

Antonio Ferreira da Silva - A Brief Biography

Current Position: Professor Chair, Federal University of Bahia (UFBA)

Institute of Physics, Institute of Health Sciences UFBA, Salvador - Ba, Brazil

Phone: +55 71 9 9989 2502 / 3235 2890 ferreira.fis@gmail.com

Experience in

Condensed Matter Physics, acting in optical and electronic properties of new materials with emphasis to experiment and theory mainly on interaction of nanoparticles with biological structures, alternative energies, oxides, photocatalysis leading to hydrogen production and solar cells, spin polarization driving to spintronic devices based in semiconductor nanostructures and ferromagnetism in diluted magnetic systems, conductivity and its effect at high magnetic field and very low temperature.

Completed his PhD in Physics at the Linköping University, Sweden in Dec 1979 with the investigation of disorder and correlation effects in impurity semiconductor materials. Joined the group of Takeo Matsubara to direct his research to disordered systems at Department of Physics, Kyoto University, Japan in 1979. At Brown University, USA in 1982 directed his investigation to inversion layers and low dimensional systems. Has been visiting professor at Uppsala University, Linköping University and Royal Institute of Technology, Sweden, Princeton Univ., Oslo Univ and London Center for Nanotechnology.

Researcher 1A of the CNPq - National Research Council for Scientific and Technological Development / MCTI (Ministry of Science, Technology and Innovations)

Current:

Coordinator of the LAMUME, LIMCETs I-VI, LIMCEBT (Integrated Multifunctional Laboratories in Exact, Biological, Health and Earth Sciences), an Integrated Infrastructure Project **UFBA/FINEP** involving Institutes of Physics, Geosciences, Chemistry, Mathematics, Biology and Health Sciences (6 Institutes). Facility Laboratory for Nano-Structured Materials for Energy and Sensor - **PETROBRAS** (Brazilian Petroleum Emp.) and Center of Excellence PRONEX/FAPESB.

Coordinator of the NUMANES -Research Nucleus on Nanostructured Materials for Energy and Sensing. PRONEX/CNPq/FAPESB (Nucleus of Excellence)

Coordinating Budget Projects over US\$7 millions

FINEP -To promote Brazil's economic and social development through public funding for Science, Technology and Innovation at companies, universities, technological institutes and other public or private institutions.

Vice Coordinator of Multi-User Nanotechnology Laboratories-LMNAN of CETENE (Northeast Center for Strategic Technologies -Recife, Brazil). **Strategic Laboratory of SisNANO** - *National System of Laboratories in Nanotechnology of the Ministry of Science, Technology and Innovations (MCTI)- Brazil.(Member)*

Previous:

Steering Committee (Full Member) for Physics and Astronomy at the (CNPq)/MCTI.

(**Twice**- National Elections, last time ended /Sept 2018).

Steering Committee for International Cooperation (CGCIN) of the (MCTI) in Nanotechnology

Steering Committee for Nanosensors and Nanodevices Innovation Networks of the SIBRATEC (Brazilian System of Technology) /MCTI

• **Advisory Committee** for the Consortium for Innovation on Nanotechnology, Energy, and Materials (CINEMA), Brazil-United States www.colorado.edu/rasei/cinema.

• **Consultant to CAPES** (Coordination of Improvement of Higher Education Personnel)

Coordinator of the Advisory Board and Technology Assessment of FAPESB (Bahia Foundation for Research)- Mathematic and Natural Sciences (up to 2016).

Appointments:

Member of Bahia Academy of Sciences (Founding Member).

Full Member of Graduate Programs; *Physics, Biotechnology (Institute of Health Sciences /ICS) and RENORBIO (Northeast Biotechnology Network)*

Vice- Coordinator of the (LMNAN) Multiuser Laboratory of Nanotechnology of CETENE (Northeast Strategic Technology Center) – Recife,Pe – as part of SisNANO-Brazilian Nanotechnology Laboratories System, MCTI.

Guest Professor, Linköping University, Dept. of Physics, Chemistry and Biology, Sweden (up to 2010)

Guest lecturer at the **MSE-KTH (Material Science-Royal Institute of Technology, Stockholm, Sweden) International Summer Course** (June-July 2007).

Guest Lecturer at the Linköping University (Dept. of Physics, Chemistry and Biology). PhD Course and International Master Course, 2006.

Visiting Staff in Physics, Uppsala University, Sweden, 2015. Programme of Exchange & Cooperation for International Studies - Europe & South America, **Erasmus Mundus**.

Visiting Physics Chair, Latin American Programme, Brazilian Physical Society, Antioquia University, Medellin, Colombia, 2014.

• **Boarding Committees for PhD Thesis** in Sweden

• **Boarding Committees for PhD Thesis** at Ecole Polytechnique Universitaire de Lille, France - May 2014

•• **External Examiner/Faculty Opponent for PhD Thesis** at Royal Institute of Technology (Stockholm-Sweden), 2013

•• **External Examiner/Faculty Opponent for PhD Thesis** at Linköping University, 2017 - Sweden

• **Advisory Committee** for the Swedish Academic Collaboration Forum (www.sacf.se)

• **Editorial Advisory Board Member**, Cogent Physics, Taylor&Francis Group

• **Editorial Advisory Board Member**, Brazilian Journal of Physics

• **Consultant to QS (Quacquarelli Symonds) Intelligence Unit (QSIU)/ QS Global Academic Survey/ QS World University Rankings-2018,2019,2021**

• **Consultant to Times Higher Education World University Rankings The World University Rankings and THE World Reputation Rankings“ 2019-2020**

• **Consultant to Scientists** and **Entrepreneurs of the Year Award Nanocell Institute** -2018

• **Boarding External Examiner/Committee for Professor Chair** at Physics Institute, São Paulo University-USP, June 2019

* **Boarding Examiner/Committee of the Year PhD Thesis-CAPES -July 2019**

* **Visiting Professor Chair at São Paulo University-USP, Physics Institute ,2020**

* **Brazilian Delegation, 4th BRICS Working Group on Materials and Nanotechnology, 22-23 /11/ 2022. BRICS(Brazil,Russia,India,China, South Africa). MCTI**

Other Appointments

Professor Chair (National Public Application), Federal University of Bahia, March 2000

Coordinator for the Graduate Program in Physics – UFBA, 2006 – 2010- 2015
Research Leader, Group of Basic and Applied Physics in Semiconductor Materials,
Member of Research Staff, Nano Northwest Strategic Centre for Technology-CETENE, Recife,
Vice-Coordinator, Multi-user Laboratory of Nanotechnology –LMNAN/CETENE
Visiting Professor, KTH-RIT, Stockholm, Sweden, June 2006,2007, 2008,2009
Visiting Professor, London Centre for Nanotechnology, London, June 2007 and 2008.
Visiting Scientist, Uppsala University, Dept of Physics, 2000-2011,
Senior Researcher, National Institute for Space Research - INPE, 1986-1999
Academic Coordinator (Graduate Courses), INPE, 1982-1985
Member of the Commission for promotion in the Research Career, INPE, 1982-1984.
Member of Staff for Student Supervising, Institute of Physics, São Paulo University, 1983-1995
Member of Staff for Student Supervising, Aeronautic Technological Institute-ITA, 1983- 1995
Visiting Researcher Associate, Dept. of Physics, Brown University, USA, Jul-Sept 1982
Head, Division of Science and Technology of Materials, INPE, 1981-1982
Visiting Researcher, Dept. of Physics, Kyoto University, Japan, 1979
Assistant Professor, Physics Institute, UNICAMP, 1972-1974

Selected Synergistic Activities

2000-2017 Attended international conferences as Invited Talk (About 31 from 2007-2017)

2008 – Visiting Professor, Princeton University, Dept of Electronical Engineering, Nov.
2008 – Visiting Professor, The City College of New York, Nov.
2008 /2011 Visiting Professor, Naval Research Laboratory, Washington, Dec.
2006- Visiting Professor, Lab. d'Etudes des Proprietés Eletroniques des Solides (CNRS), Grenoble,France, June.
2007 – Chairman: International Workshop on Bulk Nitride Semiconductors Brazil
2007 –Chairman: Swedish-Brazil International Workshop in Avanced Functional Materials,Brazil
2004-2007 - Coordinator: Cooperative Network for Research on Advanced Materials and Nanotechnology: Development of Prototypes and Nanodevices (REMAN)
1997 - Visiting Professor, Niels-Bohr Institute, University of Copenhagen, Denmark, April
1994 - Visiting Professor, Centro de Investigación y de Estudios Avanzados - CINVESTAV (Center of Investigation and Advanced Studies) Dept. of Physics, Mexico, DF, Nov-Dez
1991 – Visiting Professor, Princeton University, Dept of Electronical Engineering, Aug.

Publications

Over two hundred and thirty papers in Condensed Matter Physics,Chemistry and Biology.

Editor Book : Three

Book Chapter- “Electronic Properties of Intrinsic and Heavily Doped 3C-,nH-SiC (n=2,4,6) and III-N (III=B,Al,Ga, In)”. C. Persson and A. Ferreira da Silva, In Optoelectronic Devices: III-Nitrides. Editors M.Razeghi and M.Henini 2004; Pub. by Elsevier Adv. Technology; ISBN 0-08-044426-1. pp- 479-559

Patents: **Two** in the field of Optical Filter and LED by FTO using Porous Silicon.
Two in Protein/Saccharomyces Cerevisiae

Supervisions

PhD Student Supervisions: Six

Current PhD Students: 4

PhD Supervisor at Institute of Health Sciences/ Biotechnology- ICS/ UFBA – Current PhD Student: 4

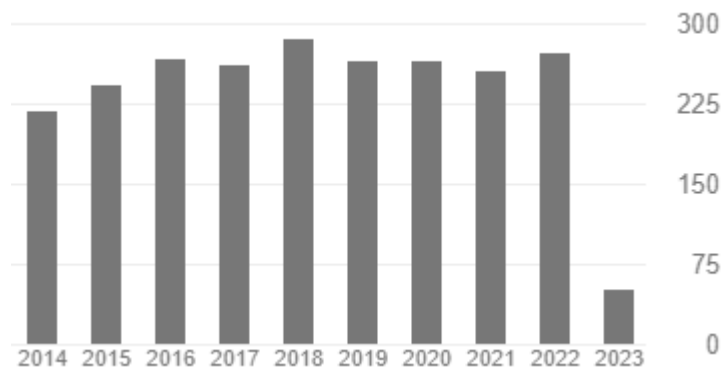
Current PNPD-CAPES (National Programme for Pos-Doc) : 1

MSc Supervisor at Institute of Health Sciences/ Biotechnology -ICS/UFBa – Current : 1

MSc student supervisions: Nineteen (19)

Collaborators: C. Moyses Araújo (U. Uppsala/U Karlstad-Sweden), R. Ahuja (U. Uppsala-Sweden), C. Persson (UiO Norway-KTH/Sweden), B. Sernelius (Linköping University LiU-Sweden), M. Willander (LiU), O. Nur (LiU), L. Stolz Roman (UFPR, Brazil), G. Aeppli (L.C.N. London/PSI-Zurich), E. Bustarret (CNRS, France), J. Freitas (NRL-USA), M. Sarachick (CUNY-USA), M.A. Toloza Sandoval (CNPEM/Brazil), E.A. de Andrada e Silva (INPE/Brazil), G. La Rocca (SNS Pisa, Italy), J.F. Diniz Chubaci (USP, Brazil), C. Rodrigues Miranda (USP, Brazil), M. Malta (UFBA, Brazil), R. Geris (UFBA/Brazil), S.T. da Cunha Lima (UFBA, Brazil), I. Pepe (UFBA, Brazil), A. Fazzio (CNPEM/Brazil), G. Machado (CETENE/Brazil), A. Levin (USP/Brazil), H. Boudinov (UFRGS/Brazil), M. Boström (UiO), G. Daltro (ICS-UFBA/Brazil)

TRACK RECORD



Scientific Impact,

Google Scholar, Jan 2023

Total number of citations:	4413	(1435 since 2018)
Hirsch-index:	29	(16 since 2018)
i10-index (>/=)	109	(34 since 2018)



Invited Talks (2007- 2021)

- “Bulk and Porous Semiconductor Materials, Optical and Conduction Investigations “**. Swedish-Brazilian Workshop on Advanced Functional Materials .Salv., Ag 08-11, 2007
- **“Optical and Transport Properties of the Double-Donor Systems Si:P,Bi”** . London Centre for Nanotechnology., London, Jun 25, 2007
- “Ferromagnetism in Disordered Doped III-V Dilute Magnetic Semiconductors”**. Princeton University, Dept. of Electrical Engineering - Nov. 24, 2008, USA.
- “Ferromagnetism in Doped Ga(1-x)Mn(x)As Dilute Magnetic Semiconductors”**. The City College of New York, Dept. of Physics. Nov 26, 2008,USA.
- “Variational Solution for the Rashba Splitting in AlGaAs/GaAs Hetrojunction”**. MRS, Material Research Society -2008 Fall Meeting, Boston, USA, Dec. 3.
- “Ferromagnetism in Disordered Dilute Magnetic Semiconductors Applied to GaMnAs”**. MRS, Material Research Society -2008 Fall Meeting, Boston, USA Dec. 4.
- “High Doping Effects on Fundamental Properties of SiC and Diamond”**. NAVY-Naval Research Laboratory, Dec 05. 2008, Washington, USA.
- “Complex bulk and surface materials: morphological, optical and conduction investigations”**II Workshop on simulation and Analysis of Complex Systems + 4th Workshop on Complex Systems. INPE + Pan-American Association of Computational Interdisciplinary Sciences, SJ dos Campos, Mar 2009.
- “Electronic structure and band-edge optical absorption of rutile SnO₂ and TiO₂”**. 15th Semiconducting and Insulating Materials Conference.Vilnius University and Semiconductor Physics Institute, Vilnius, Lituania, June 2009.
- “Optical and Transport Properties in Semiconductor Systems”**. LiU-Suécia, 2010
- “Optical Properties of TiO_{2-x}N_x “**. IWBNS-VII 2011, 7th International Workshop on Bulk Nitride Semiconductors – Koyasan, Japan, March15-20, 2011.
- “Study of Native Defects in Thallium Nitride “**. IWBNS-VII 2011, 7th International Workshop on Bulk Nitride Semiconductors – Koyasan, Japan, March15-20, 2011.
- “Research & Industry Connections: the Brazilian and Sweden Experiences”** - Brazil-Sweden Innovation Learning Laboratory. Brazilian Kick-off discussant, São José dos Campos, SP- Brazil, April 08,2011
- **“Optical Properties of the Photocatalyst BiTaO₄ ”** 16th Semiconducting and Insulating Materials Conference – SIMC XVI. Stockholm, Suécia, June 19-23,2011.
- **“ Optical Properties of the Photo-catalyst BiTaO₄ / BiNbO₄”**The Seventh Multifunctional Materials Workshop (MFM-7). Gamboa- Panama. Aug 5-9,2012.
- “Electron g-factor Anisotropy in Semiconductor Quantum Wells “ Spin –Related Phenomena in Mesoscopic Transport –NORDITA, Stockholm,3-28 September 2012**
- “Intrinsic and Doping Effects on Fundamental Properties of Semiconductor Materials”** Instituto de Física Teórica ,Universidade Estadual Paulista (UNESP) - ICTP South American Institute for Fundamental Research. May 08, 2013.

- “Renewable Energy: What Does the Future Hold?”** Royal Institute of Technology –KTH, Stockholm-Suécia, Oct.18, 2013.

- **“Bulk Properties of InN Films Deposited by Ion Beam Assisted Technique “**. IWBNS-VIII 2013, 8th International Workshop on Bulk Nitride Semiconductors –**Seeon, Munich/Germany**, Oct 03.
- **“Properties of Oxides and Nitride Films Deposited by Ion Beam Assisted Method“**. The Eighth Multifunctional Materials Workshop (MFM-8).Itamambuca, SP Nov. 10-14,2013.
- “Nanostructured materials: different applications for yeast, gold nanoparticles, hydrogen production and nanoporous silicon”**. 1st Brazil-China Seminar on Nanotechnology,March 25 to 27, 2014. BRICS . CNPEM,SP
- “Renormalization of the Electron g-Factor in Semiconductor Quantum Wells”**.4th International Conference on Superconductivity and Magnetism”,ICSM2014. **Antalya (Turkey)** 27April-02May
- “Spin Related Effects in III-V Semiconductor Nanostructures “**.Invited 1st International Workshop on Advanced Materials and Energy Applications. **Meknès (Morocco)**, 7-8 May 2014.
- “Ferromagnetism in Dilute Magnetic Semiconductors: Application to Doped Ga_{1-x}Mn_xAs ”**. Universidad de Antioquia, **Medellin, Colombia**. Nov. 10, 2014.
- “Electron g-Factor Renormalization in Semiconductor Quantum Well Systems”**. Universidad de Antioquia, **Medellin, Colombia**. Nov. 14 2014.
- Invited Speaker: MRS-E, European Material Research Society, Fall Meeting – **Warsaw, Poland**, Sept, 2015.
- Invited Speaker: IWBNS-IX 2015, 9th International Workshop on Bulk Nitride Semiconductors, Seoul, Korea, Nov, 2015.
- Invited Speaker 2015: MRS-E, European Material Research Society, Fall Meeting – Warsaw, Poland, Sept, 2015.
- Invited Speaker: Promising Approaches for Conversion and Storage of Solar Energy. Medellin, Colombia** Oct 8-9, 2015. “A Study on the Photocatalytic H₂ Production and Solar Cell Materials: Electronic and Optical Properties of Doped BiNbTaO₄,TiO₂& CIS”.
- **Novel Functional Materials and Nanotechnology. “Functional Materials for Optoelectronic and Energy Conversion”**. **Brazil -Sweden Excellence Seminar**16 – 20 May, 2016. **Brasilia,DF Brazil**.
- **“Electronic and Optical Properties of Doped Oxides for Energy Conversion “** SBPMat -XV Material Research Society Meeting , **Campinas, SP**- Sept 25-29,2016
- **“Research Collaboration on Functional Materials “Brazil-Sweden Bilateral Research and Education Collaboration, Recife** April 6-7,2017
- Invited Speaker:” The Effect of Cr concentration on the magnetic moment of the InCrN: a first principle study”**. IWBNS-X 2017, 10th International Workshop on Bulk Nitride Semiconductors, **Nuusio National Park in Espoo, Finland** Sept 17-23,2017.
- **“Optical, Electronic, Spintronic and Magnetic Properties of Semiconductor Materials“– Joint South Africa-Sweden Research Collaboration Workshop** on Improving performance of wide-bandgap materials, 25-26 Sept 2017, Gyllen Uttern,**LiU**
- **“ZnO Nanostructures: What does the Future Holds? “LiU -Sweden**, Oct 27,2017
- **“ Narrow-Gap Semiconductor Spintronics—Electron G-Tensor Engineering with Multilayer Structures “** Oral Presentation for the **2020 MRS Fall Meeting, November 28–December 4, 2020.Boston**. Symposium: F.NM06 / Optoelectronics and Spintronics.

- “ **Electron G-Tensor Engineering in Narrow Gap Semiconductor Heterostructures:Spintronics Applications** “ **Invited Speaker** / Presentation for the XXIX International Materials Research Congress MRS -Materials Research Society, Cancún, August **2021**. Symposium: F4 **Advanced Defense Materials**.

-Projetos/Laboratórios-Implantações/Coordenações-Resumo

•**Laboratório Multi - Usuário de Microscopia Eletrônica da UFBA –FINEP/MCT (LAMUME)**. CT-INFRA Plano de Desenvolvimento da Infra-Estrutura Institucional de Pesquisa - Edital 01/2005. MCTI/FINEP - 1140/06, Projeto Excelência em Artes, Saúde e Tecnologia da UFBA. Valor app. R\$1.000.000,00 **Microscópio de Varredura -MEV**. Operacional abril 2012
FINEP- Financiadora de Estudos e Projetos

• **Laboratórios Integrados e Multifuncionais em Ciências Exatas e da Terra, LIMCET**. Construção prédio para laboratório no Instituto de Geociências e compra de **Microscópio de Força Atômica**. Projeto de Infra-Estrutura. Valor app. R\$1.500.000,00. Viabilização2015. **CHAMADA PÚBLICA MCT/FINEP/CT-INFRA – PROINFRA – 01/2008**.

•**LIMCET II**. Projeto Integrado Institutos de Física, Geociências e de Química. Laser Corante etc. R\$ 4.578.818,00. PROINFRA–01/2009UFBA/FINEP-01/2009.

• **LIMCET III**. Valor Apoiado R\$ 2.141.323,00. PROINFRA/FINEP – 01/2010

• **LIMCET IV. Microscópio de Transmissão-MET (Implantação 2019)**. Implantação do Auditório de Video-Conferência. Total R\$ 5.301.070,00. PROINFRA/UFBA/FINEP (2011).

• **LIMCET V**. Projeto Integrado Institutos de Física, Geociências, Química e de Matemática. Implantação **Sistema de Computação de Alto Desempenho**, Valor Apoiado R\$ 2.201.647,00. PROINFRA – 01/2012

• **LIMCEBT**. Laboratórios Integrados e Multifuncionais em Ciências Exatas, Biológicas e da Terra. **Projeto Integrado Institutos de Física, Geociências, Química, Matemática, Biologia e de Ciências da Saúde. Microscopia Confocal**. Protein Liquid Chromatography PRO-INFRAUFBA/FINEP (2014/2015). App R\$7.000.000,00.

•**Implantação do Laboratório Multi-Usuário de Microscopia Eletrônica (LAMUME)** do Núcleo de Pesquisa em Materiais Nano-Estruturados para Energia e Sensoriamento. **Redes Temáticas em Nanotecnologia, Petrobras/CENPES,2010**. Valor R\$407.000,00. FAPEX 0050.0047677.08.9 – SAP 4600307304

•**Laboratório de Baixa Temperatura** no LaPO/IF-UFBA . 2009.
Propriedades óticas e de condução (Hall) a baixas temperaturas.

•**Controlling Properties of High Dielectric Constant Oxide Films** Deposited by Ion Beam Assisted Method (IBAD). Envolvimento: UFBA/USP/Office of Naval Research Laboratory- Washington, USA. Período 3 anos, US\$100,000/ano. 2010. Renovado 2019.

•Projeto em Temas Estratégicos: **Materiais Avançados Para Energias Alternativas e Sensores**. FAPESB 2008/2010. R\$349.810,00. Edital 008/2008

•**Desenvolvimento de Materiais Nanoestruturados**. Aplicados à Produção de Hidrogênio. R\$154.100,00. Bolsas de Doutorado- GD (1), Mestrado – GM (2),Iniciação Tecnológica Industrial – ITI (2). Edital MCT/CNPq/CT- Energ N° 04/2010.

•**NUMANES**-Núcleo de Pesquisa em Materiais Nanoestruturados para Energia e Sensoriamento–**PRONEX/CNPq/FAPESB (NUMANES) (Núcleo de Excelência)** – 2007/2010. App. R\$ 650.000,00. T.O.05/2007.

• **PRONEX/CNPq/FAPESB (NUMANES II)** (Núcleo de Excelência) – 2011/2014. R\$ 997.916,80. EDITAL FAPESB/CNPq No 024/2010

• **Centro Laboratorial Multiusuário de Materiais Avançados do Parque Tecnológico do Estado da Bahia (CLAMTEC)** – Valor R\$ 26.213.797,00. PROJETOS PARA CONSTRUÇÃO E IMPLANTAÇÃO DE CENTROS LABORATORIAIS MULTIUSUÁRIOS NO PARQUE TECNOLÓGICO. EDITAL PROPCI/UFBA 08/2013 – **PROPAPTEC** (Aprovado CONSUNI/UFBA Ata 10/09/2013 Proc. 23066.029822/12-75)).

• Programa **Ciência sem Fronteiras** – Pesquisador Visitante Especial. França. “Espectroscopia de perda de energia de fotoelétrons para o estudo de novos materiais na energia solar e na eletrônica-Photoelectron Energy Loss Spectroscopy**PEELS**.Exchange Programme MEC/MCTI/CAPES/CNPq/FAPs Nº61/2011.Implantação 2012.

• Fortalecimento da **Infra-Estrutura do Programa de Pós-Graduação em Física (PPGF)** do Instituto de Física da UFBA. Edital 06/2010 FAPESB **Programa de Infra-Estrutura de Pesquisa**.R\$149.961,95, Ed 011/2012 R\$197.837,40. Ed 010/2013 R\$195.959,22

• Projeto **Cooperação Internacional**. Com Uppsala University. “**Materiais Híbridos para Conversão de Energia Solar Através de Fotossíntese Artificial**”. R\$87.250,00 Edital 012/2014.TO INT0003/2015. Em curso FAPESB.

- Implantação e Membro Gestor Titular quando da Criação do Centro Interdisciplinar de Energia e Ambiente da UFBA - **CIEnAm** e Doutorado / CAPES.

- **Membro Titular da Comissão de Coordenação e Elaboração do Projeto para a Implantação do Campus Avançado da UFBA no Município de Camaçari**, Ba 2011/2013. Proposta elaborada pela Comissão constituída pela Portaria 554/2011 da Reitora da UFBA, Professora Dora Leal Rosa.

- **Projetos Estruturantes** de C&T&I-2008 MCTI/FINEP/UFBA/FAPESB Membro Equipe Executora. Integração e Fortalecimento da Infra-Estrutura em Engenharias no Estado da Bahia. Valor total: R\$7.998.657,50

- **Membro do Comitê Temático** Transversal de Tecnologia e Inovação do Conselho de Desenvolvimento Industrial do Estado da Bahia. 2010

- **Topological boundary states for design of quantum devices- INCT 2023- CNPEM** Colaboração com Prof Adalberto Fazzio . Incluindo 1 PD.

- **CH PETRO ENERG. Chamada CNPq/MCTI/FNDCT Nº 18/2022 - Pesquisa, Desenvolvimento e Inovação em Apoio ao Programa Combustível do Futuro e à Iniciativa Brasileira do Hidrogênio (IBH2 MCTI).**

Projeto: Produção Eletro e Fotocatalítica de Hidrogênio por Materiais Nanoestruturados Sustentáveis. Electro- and photocatalytic hydrogen production by sustainable nanostructured materials.**Coordenação: Antonio Ferreira da Silva. Recurso: R\$1.192.000,00. 10/2022**

Palestras Governamentais

- **“Nanotecnologia e suas Aplicações”.**

Conselho de Altos Estudos e Avaliação Tecnológica. Câmara dos Deputados Federais, Nov. 25, 2009, Brasília.

- **“Materiais Avançados e Nanotecnologia “.**

III Conferência Estadual de Ciência, Tecnologia e Inovação. “Ciência, Tecnologia e Inovação para o Desenvolvimento Social da Bahia”. Áreas Estratégicas. **SECTI- Secretaria de Ciência Tecnologia e Inovação Salvador**, 17/03/2010.

Conferências Organizadas/

- a. **The International Workshop on Bulk Nitride Semiconductors-XI.** Pocono Mountains, Lehigh Valley, PA, USA Oct 11-16,2020. Conference Organizers: International Steering Committee. International Advisory Committee /2022
- b. Brazil-Sweden Bilateral Research and Education Collaboration, Recife April 6-7,2017
- c. “The Eighth Multifunctional Materials Workshop (MFM-8)”. Itamambuca, SP Nov. 10-14,2013.
- d. Regional Program Committee-Americas. “10th International Conference on Nitrides Semiconductors 2013” –ICNS-10. Trabalho apresentado : “Intrinsic Properties of InN Films Deposited by Ion/Electron Bean Assisted Method”.Washington,DC (USA)
- e. International Advisory Committee, The International Workshop on Bulk Nitride Semiconductor (IWBNS-8). Seeon, Munich/Germany, 2013.
- f. 5th International Workshop on Bulk Nitride Semiconductors – Sept 24-28, 2007 Itaparica,Salvador,Ba,Brazil
- g. Swedish-Brazilian Workshop on Advanced Functional Materials – Aug 8-11,2007, Salvador,Ba,Brazil
- h. NanotecNE – Bahia. Fórum para o Desenvolvimento Industrial em Nanotecnologia no Nordeste. CETENE, SECTI, FIEB/IEL, UFBA, ADBI. Salvador, 04/09/2008

Algumas Consultorias

Revistas Internacionais e Fundações de Amparo à Pesquisa no Brasil. Termo de Cooperação entre as Fundações e a Vale do Rio Doce: FAPEMIG/FAPESP/FAPESPA/VALE (2010). Agencia Nacional de Investigación e Innovación –ANII. Uruguay

Distinções:

a) Prêmio Inventor UFBA,2012.Titulo: ”Proteínas de choque térmico (HSP)s como marcadoras de leveduras starters de Saccharomyces cerevisiae mais resistentes ao estresse em processos fermentativos” junto com a Biologia.

b) Prêmio PUBLIC-UFBA 2012.“Visible-light-driven photocatalytic hydrogen production over dye-sensitized-BiTaO₄” Jour. of Photochemistry and Photobiology A: Chemistry.

c) UFBA (Reportagens da UFBA)

<https://especiais.correio24horas.com.br/ocerebrodaufba/antonioferreira/>

<https://www.edgardigital.ufba.br/?p=22396>

<http://www.cienciasbahia.org.br/vernoticias.php?id=1179>

d)Lattes

<http://lattes.cnpq.br/6627014131017403>

e) Reportagens Jornal (Cérebros da UFBA)

<https://especiais.correio24horas.com.br/ocerebrodaufba/antonioferreira/>

<https://especiais.correio24horas.com.br/ocerebrodaufba/portfolio-item/intro/>

<https://especiais.correio24horas.com.br/ocerebrodaufba/>

Palestras Convidadas (2008-2022) – Nacionais

-“Evolução da Ciência”, **Centro Estadual de Tecnologia da Bahia, CETEB**, Camaçari. Dezembro 16 (Duas Palestras: Tarde e Noite), 2008.

-“Materiais Complexos: Propriedades Ópticas, Morfológicas e Condutivas”. Aplicações em NanoBioEstruturas. Workshop Nanobioestruturas e Nanobiomoléculas.

CNPq/UFRN/FAPERN, Natal, Nov2009.

- “Propriedades Óticas, Condutoras, Morfológicas e Magnéticas de Novos Materiais Semicondutores. Teoria e Aplicação”. II Escola de Inverno de Física.,IF 27/07/2010.

- **“Alguns Aspectos da Nanociência: Aplicações”**. **Academia de Ciências da Bahia- ACB** . Salvador 18/10/2010.

- “Materiais Avançados para Energias Alternativas e Sensores. Teoria- Experimento- Aplicação”. III Escola de Inverno de Física. Salvador, 22/07/2011.

- **“Alguns Aspectos da Nanociência: Aplicações Nanobiotecnológicas”**. **Centro de Pesquisa Gonçalo Moniz, FIOCRUZ / Ba**. 04/11/2011.

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