvil cells (DAC) for electrical resistivity and AC specific heat measurements.

INAC/SPSMS/IMAPEC, CEA Grenoble.

Research and Development.

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

Type of business or sector

2010 - 2012

Post doctoral Fellow.

Development of low temperature instruments and components to permit various scientific characterization techniques to reach temperatures below 1K.

Elisa M. Baggio-Saitovitch, at Brazilian Center for Physics Research - CBPF.

Research and Development.

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

Type of business or sector

2007 - 2009

Post doctoral fellow.

Construction of a low temperature environment for the development of low temperature components, supervised by Prof. Magda B. Fontes

Magda B. Fontes, CBPF.

Research and Development.

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

Type of business or sector

2006 - 2007

Post doctoral fellow.

Development of a dilution refrigerator.

Elisa M. Baggio-Saitovitch, CBPF

Research and Development.

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

Type of business or sector

2006 - 2012

Teacher.

Javascript and project execution teaching at a webdesign *latu-sensu* graduate course at PUC-Rio.

CCE PUC-Rio.

IT, Webdesign.

Dates	2000 - 2001
Occupation or position held	IT Consultant
Main activities and responsibilities	Develop a solution for TCP/IP traffic control for an ISP, where a RedHat linux distribution was reduced to 16Mb and customized to control over 250 clients to balance their traffic.
Name and address of employer	DirectNet, São José dos Campos, under supervision of Ernani Souza Reis, ernani.reis@gmail.com.
Type of business or sector	IT.
Dates	1997
Occupation or position held	Visiting student.
Main activities and responsibilities	Develop a way to do electrical poling on optical fibers that were etched with hydrofluoric acid to reduce their diameter to 10 μm .
Name and address of employer	KTH, Royal Institute of Technology, Stockholm, Sweden, under the supervision of Walter Margulis. walter.margulis@acreo.se.
Type of business or sector	Research and Development.

Education and Training

Dates	2001-2006
Title of qualification awarded	Doctor in Sciences - Physics. Thesis Title: "Pressure-temperature-composition phase diagram of the heavy fermion compound $Ce_2Rh_{1-x}Ir_xIn_8$ ".
Principal subjects/occupational skills covered	Working with dilution refrigerators (very low temperatures), assembling high pressure cells, dealing with tiny (0.5mm) samples for electrical resistivity measurements under high pressures, patience, persistence.
Institution	Pontifical Catholic University of Rio de Janeiro (PUC-Rio)
Dates	1998-1999
Title of qualification awarded	Master in Sciences - Physics. Thesis title: "Micro optical fiber poling"
Principal subjects/occupational skills covered	Working with hidro-fluoric acid and high voltages. Developed the concept of micro optical fibers.
Institution	Pontifical Catholic University of Rio de Janeiro (PUC-Rio)
Dates	1992-1997
Title of qualification awarded	Bachelor in Physics
Principal subjects/occupational skills covered	Developed simulation programs. Worked with cryogenics, lasers, cooling systems, non-linear optics and instrumentation development.
Institution	Pontifical Catholic University of Rio de Janeiro (PUC-Rio)

Personal skills and competences

Mother tongue(s)

Self-assessment
European level^(*)

French

English

Brazilian Portuguese

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user

^(*) Common European Framework of Reference (CEF) level

Social skills and competences	Team working, ability to work in an international environment, student tutoring.
Other skills and competences	Scientific instrumentation development, programming, optics, diamond anvil cells, dilution fridges, low temperature instrumentation, basic digital electronics, basic PCB prototyping, basic microcontrollers, paraglider piloting, some numerical simulations, rock climbing, trekking guiding.
Computer science experience	
Programming Languages:	C++, C, Pascal, Basic, Perl, SQL, JavaScript, basic Objective-C.
Networking:	TCP/IP, ethernet, wireless networks, network security and administration.
Operating systems:	Fedora Linux, Mac OS, FreeBSD, Windows.
Developed/in development software	
Power Adapter Alarm	an app developed with Objective-C, available for sale on App Store, that sounds an alarm when the computer is disconnected from the power adapter.
MMS	a system that controls scientific equipments and acquires data from them using a client server architecture, originally made in Perl and then upgraded to C++. All the communication tasks between client computer and laboratory servers is done transparently to make scientific work easier. Open source and under continuous development.
Data processing	a set of libraries used to process large amounts of data from different equipments, make it available in a standard format and search for best data fit intervals of selected mathematical functions. Open source and under development.
APSIM	a system that extracts data from the FlightGear flight simulator, feeds it to a microcontroller through a USB link, uses the data to stabilize and pilot the airplane and sends the data back to the flight simulator. Developed as a test bench for the flight control functions.
CQS	a system, completely developed in Perl, that balances traffica equally between clients from a cable ISP in São José dos Campos, SP, Brazil.
Camera	a 3D camera library made to plot 3D lines and pixels in a 2D display. Originally made in C, then upgraded to Perl, then upgraded to C++, than forgotten.
Many CGIs	made to automate websites. Initially made in Perl, but now the solutions are developed in C++.
Some bioinformatics essays	made to reassemble DNA subsequences. Made in Perl. Long time ago.
Many body simulator	made to study physically interesting cases during university. Made in C++. Accepted and processed XML files with particle/spring configurations.
Other	There are many other small softwares not mentioned here. Programming has always been an enthusiastic hobby for me.
Additional Information	
Scholarships	
[12]	Renewal of Science without Borders (CNPq) post doctoral fellowship (Jul. to Dec. 2014).
[13]	Renewal of Science without Borders (CNPq) post doctoral fellowship (Mar. to Jul. 2014).
[12]	Renewal of Science without Borders (CNPq) post doctoral fellowship (Jan. to Mar. 2014).
[11]	Science without Borders (CNPq) post doctoral fellowship 2013.

- [10] National Post-doctoral Program - CAPES-FAPERJ, 2010-2015.
- [9] Renewal of Junior Post-doctoral Scholarship, FAPERJ funding agency, 2009.
- [8] Renewal of Junior Post-doctoral Scholarship, FAPERJ funding agency, 2008.
- [7] Junior Post-doctoral Scholarship, FAPERJ funding agency, 2008.
- [6] Renewal of Institutional Training Program Scholarship, CNPq funding agency, 2007.
- [5] Institutional Training Program, CNPq funding agency, 2006.
- [4] PhD scholarship, CNPq funding agency, 2001.
- [3] Graduate Student Stipend, CNPq funding agency, 1998.
- [2] PIBIC Scientific Initiation Scholarship, PUC-Rio, 1995.
- [1] Scientific Initiation Scholarship, CNPq funding agency, 1994.

Grants

- [2] Technological Development grant, FAPERJ funding agency, 2009, R\$ 130.000,00.
- [1] Startup grant, FAPERJ funding agency, 2008, R\$10.000,00.

Developed Research Projects

- [6] Development of a control system, initially for an unmanned air vehicle, with scientific purposes. FAPERJ grant type ADT1, 2009.
PhD:
- [5] Pressure-temperature-composition phase diagram of the heavy fermion compound $Ce_2Rh_{1-x}Ir_xIn_8$. PhD thesis work developed at PUC-Rio, CBPF and Unicamp, between September 2001 and May 2006.
Masters:
- [4] Micro optical fiber poling. Masters thesis work developed at PUC-Rio Optoelectronics lab under advising of Profs. Walter Margulis and Isabel S. Carvalho, between 1998 and 1999.
Undergraduate:
- [3] Development of an in fiber optical modulator using standard telecom optical fibers. Developed as a visiting student of the Optics Department of Royal Institute of Technology, Stockholm, Sweden, from January to June 1997, under Prof. Walter Margulis supervision.
- [2] The effect of radiation pressure on micro optical fibers. Scientific initiation project developed from 1995 to 1996 in the Optoelectronics Lab of PUC-Rio under supervision of Prof. Walter Margulis.
- [1] Development of an automation software for electrical resistivity measurements of high Tc superconductors. Scientific initiation project supervised by Prof. Hortencio A. Borges at the Superconductivity Lab of PUC-Rio.

Teaching Experience

- [2] **Graduate:** JavaScript programming module, from 2006 to 2012 at Webdesign graduate course (20 hour module / 1 module per year).
- [1] Publishing and Management/Project module, from 2006 to 2012 at Webdesign graduate course(20 hour module / 1 module per year).
Undergraduate:
- [4] The Cold Side of Physics - Low Temperature Physics, IX CBPF School, 2012.
- [3] Physics lab I - Mechanics, from September to November 2003.
- [2] Physics lab III - Electromagnetism, from September to November 2001.
- [1] Physics for arts lab, from March to June 1998.
High school:
- [1] PIUES - School, University and Society Integration Program: experimental physics lectures to high school students, from March 1994 to December 1995.

Scientific Initiation Advisory

- [4] Project: **Development of control and stabilization loops for the autonomous scientific platform being developed at CBPF.**
Student: Alan Ferreira Borba (IME).
Period: 2010-2011.
Co-advisor: Dr. Eduardo Novaes Hering.
Advisor: Prof. Henrique Lins de Barros.
- [3] Project: **A deep stick type electrical resistivity measurement system with a 1K pot.**
Student: Caio Carvalho (IME).
Period: 2010 - 2011.
- [2] Project: **Development of an electronic interface between microcontrollers and the sensors of the flight control system for aerial platforms.**
Student: Benhur Quintino (IME).
Period: 2010 - 2011.
Co-advisor: Prof. Henrique Lins de Barros.
- [1] Project: **Development of low temperature instrumentation.**
Student: Giovanna Killer Soares de Souza (IME).
Period: 2009 a 2011.
Co-advisors: Dra Scheilla Maria Ramos da Silva, Dr. Marcos de Castro Carvalho.

PROVOC Advisory

- PROVOC: Scientific Vocation Program for High School Students
- [3] Project: **Detection of bioelectrical signals in plants.**
Students: Viviane Rodrigues (Pedro II - Caxias), Ana Maria Garcia Lima (Pedro II - Tijuca), Felipe Favrat (Pedro II - Caxias), Helena Oliveira (CAP-UERJ).
Period: 2010 - 2011
Co-advisors: Dr. Scheilla Maria Ramos da Silva, Dr. Marcos de Castro Carvalho.
Status: Concluded. Awarded.
- [2] Project: **A device for helping people with visual difficulties.**
Students): Viviane Rodrigues (Pedro II - Caxias), Larissa Jorge da Silva (Pedro II - Realengo).
Period: 2009 - 2010.
Co-advisors: Draa. Scheilla Maria Ramos da Silva, Dr. Marcos de Castro Carvalho.
Status: Concluded. Awarded.
- [1] Project: **Characterization of an alien element (Caracterização de um elemento alienígena).**
Students (Alunos): Gabriel (Pedro II - Realengo), Marcos (Pedro II - Realengo), Larissa Jorge da Silva (Pedro II - Realengo).
Period (Período): 2008 - 2009
Co-advisors (Co-orientadores): Dra. Scheilla Maria Ramos da Silva, Dr. Eduardo Novaes Hering.
Advisor (Orientador): Dr. Marcos de Castro Carvalho.
Status: Concluded. Awarded.

Participation in Latus Senu Judging Commission Boards

- [4] Adriana Pontes Alcântara de Souza, Cadastro Cultural - Bases para integração de núcleos de produção artística na Web, em 6 de março de 2007.
- [3] Rafael Martins Guimarães, Análise de site de comércio eletrônico da Editora Campos/Elsevier, em 6 de março de 2007.

- [2] Tatiana C. Varejão Teixeira, Demonstração da acessibilidade no aprendizado do deficiente visual- TOA: Tutorial Online Acessível, em 6 de março de 2007.
- [1] Miguel de Souza Carino, Portfólio: Sua importância para o Webdesigner, em 8 de março de 2007.

Articles in Scientific Journals

- [19] COLLAVE, J. R. ; Borges, H. A. ; RAMOS, S. M. ; E.N.HERING ; Fontes, M. B. ; BAGGIO-SAITOVITCH, E. ; Mendonça Ferreira, L. ; BITTAR, E. M. ; PAGLIUSO, P. G. . **Heavy fermion $Ce_3Co_4Sn_{13}$ compound under pressure.** Journal of Applied Physics, v. 117, p. 17E307, 2015.
- [18] SHIMIZU, YUSEI ; BRAITHWAITE, DANIEL ; SALCE, BERNARD ; COMBIER, TRISTAN ; AOKI, DAI ; HERING, EDUARDO N. ; RAMOS, SCHEILLA M. ; FLOUQUET, JACQUES . **Unusual strong spin-fluctuation effects around the critical pressure of the itinerant Ising-type ferromagnet URhAl.** Physical Review B, v. 91, p. 125115, 2015.
- [17] Ramos, S. M. ; E.N.HERING ; LAPERTOT, G ; WILHELM, F ; ROGALEV, A ; BAUDELET, F ; BRAITHWAITE, D . **XMCD measurements under pressure confirm ferromagnetism in YbCu Si but find none in YbRh Si.** JOURNAL OF PHYSICS. CONFERENCE SERIES (ONLINE), v. 592, p. 012015, 2015.
- [16] J.R. Collave, H.A. Borges, S.M. Ramos, E.N. Hering, M.B. Fontes, E. Baggio-Saitovitch, A. Eichler, E.M. Bittar, P.G. Pagliuso, **Electrical resistivity under extreme conditions in the $Ce_3Ir_4Sn_{13}$ heavy fermion compound.** Solid State Communications Volume 177, January 2014, Pages 132–135.
- [15] E. N. Hering, S. M. Ramos, **Engarrafamentos.** Revista Ciência Hoje, March 2012.
- [14] H. Hidaka, S.M.Ramos, E.N.Hering, M.B.Fontes, E.B.Saitovitch, S.Otani, T.Wakabayashi, Y.Shimizu, T.Yanagisawa, H.Amitsuka. **Effects of Pressure on Cage-Structural Compound $Ce_3Pd_{20}Ge_6$.** J. Phis. Conf. Ser. 391 (2012) 012019.
- [13] K Sengupta, M Alzamora, M B Fontes, E V Sampathkumaran, S M Ramos, E N Hering, E M B Saitovitch, P L Paulose, R Ranganathan, Th Doert and J P F Jemetio. **Large variations in the magnetic ordering behavior of $EuCu_2As_2$ with the application of external pressure and magnetic field.** J. Phys.: Condens. Matter 24 (2012).
- [12] E.N.Hering, H.Borges, S.M.Ramos, M.B.Fontes, E.Baggio-Saitovich, M.Continentino, E.Bittar, L.Mendonça.Ferreira, R.Lora-Serrano, F.Gandra, C. Adriano, P.G.Pagliuso, N.Moreno, J.Sarrao, J.D.Thompson. **Residual superconducting phases in the disordered $Ce_2Rh_{1-x}Ir_xIn_8$ alloys.** Physical Review. B, Condensed Matter and Materials Physics, v. 82, p. 184517, 2010.
- [11] S.M.Ramos, M. Fontes, E.N.Hering, M. Continentino, E. Baggio-Saitovitch, F. Dinola Neto, E. Bittar, P. Pagliuso, E. Bauer, J. Sarrao, J. Thompson. **Superconducting Quantum Critical Point in $CeCoIn_5-xSn_x$.** Physical Review Letters 105, 126401, 2010.
- [10] E.N. Hering, H.A. Borges, S.M. Ramos, M.B. Fontes, E. Baggio-Saitovich, E.M. Bittar, L. Mendonça Ferreira, R. Lora-Serrano, C. Adriano, P.G. Pagliuso, J.L. Sarrao, and J.D. Thompson. **Two superconducting phases in the bi-layered alloys $Ce_2Rh_{1-x}Ir_xIn_8$.** Physica B - Proceedings of the International Conference on Strongly Correlated Electron Systems, 1 April 2008, 403:780, 2008.
- [9] L. Mendonça Ferreira, T. Park, V. Sidorov, M. Nicklas, E. M. Bittar, R. Lora-Serrano, E. N. Hering, S. M. Ramos, M. B. Fontes, E. Baggio-Saitovich, Hanoh Lee, J. L. Sarrao, J. D. Thompson, and P. G. Pagliuso. **Tuning the pressure-induced superconducting phase in doped $CeRhIn_5$.** Physical Review Letters, 101:017005, 2008.
- [8] L. Mendonça Ferreira, E.M. Bittar, P.G. Pagliuso, E.N. Hering, S.M. Ramos, H.A. Borges, E. Baggio-Saitovich, E.D. Bauer, J.D. Thompson, and J.L. Sarrao. **Pressure-temperature phase diagrams of in-plane doped $CeRhIn_5$.** Physica C: Superconductivity, 2007.
- [7] E.N. Hering, H.A. Borges, S.M. Ramos, M.B. Fontes, E. Baggio Saitovitch, E.M. Bittar, P.G. Pagliuso, N.O. Moreno, J.D. Thompson, and J.L. Sarrao. **Pressure-temperature-composition phase diagram of Ce_2MnIn_8 .** Physica B: Condensed Matter, 2006.

- [6] A. Polasek, L. A. Saleh, H. A. Borges, E. N. Hering, G. S. Oliveira, E. T. Serra, J. H. G. Lima, and F. Rizzo. **Investigation of PB-free Bi-2223 High Temperature Sintering.** *IEEE Transactions on Applied Superconductivity*, 2005.
- [5] B.A.Marinkovic, S.K.Xia, E.T.Serra, H.A.Borges, E.N.Hering, and F.Rizzo. **Electric Current Suppression Mechanisms in Bi-2212 Bulk Obtained by Partial Melt-Processing.** *Physica C*, 408:34–36, 8 2004.
- [4] R.Reyes, E.N.Hering, and M.Cremona. **Growth and Characterization of OLED with samarium complex as emitting and electron transporting layer.** *Thin Solid Films*, 420:23–29, February 2002.
- [3] W.Margulis, F.C.Garcia, E.N.Hering, L.C.Guedes Valente, B.Lesche, F.Laurell, and I.C.S.Carvalho.**Poled Glasses.** *MRS Bulletin*, 31, February 1998.
- [2] F.C.Garcia, I.C.S.Carvalho, E.N.Hering, W.Margulis, and B.Lesche. **Inducing a Large Order Nonlinearity in Soft Glasses by Poling.** *Applied Physics Letters*, 1998.
- [1] B. Lesche, F.C.Garcia, E.N.Hering, W.Margulis, I.C.S.Carvalho, and F.Laurell. **Etching of Silica Glass under Electric Fields.** *Physical Review Letters*, 1997.

Presentations in Congresses

- [10] E.N.Hering, S.M.Ramos, D.Braithwaite, B.Salce, A.Sakai and S.Nakatsuji. **Phase diagram of SmTi₂Al₂₀ under pressure.** Bernard Coqblin Memorial Symposium 2013, Orsay, France.
- [9] E.N.Hering, F.Badaró, S.M.Ramos, A.Eichler, M.B.Fontes, E.Baggio-Saitovitch. **A server based, multi user, multi experiment, data acquisition and control system with project information integration and a publish button.** Encontro de Física 2011, Foz do Iguaçu.
- [8] G.K.S.Souza, E.N.Hering, S.M.Ramos, A.Eichler, M.B.Fontes, E.Baggio-Saitovitch. **Bringing new light into quantum critical phenomena by taking microscopic characterization systems below 1K.** Encontro de Física 2011, Foz do Iguaçu.
- [7] E.N.Hering, S.M.Ramos, H.A.Borges, M.B.Fontes, E.Baggio-Saitovitch, E.M.Bittar, C.Adriano, P.G.Pagliuso, N.Moreno, J.D.Thompson, J.L.Sarrao. **Possible Reentrant Superconductivity on the Ce₂Rh_{0.75}Ir_{0.25}In₈ Heavy Fermion Compound.** X Encontro SBPMat, 2011, Gramado.
- [6] E.N.Hering, H.A.Borges, E.Baggio Saitovitch, M.B.Fontes, P.G.Pagliuso, N.O.Moreno, J.D.Thompson e J.L. Sarrao. **Supercondutividade no diagrama de fases (pressão, temperatura e composição) do composto férmion pesado Ce₂MIn₈ (M=Rh, Ir).** Em XXIX Encontro Nacional de Física da Matéria Condensada, São Lourenço, MG, Brasil, 2006.
- [5] E. N. Hering, H. A. Borges, S. M. R. Silva, M. B. Fontes, E. M. B. Saitovitch, P. G. Pagliuso, N.O. Moreno, and J.L. Sarrao. **Pressure-temperature-composition phase diagram of Ce₂MIn₈ (M = Rh, Ir).** Em XXVIII Encontro Nacional de Física da Matéria Condensada, Santos, São Paulo, Brasil, 2005.
- [4] E.N.Hering, I.C.S.Carvalho, L.C.G.Valente e W.Margulis. **Polarização de microfibras para modulação eletroóptica.** Em XXII Encontro Nacional de Física da Matéria Condensada, São Lourenço, MG, Brasil, 1999.
- [3] E.N.Hering, I.C.S.Carvalho, A. Salles, C.M.B.Cordeiro, C.J.S.Matos, L.C.G.Valente e W.Margulis. **Title.** Em XXI Encontro Nacional de Física da Matéria Condensada, Caxambu, MG, Brasil, 1998.
- [2] E.N.Hering, F.C.Garcia, I.C.S.Carvalho, and W.Margulis. **O efeito da pressão de radiação em micro-fibras ópticas.** In IV Jornada de Iniciação Científica - PIBIC, PUC-Rio, 1996.
- [1] E.N.Hering, F.C.Garcia, I.C.S.Carvalho, and W.Margulis. **Desenvolvimento de dispositivos opticos utilizando microfibras.** In III Jornada de Iniciação Científica - PIBIC, PUC-Rio, 1995.

**Co-author on
Presentations in
Congresses**

- [23] H.Hidaka, T.Wakabayashi, S.Otani, T.Yanagisawa, H.Amitsuka, S.M.Ramos, E.N.Hering, M.B.Fontes, E.Baggio-Saitovitch. Effects of Pressure on Cage-Structural Compound $Ce_3Pd_{20}Ge_6$. Encontro de Física 2011, Foz do Iguaçu.
- [22] H.Hidaka, S.Otani, T.Yanagisawa, H.Amitsuka, S.M.Ramos, E.N.Hering, E.Baggio-Saitovitch. **Effects of Pressure on Clathrate $Ce_3Pd_{20}Ge_6$** . X Encontro SBPMat, Gramado, 2011.
- [21] H.Hidaka, S.Otani, T.Wakabayashi, T. Yanagisawa, S.M.Ramos, E.N.Hering, M.B.Fontes, E.Baggio-Saitovitch. **Effects of Pressure on Clathrate $Ce_3Pd_{20}Ge_6$** . From Blue Pigment to Green Energy, Cobalt mines - Skutterudites – Thermoelectrics, 2011, Skuterud, Norway, 2011.
- [20] J.R.C.Garcia, H.A.Borges, S.M.Ramos, E.N.Hering, M.B.Fontes, E.Baggio-Saitovitch, P.G.Pagliuso. **Study of electrical resistivity under high pressures of compound $Ce_3Ir_4Sn_{13}$** . X Encontro SBPMat, 2011.
- [19] S.M.Ramos, F. Dinola Neto, M.A.Continentino, E.N.Hering, M.B.Fontes, E.Baggio-Saitovitch, P.G.Pagliuso, J.L.Sarrao, J.D.Thompson. **Superconducting Quantum Critical Point in the Sn Doped $CeRhIn_5$** . Encontro de Física 2011, Foz do Iguaçu.
- [18] C.Adriano, L.Bufaical, L.Mendonça-Ferreira, E.N.Hering, E.Bittar, P.G.Pagliuso, R.Lora-Serrano. **X-ray absorption studies of the $Ce_2Rh_{1-x}Ir_xIn_8$ intermetallic compounds**. ICM 2009 - International Conference on Magnetism, 2009, Karlsruhe. ICM 2009 Program and Abstracts, 2009. p. 95.
- [17] L.Mendonça Ferreira,T.Park, V.Sidorov, M.Nicklas, E.M.Bittar, R.Lora-Serrano, E.N.Hering, S.M.Ramos, M.B.Fontes, E.Baggio-Saitovich, Hanoh Lee, J.L.Sarrao, J.D.Thompson, P.G.Pagliuso. **Electronic tuning of the pressure-induced superconducting phase in $CeRhIn_5$** . International Conference on Strongly Correlated Electron Systems - SCES, 2008, Búzios. International Conference on Strongly Correlated Electron Systems - ABSTRACTS, 2008.
- [16] E. N. Hering, H. A. Borges, S. M. Ramos, M. B. Fontes, E. Baggio-Saitovich, E. M. Bittar, L. Mendonca Ferreira, R. Lora-Serrano, C. Adriano, P. G. Pagliuso, J. L. Sarrao, and J. D. Thompson. **Two superconducting phases in the bi-layered alloys $Ce_2Rh_{1-x}Ir_xIn_8$** . In The International Conference on Strongly Correlated Electron Systems, Houston, EUA, 2007.
- [15] H. Borges, A. Polasek, L.A. Saléh, E. Hering, F. Rizzo, E.T. Serra, and J.H.G. Lima. **High temperature sintering and melting relations of Pb-doped and Pb-free Bi-2223**. In European Conference on Applied Superconductivity, Vienna, Austria, 2005.
- [14] A. Polasek, L.A. Saleh, C.V. de Sena, E. Hering, H. Borges, F. Rizzo, E.T. Serra, and J.H.G. Lima. **Melt processed bi-2212 blocks obtained from different starting compositions**. In European Conference on Applied Superconductivity, Vienna, Austria, 2005.
- [13] E. N. Hering, H. A. Borges, S. M. Ramos, M. B. Fontes, E. Baggio Saitovitch, E. M. Bittar, P. G. Pagliuso, N. O. Moreno, J. D. Thompson, and J. L. Sarrao. **Pressure-temperature-composition phase diagram of Ce_2MIn_8 (M=Rh,Ir)**. In The International Conference on Strongly Correlated Electron Systems, July 26th-30th, 2005, Vienna, Austria, 2005.
- [12] P.G.Pagliuso, E.N.Hering, H.A.Borges, S.M.Ramos, M.B.Fontes, E.M. Baggio-Saitovitch, N. O. Moreno, J.Sarrao. **Pressure-Temperature-Composition Phase Diagram of Ce_2MIn_8 (M = Rh, Ir)**. XXVIII Encontro Nacional de Física da Matéria Condensada., 2005, Santos-Sp. Resumo da ENFMC, 2005.
- [11] A.Polasek, L.A.Saleh, H.A.Borges, E.Hering, F.Rizzo, E.T.Serra, and G.S. Oliveira. **Investigation of Pb-free bi-2223 high-temperature sintering**. In ASC/04, Applied Superconductivity, 2004.

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Other Publications

- [2] PhD Thesis: E.N.Hering. Pressure-temperature-composition of the heavy fermion compound $Ce_2Rh_{1-x}Ir_xIn_8$, PUC-Rio, 2006.
- [1] Masters Thesis: Micro optical fiber poling. PUC-Rio, 1999.

Schools, Congresses and Workshops attended

- [14] Autumn School on Correlated Electrons: DMFT at 25: Infinite Dimensions, September 2014, Jülich, Germany.
- [13] SCES 2014 - International Conference on Strongly Correlated Electron Systems, Grenoble, FR, 2014.
- [12] BCMS 2013 - Bernhard Coqblin Memorial 2013
- [11] SCES 2011 - International Conference on Strongly Correlated Electron Systems, Cambridge, UK, 2011.
- [10] Brazilian Workshop on Magnetization Dynamics, 2010, CBPF, Rio de Janeiro, Brasil.
- [9] O papel das controvérsias no desenvolvimento das ciências, CBPF, Rio de Janeiro, 2009.
- [8] DAAD School on Fundamentals and Materials for Novel Sensors, 2009, Rio de Janeiro, Brasil.
- [7] 3rd I2CAM-FAPERJ, School on Soft Condensed Matter Physics, 2009, Rio de Janeiro, Brasil.

- [6] SCES 2008 - International Conference on Strongly Correlated Electron Systems,, Buzios, Rio de Janeiro, Brasil.
- [5] NANO 2008, Rio de Janeiro, Brasil.
- [4] 2nd I2CAM-FAPERJ, 2008, Biological Physics, Rio de Janeiro, Brasil.
- [3] I2CAM-FAPERJ, 2007, New Phenomena in Highly Correlated Quantum Matter, Rio de Janeiro, Brasil.
- [2] Segundo Workshop de Tecnologia NanoAeroespacial, 2006, São José dos Campos, SP, Brasil.
- [1] Primeira Escola de Óptica Aplicada, Insituto de Física da USP, São Paulo, Brasil.

Participation on Organization of Events

- [3] International Conference on Strongly Correlated Electron Systems - SCES 2014, Grenoble, France, Local Committee.
- [2] International Conference on Strongly Correlated Electron Systems - SCES 2008, Rio de Janeiro, Brasil, Local Committee.
- [1] 9th International Conference on Nanostructured Materials - NANO 2008, Rio de Janeiro, Brasil, Local Committee. Exhibitors organizer.

Company Partnerships

- [1] Founding partner of Porticus Comunicações. Development of IT solutions based on Linux, from 2000 a 2001.