

## ADAIR R. AGUIAR, PH.D.

- Last update: Jan. 21, 2025

- **Office**

Department of Structural Engineering - SET, São Carlos School of Engineering - EESC  
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- **Education**

- Jan. 1998, Ph.D. in Mechanics, University of Minnesota - UMN, Minneapolis, MN, USA  
Thesis: SINGULAR PROBLEMS IN ELASTICITY
- Dec. 1989, M.E. in Mech. Engrg., Pontifical Catholic University of Rio de Janeiro - PUC-Rio, Rio de Janeiro, RJ  
Dissertation: NUMERICAL SIMULATION OF THE NECKING PHENOMENON IN AN ELASTIC MATERIAL
- Jan. 1988, B.E. in Mech. Engrg., Federal University of Santa Catarina - UFSC, Florianópolis, SC

- **Professional and visiting positions**

- November 2018 - present, Affiliate Adjunct Associate Professor, Department of Aerospace Engineering and Mechanics at the University of Minnesota, Minneapolis, MN, USA.
- March 2007 - present, Researcher, National Council for Scientific and Technological Development - CNPq, Brasília, DF. Obs.: CNPq Fellowship for Research Productivity, Level II
- May 2015 - present, Associate Professor, SET/EESC/USP
  - April 2021 - present, Director of Graduate Studies in Bioengineering
  - Sept. 2017 - March 2021, Associate Director of Graduate Studies in Bioengineering
  - April 2017 - present, member of Department Council
- Aug. 2003 - April 2015, Assistant Professor, SET/EESC/USP
  - Sept. 2013 - Aug. 2017, member of Deliberative Council of Center of Engineering Applied to Health

Research:

- Development of peridynamic theory
- Singular states in elasticity
- Evaluation of effective properties using homogenization theories
- Material stability of hyperelastic solids

Teaching:

- Undergraduate level: Strength of Materials V, Solid Mechanics I, II, III, Mechanics of Aeronautical Structures I, II
- Graduate level: Nonlinear Elasticity, Nonlinear Programming for Engineering: Theory and Applications
- Dec. 2010 - June 2011, Visiting Researcher/Lecturer, UMN, Minneapolis, MN, USA
  - Research: Modeling of peridynamic materials
  - Teaching: Mechanics of Composite Materials
- Jan. 2002 - July 2003, Visiting Researcher, Federal University of Paraná - UFPR, Curitiba, PR
  - Research: Propagation of waves in heterogeneous elastic solids
  - Teaching: Introduction to Fracture Mechanics, Continuum Mechanics
- Sept. 1999 - June 2001, Software Developer, Energy Solutions International - ESI, Houston, TX

- Feb. 1998 - Aug. 1999, Sept. - Nov. 2001, Research Associate/Lecturer, Rice University, Houston, TX  
Research: Propagation of waves in elastic medium containing a random distribution of scatterers  
Teaching: Strength of Materials Laboratory, Continuum Mechanics I

- **Short visits**

- Feb. 12 - 23, 2024, Visiting Researcher, University of California, Berkeley, CA, USA
- Feb. 07 - 22, 2020, Visiting Researcher, New Mexico State University (NMSU), Las Cruces, NM, USA
- Sept. 07 - 15, 2019, Visiting Researcher, Don State Technical University, Rostov-on-Don, Russia
- June 17 - 23, 2018, Visiting Researcher, University of Parma, Parma, Italy
- August 15 - 18, 2012, Visiting Researcher, Institute of Acoustics, Tongji University, Shanghai, China
- June 21 - 27 and July 05 - 26, 2008, Visiting Researcher, Laboratoire de Mécanique Physique - LMP, Université de Bordeaux I, Talence, France
- June 28 - July 04, 2008, Visiting Researcher, Institut Für Mechanik, Otto-Von-Guericke-Universität, Magdeburg, Germany
- Jan. - June 1990, Trainee, Laboratoire de Mécanique et d'Acoustique - LMA, Marseille, France

- **Selected publications**

1. Aguiar, A.R.; Rehm, L.; Steigmann, D.; Taylor, M.: "An Asymptotic Thin-Plate Theory Derived from State-Based Peridynamics". *Journal of Peridynamics and Nonlocal Modeling*, (2025). Accepted for publication.
2. Aguiar, A.R.; Rocha, L.A.: "A Minimization Theory in Finite Elasticity to Prevent Self-Intersection". *International Journal of Solids and Structures* **310**, 113198 (2025).
3. Aguiar, A.R.; da Rocha, G.L.: "Construction of Invariant Relations of  $n$  Symmetric Second-Order Tensors". *Journal of Elasticity* **154**, 45-60 (2023).
4. Aguiar, A.R.; Patriota, T.V.B.: "Brittle Fracture Modeling Using Ordinary State-Based Peridynamics with Continuous Bond-Breakage Damage". *Journal of Peridynamics and Nonlocal Modeling* **5**, 81-120 (2023).
5. Aguiar, A.R.; Bravo-Castillero, J.; Rocha, L.A.: "Analysis of a Cylindrically Orthotropic Disk Using a Regular Perturbation Method". *Archive of Applied Mechanics* **92**, 1983-1996 (2022). Published online: 26 May.
6. Aguiar, A.R.; Seitenfuss, A.B.: "Determination of material properties of a linearly elastic peridynamic material". *Mathematics and Mechanics of Solids*, **27**:6, 1069-1091, (2021).
7. Aguiar, A.R.; Rocha, L.A.: "On the Existence of Rotationally Symmetric Solution of a Constrained Minimization Problem of Elasticity". *Journal of Elasticity*, **147**, 1-32, (2021).
8. Aguiar, A.R.; Sevostianov, I.: "Arbitrarily loaded circular crack in a piezoelectric solid of the symmetry class 6". *Acta Mechanica*, **232**, 2659-2678, (2021).
9. Aguiar, A.R.; Prado, E.B.T.; da Silva, U.P.: "Analysis of Boundary Layer Influence on Effective Shear Modulus of 3-1 Longitudinally Porous Elastic Solid". *Latin American Journal of Solids and Structures*, **17**:8, 1-19, (2020).
10. Aguiar, A.R.: "Strong Ellipticity Conditions for Orthotropic Bodies in Finite Plane Strain". *Journal of Elasticity*, **234**, 219-234, (2019).
11. Aguiar, A.R.; Patriota, T.V.B.; Royer-Carfagni, G.; Seitenfuss, A.B.: "Boundary Layer Effects in a Finite Linearly Elastic Peridynamic Bar". *Latin American Journal of Solids and Structures*. **15**, 1-14, (2018).

12. Aguiar, A.R.; Bravo-Castillero, J.; da Silva, U.P.: “Application of Mori-Tanaka Method in 3-1 Porous Piezoelectric Medium of Crystal Class 6”. *International Journal of Engineering Science*, **123**, 36-50 (2018).
13. Aguiar, A.R.; Royer-Carfagni, G.; Seitenfuss, A.B.: “Wiggly Strain Localizations in Peridynamic Bars with Non-Convex Potential”. *International Journal of Solids and Structures*, **138**, 1-12 (2018).
14. Aguiar, A.R.; da Rocha, G.L.: “On the Number of Invariants in the Strain Energy Density of an Anisotropic Nonlinear Elastic Material with Two Material Symmetry Directions”. *Journal of Elasticity*, **131**:1, 125-132 (2018). Erratum **131**:1, 133-136 (2018).
15. Aguiar, A.R.; Pérez-Fernández, L.D.; Prado, E.B.T.: “Analytical and Numerical Investigation of Failure of Ellipticity for a Class of Hyperelastic Laminates”. *European Journal of Mechanics. A, Solids* **61**, 110-121 (2017).
16. Aguiar, A.R.: “On the Determination of a Peridynamic Constant in a Linear Constitutive Model”. *Journal of Elasticity* **122**:1, 27-39. Erratum. **122**:1, 41-42 (2016).
17. Aguiar, A.R.; Fosdick, R.L.: “On the Corner Behavior of a Nonlinear Elastic Wedge Under Mixed Boundary Conditions”. *International Journal of Non-Linear Mechanics* **66**, 111-125 (2014).
18. Sevostianov, I.; da Silva, U.P.; Aguiar, A.R.: “Green’s Function for Piezoelectric 622 Hexagonal Crystals”. *International Journal of Engineering Science* **84**, 18-28 (2014).
19. Aguiar, A.R.; Fosdick, R.L.: “A Constitutive Model for a Linearly Elastic Peridynamic Body”. *Mathematics and Mechanics of Solids* **19**:5, 502-523 (2014).
20. Aguiar, A.R.; Bravo-Castillero, J.; Rodríguez-Ramos, R.; da Silva, U.P.: “Effective Electromechanical Properties of 622 Piezoelectric Medium with Unidirectional Cylindrical Holes”. *Journal of Applied Mechanics* **80**:5, 050905-1-11 (2013).
21. Otero, J.A.; Calas, H.; Rodríguez-Ramos, R.; Bravo-Castillero, J.; Aguiar, A.R.; Monsivais, G.: “Dispersion Relations for SH Waves on a Magneto-Electro-Elastic Heterostructure with Imperfect Interfaces”. *Journal of Mechanics of Materials and Structures* **6**:7-8, 969-993 (2011).
22. Bravo-Castillero, J.; Rodríguez-Ramos, R.; Guinovart-Díaz, R.; Sabina, F.; Aguiar, A.R.; da Silva, U.P.; Gomez-Munoz, J.: “Analytical Formulae for Electromechanical Effective Properties of 3-1 Longitudinally Porous Piezoelectric Materials”. *Acta Materialia (Oxford)* **57**:3, 795-803 (2009).
23. Aguiar, A.R.; Fosdick, R.L.; Sánchez, J.A.G.: “A Study of Penalty Formulations Used in the Numerical Approximation of Rotationally Symmetric Solutions without Singularities”. *Journal of Mechanics of Materials and Structures* **3**:8, 1403-1427 (2008).
24. Aguiar, A.R.: “Local and Global Injective Solution of the Rotationally Symmetric Sphere Problem”. *Journal of Elasticity* **84**:2, 99-129 (2006).
25. Aguiar, A.; Angel, Y.: “Interface Effects and Coherent Waves in Porous Elastic Media”. *Mathematics and Mechanics of Solids* **11**, 196-215 (2005).
26. Aguiar, A.; Fosdick, R.: “Self-Intersection in Elasticity”. *International Journal of Solids and Structures*. **38**, 4797-4823 (2001).
27. Aguiar, A.; Fosdick, R.: “A Singular Problem in Incompressible Nonlinear Elastostatics”. *Mathematical Models & Methods in Applied Sciences* **10**, 1181-1207 (2000).
28. Aguiar, A.; Angel, Y.: “Antiplane Coherent Scattering from a Slab Containing a Random Distribution of Cavities”. *Proceedings of the Royal Society of London A* **456**, 2883-2909 (2000).
29. Aguiar, A.; Angel, Y.: “Ultrasonic Reflection from Randomly Distributed Cylindrical Cavities”. *Ultrasonics* **38**, 842-844 (2000).

- **Book chapters**

1. Aguiar, A. R.; Prado, E. B. T.: “Estimate of Elastic Properties of Biological Tissues Using a Finite Element Methodology”. In: *Advanced Materials Modelling for Mechanical, Medical and Biological Applications (Advanced Structured Materials, 155)*. Springer International Publishing, 1-21 (2021).

2. Nikolaev, A.L.; Mitrin, B.I.; Sadyrin, E.V.; Zelentsov, V.B.; Aguiar, A.R.; Aizikovich, S. M.: “Mechanical Properties of Microposit S1813 Thin Layers”. In: *Modeling, Synthesis and Fracture of Advanced Materials for Industrial and Medical Applications (Advanced Structured Materials, 136)*. Springer Nature Switzerland AG, 137-146 (2020).

- **Invited talks**

1. Linearly Elastic Constitutive Model in Peridynamics - Theory and Validation. *Research Seminar*, University of California, Berkeley, CA, USA. February 20, 2024.
2. A Linearly Elastic Constitutive Model in Peridynamics. *Plenary Talk*, Don State Technical University, Rostov-on-Don, Russia. September 11, 2019.
3. A Constitutive Model for a Linearly Elastic Peridynamic Body. *Research Doctoral Program in Industrial Engineering*, University of Parma, Parma, Italy. June 20, 2018.
4. Self-Intersection in an Anisotropic Spherical Solid: Analytical and Computational Results. *AEM Department Seminars*, University of Minnesota, Minneapolis, MN, USA. April 01, de 2011.
5. Self-intersection in an anisotropic solid: Analytical and computational results. *Séminaires et Soutenances du Laboratoire de Mécanique Physique (LMP)*, Université Bordeaux I, Talence, France. July 15, 2008.
6. Self-intersection in an anisotropic solid: Analytical and computational results. Fakultät für Maschinenbau, Institut für Mechanik, Lehrstuhl Numerische Mechanik, Otto-Von-Guericke-Universität Magdeburg, Magdeburg, Germany. July 01, 2008.
7. Propagação de Ondas em Sólidos Elásticos Porosos. *Seminários em Física Médica e Biológica I e II*, Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto (FFCLRP/USP), Departamento de Física e Matemática, Ribeirão Preto, SP. October 28, 2004.
8. Propagation of Waves in Porous Elastic Solids. *Special seminar in Mechanics and Materials*, Rice University, Department of Mechanical Engineering and Materials Science, Houston, TX, USA. October 18, 2002.
9. Singular Problems in Elasticity: Asymptotic and Computational Results. *Research Seminar in Mechanics of Materials*, University of Minnesota, Aerospace Engineering and Mechanics, Minneapolis, MN, USA. October 22, 2002.
10. Propagation of Waves in an Elastic Solid Containing a Random Distribution of Cylindrical Cavities. *Mechanics of Materials Seminar*, Woodruff School of Mechanical Engineering, Georgia Institute of Technology, School of Mechanical Engineering, Atlanta, GA, USA. July 01, 1999.
11. Simulation Numérique du Phénomène de la Striction dans un Matériau Élastique. *Séminaires du L.M.A.*, Centre National de la Recherche Scientifique, Laboratoire de Mécanique et d’Acoustique (LMA/CNRS), Marseille, France. March 23, 1990.

- **Organization of events**

- Meetings:

- Minisymposium on *Nonlocal Models and Methods for Material Failure and Damage Simulation*. In: 6th European Conference on Computational Mechanics (ECCM 6). Glasgow, UK. June 11 - 15, 2018.
- 2nd Workshop on *Bone as an Engineering Material - Assessment of Bone Quality: Microstructure, Function and Diseases*. University of São Paulo at São Carlos, SP, Brazil. June 6 - 9, 2017.
- Minisymposium on *Material Modeling in Mechanics*. In: 14th Pan-American Congress of Applied Mechanics (PACAM XIV), Santiago, Chile. March 24 - 28, 2014.
- Minisymposium on *Nonlocal Models for Stiffness Damage and Fracture in Multi-Scale Media and FGM’s*. In: 13th International Symposium on Multiscale, Multifunctional and Functionally Graded Materials - MM&FGM 2014, Tauá Resort, Atibaia, SP, Brazil. Oct. 19 - 22, 2014.

- *International Workshop on Material Modeling*, University of São Paulo at São Carlos, SP, Brazil. March 31 - April 04, 2014.
- Minisymposium on *Continuum Mechanics of Solids and Fluids: A Symposium in Honor of Roger Fosdick* and symposium on *Theoretical and Computational Methods Applied to Multiscale Phenomena*. In: 13th Pan-American Congress of Applied Mechanics (PACAM XIII), Houston, TX, USA. May 22 - 24, 2013.
- *11th Pan-American Congress of Applied Mechanics (PACAM XI) and The 48th SNP Meeting: Advances in Fundamental and Applied Mechanics: A Bridge Between the Physical Behavior and the Mathematical Modeling of Materials*, Foz do Iguacu, PR, Brazil. Jan. 04 - 08, 2010.
- Courses at EESC/USP:
  - *Micromechanics of Materials*. Igor Sevostianov New Mexico State University (NMSU), El Paso, NM, USA. Feb. 26 - March 05, 2020.
  - *Introdução à Homogeneização Assintótica. Aplicações*. Julián Bravo-Castillero Universidad Nacional Autónoma de México (UNAM), Mérida, México. Nov. 25 - Dec. 06, 2019.
  - *Modeling of Biological Tissues*. Iwona M. Jasiuk University of Illinois at Urbana-Champaign (UIUC), Urbana, IL, USA. April 23 - May 4, 2018.
  - *Advanced Topics on Structural Glass*. Gianni Royer Carfagni, University of Parma, Parma, Italy. Oct. 14 - Nov. 24, 2016.
  - *Stability and Bifurcation in Mechanics of Materials*. Eliot Fried, Okinawa Institute of Science and Technology - OIST, Okinawa, Japan. March 10 - 11, 2014.
  - *Methods for the Evaluation of Effective Laws for Nonlinear Elastic Composites*. Julián Bravo-Castillero, University of Havana, Havana, Cuba. June 02 - Sept. 14, 2010
  - *Invariant Structure of Classical Continuum Thermomechanics*. Roger L. Fosdick, University of Minnesota, Minneapolis, MN, USA. Aug. 05 - 18, 2009.
  - *Homogenization and Effective Material Properties of Composites*. Julián Bravo-Castillero, University of Havana, Havana, Cuba. May 11 - July 09, 2009.
  - *Introduction to Asymptotic and Variational Methods of Homogenization*. Julián Bravo-Castillero, University of Havana, Havana, Cuba. Sept. 10 - 27, 2007.
  - *Mechanics of Heterogeneous Non-linear Elastic Solids*. Kumbakonam R. Rajagopal, Texas A & M University, College Station, TX, USA. June 19 - 22, 2006.
- **Membership in professional associations**
  - SOCIETY FOR NATURAL PHILOSOPHY (SNP), since 2009.
    - Member of the Selection Committee, since 2018
  - SOCIETY OF ENGINEERING SCIENCE (SES), since 1999
  - AMERICAN ACADEMY OF MECHANICS (AAM), since 1998.
    - Co-chair of PACAM Committee at American Academy of Mechanics (AAM), 2010 - 2015
  - BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING (ABCM), since 1989
  - BRAZILIAN SOCIETY OF COMPUTATIONAL AND APPLIED MATHEMATICS (SBMAC) since 1989
- **Member of editorial boards**
  - *Mathematics and Mechanics of Solids*, since Nov. 2017
  - *Journal of Peridynamics and Nonlocal Modeling*, since July 2017
  - *Journal of Elasticity*, since June 2014
  - *Journal of Mechanics of Materials and Structures (JoMMS)*, since Sept. 2013
- **Guest Editor**

- Elliott, R.S.; Aguiar, A.R.; Chen, Y.-C.; Royer-Carfagni, G.: Special Issue - In Recognition of the 85th Birthday of Roger L. Fosdick. *Journal of Elasticity* **154**, 2023. <https://link.springer.com/collections/feabahbcba>.
- Aguiar, A.R.: Special Issue - Eleventh Pan-American Congress of Applied Mechanics (PACAM XI). *Journal of Mechanics of Materials and Structures* **6:7–8**, 2011. Berkeley, CA - USA. [msp.berkeley.edu/jomms/2011/6-7/index.xhtml](http://msp.berkeley.edu/jomms/2011/6-7/index.xhtml).
- Aguiar, A.R.; Bravo-Castillero, J.: Edição Especial "Método de Homogeneização Assintótica". *Cadernos de Engenharia de Estruturas* **12: 55**, 2010. São Carlos, SP, Brazil. [cadernos.set.eesc.usp.br/issue/view/6/showToc](http://cadernos.set.eesc.usp.br/issue/view/6/showToc).

#### ● Journal Reviewer

- *Computer Methods in Applied Mechanics and Engineering*, <https://www.sciencedirect.com/journal/computer-methods-in-applied-mechanics-and-engineering>, ISSN: 1879-2138 (Online) 0045-7825 (Print). Since September, 2024.
- *Archive of Applied Mechanics*, <https://link.springer.com/journal/419>, ISSN: 1432-0681 (Online) 0939-1533 (Print). Since January, 2024.
- *International Journal of Solids and Structures*, <https://www.sciencedirect.com/journal/international-journal-of-solids-and-structures>, ISSN: 1879-2146 (Online) 0020-7683 (Print). Since December, 2023.
- *Meccanica*, <https://link.springer.com/journal/11012>, ISSN: 1572-9648 (Online) 0025-6455 (Print). Since June, 2023.
- *Mechanics of Time-Dependent Materials*, [www.sciencedirect.com/journal/engineering-fracture-mechanics](http://www.sciencedirect.com/journal/engineering-fracture-mechanics), ISSN: 1385-2000 (Print) 1573-2738 (Online). Since October, 2022.
- *Engineering Fracture Mechanics*, [www.sciencedirect.com/journal/engineering-fracture-mechanics](http://www.sciencedirect.com/journal/engineering-fracture-mechanics), ISSN: 0013-7944. Since February, 2022.
- *Mathematical Biosciences*, [www.journals.elsevier.com/mathematical-biosciences](http://www.journals.elsevier.com/mathematical-biosciences), ISSN: 0025-5564. Since January, 2022.
- *Mathematics and Computers in Simulation*, <https://www.elsevier.com/journals/personal/mathematics-and-computers-in-simulation/0378-4754>, ISSN: 0378-4754. Since December, 2021.
- *Scientific Reports*, <https://www.nature.com/srep/>, ISSN: 2045-2322. Since August, 2021.
- *International Journal of Non-Linear Mechanics*, [www.sciencedirect.com/journal/international-journal-of-non-linear-mechanics](http://www.sciencedirect.com/journal/international-journal-of-non-linear-mechanics), ISSN: 0020-7462. Since December, 2020.
- *Journal of the Mechanics and Physics of Solids*, <https://www.journals.elsevier.com/journal-of-the-mechanics-and-physics-of-solids>, ISSN: 0022-5096. Since August, 2020.
- *Acta Polytechnica*, <https://ojs.cvut.cz/ojs/index.php/ap>, ISSN: 1210-2709, eISSN: 1805-2363. Since July, 2020.
- *Journal of Peridynamics and Nonlocal Modeling*, [www.springer.com/journal/42102](http://www.springer.com/journal/42102), ISSN: 2522-896X (Print) 2522-8978 (Online). Since May, 2019.
- *International Journal of Engineering Science*, <https://www.journals.elsevier.com/international-journal-of-engineering-science>, ISSN: 0020-7225. Since March, 2019.
- *Computers in Biology and Medicine*, [www.journals.elsevier.com/computers-in-biology-and-medicine/](http://www.journals.elsevier.com/computers-in-biology-and-medicine/), ISSN: 0010-4825. Since July, 2016.
- *Revista Escola de Minas*, [www.rem.com.br/](http://www.rem.com.br/), ISSN: 0370-4467. Since April, 2016.
- *Mathematics and Mechanics of Solids*, [mms.sagepub.com/](http://mms.sagepub.com/), eISSN: 1741-3028. Since January, 2016.

- *Journal of the Brazilian Society of Mechanical Sciences and Engineering (BMSE)*, [www.springer.com/journal/40430](http://www.springer.com/journal/40430), eISSN: 1806-3691. Since January, 2015.
  - *Journal of Engineering Mechanics*, [ascelibrary.org/journal/jenmdt](http://ascelibrary.org/journal/jenmdt), eISSN: 1943-7889. Since February, 2014.
  - *Mechanics Research Communications (MRC)*, [ees.elsevier.com/mrc/](http://ees.elsevier.com/mrc/), ISSN: 0093-6413. Since April, 2011.
  - *Journal of Mechanics of Materials and Structures (JoMMS)*, [www.jomms.org](http://www.jomms.org), ISSN: 1559-3959. Since March, 2008.
  - *Mathematical Reviews*, [www.ams.org/mr-database](http://www.ams.org/mr-database). Since May, 2007.
  - *Latin American Journal of Solids and Structures (LAJSS)*, [www.lajss.org/index.php/LAJSS](http://www.lajss.org/index.php/LAJSS), eISSN: 1679-7825. Since November, 2005.
  - *Journal of Elasticity*, [www.editorialmanager.com/elas/](http://www.editorialmanager.com/elas/), ISSN: 0374-3535. Since March, 1998.
- **Fellowships, scholarships and other awards**
    - Title of *Livre Docente* obtained by public examination at EESC/USP, Feb. 2015.
    - **FAPESP Fellowship for Research Abroad** at UMN, Dec. 2010 - June 2011.
    - First place in public examination for academic position at UFPR, Curitiba, PR, Brazil, March 19, 2003
    - First place in public examination for academic position at EESC/USP, São Carlos, SP, Aug. 03, 2003
    - **Fellowship from Texas Advanced Technology Program** for post-doctoral research at Rice University, 1998 - 1999
    - **CNPq/Brazil Scholarship** for Ph.D. studies at UMN, 1990 - 1995
    - **CAPES/COFECUB Scholarship** for traineeship at LMA, 1990
    - **CNPq/Brazil Scholarship** for M.E. studies at PUC-Rio, 1988 - 1989
    - **PET-CAPES/Brazil Scholarship** awarded to outstanding undergraduate students, 1985 - 1987
- **Ad hoc consultant**
    - ITALIAN MINISTRY OF EDUCATION, UNIVERSITIES AND RESEARCH (MIUR), Italy, since April 2018
    - COORDINATION FOR THE IMPROVEMENT OF HIGHER EDUCATION PERSONNEL (CAPES), Brasília, DF, since Jan. 2015
    - SÃO PAULO RESEARCH FOUNDATION (FAPESP), São Paulo, SP, since April 2007
    - NATIONAL COUNCIL FOR SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT (CNPQ), Brasília, DF, since March 2007
    - ARAUCÁRIA FOUNDATION, Curitiba, PR, since Aug. 2004
- **Language Skills**
    - **Native Language:** Portuguese
    - **Foreign Languages:** English, French, Spanish
- **Conferences - Extended Abstracts**
    1. Aguiar, A.R.; Rocha, L.A., 2024. Numerical investigation of an orthotropic finite elasticity problem using unconstrained minimization theory to prevent material overlapping Presented at *CILAMCE 2024 - XLV Ibero-Latin American Congress on Computational Methods in Engineering*. Maceió, Al. In: *Proceedings of CILAMCE 2024 - XLV Ibero-Latin American Congress on Computational Methods in Engineering* **1**, 1-7.

2. Aguiar, A.R.; Rocha, L.A., 2024. On a constrained minimization theory to prevent material overlapping in nonlinear elasticity. Presented at *9th International Symposium on Solid Mechanics - MecSol 2024*. Florianópolis, SC. In: *Proceedings of the 9th International Symposium on Solid Mechanics - MecSol 2024* **1**, 1-10. Rio de Janeiro, RJ.
3. Aguiar, A.R.; Rocha, L.A., 2023. Investigation of non-smooth solutions in finite elasticity using the phase-plane method. Presented at *XLII Congresso Nacional de Matemática Aplicada e Computacional - CNMAC 2023*. Bonito, MS. In: *Proceeding Series of the Brazilian Society of Computational and Applied Mathematics* **10**:1, 010064-1 - 010064-7. São Carlos, SP.
4. Aguiar, A.R.; Rocha, L.A., 2023. Numerical investigation of non-smooth solutions in finite elasticity. Presented at *27th International Congress of Mechanical Engineering*. Florianópolis, SC. In: *Proceeding of the 27th International Congress of Mechanical Engineering* **1**, 1-8. Rio de Janeiro, RJ:ABCM.
5. Aguiar, A.R.; Rocha, L.A., 2023. Numerical investigation of orthotropic finite elasticity problem with discontinuous deformation gradient. Presented at *XLIV Ibero-Latin American Congress on Computational Methods in Engineering*. Porto, Portugal. In: *Proceedings of the XLIV Ibero-Latin American Congress on Computational Methods in Engineering* **1**, 1-7.
6. Aguiar, A.R.; Rocha, L.A., 2021. Numerical study of a two-dimensional problem in a constrained minimization theory of elasticity. Presented at *CILAMCE 2021 - XLII Iberian Latin American Congress on Computational Methods in Engineering*. Rio de Janeiro. In: *Proceedings of CILAMCE 2021 - XLII Iberian Latin American Congress on Computational Methods in Engineering*.
7. Aguiar, A.R.; Rocha, L.A., 2021. Bifurcating solutions in a constrained minimization problem of elasticity. Presented at *XL Congresso Nacional de Matemática Aplicada e Computacional (XL CNMAC) - Evento Virtual*. UFMS, Campo Grande, MS. In: *Proceeding Series of the Brazilian Society of Computational and Applied Mathematics*, **8**:1, 010380-1 - 010380-7.
8. Aguiar, A.R.; Bravo-Castillero, J.; Rocha, L.A., 2021. Analysis of Equilibrium in Elasticity Using a Regular Perturbation Technique. Presented at *26th ABCM International Congress of Mechanical Engineering (COBEM 2021) - Virtual Congress*. November 22-26, Florianópolis, SC, Brazil. In: *Proceedings of the 26th International Congress of Mechanical Engineering*, 7p.
9. Aguiar, A.R.; Seitenfuss, A.B., 2021. Equilibrium of a Linearly Elastic Peridynamic Material. In: *25th International Congress of Theoretical and Applied Mechanics - ICTAM 2020+1 - Online*, Abstract Book, **1**, 1777 - 1778. August 22nd to 27th. Milan, Italy.
10. Aguiar, A.R.; Patriota, T.V.B., 2020. Modeling and Numerical Simulation of Crack Propagation Using Peridynamics. In: *XLI CILAMCE - Iberian Latin American Congress on Computational Methods in Engineering*, Foz do Iguaçu, PR.
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14. Aguiar, A.R.; Seitenfuss, A.B., Validation of a Linearly Elastic Peridynamic Material. In: *6th European Conference on Computational Mechanics (ECCM 6)*, 2018, Glasgow, UK.
15. Aguiar, A.R.; Prado, E.B.T.; da Silva, U.P., 2018. Effective Moduli of 3-1 Longitudinally Porous Solids with Regular Hexagonal Array. In: *6º Encontro Nacional de Engenharia Biomecânica*, Águas de Lindóia, SP.



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17. Aguiar, A.R.; da Rocha, G.L., 2018. A Methodology to Find Relations between Invariants of  $n$  Symmetric Second-Order Tensors. Presented at *XXXVIII Congresso Nacional de Matemática Aplicada e Computacional (XXXVIII CNMAC)*, Sept. 17 - 21, Campinas, SP. In: *Proceeding Series of the Brazilian Society of Computational and Applied Mathematics*, **6:2**, 010245-1 - 010245-7.
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19. Aguiar, A.R.; Royer-Carfagni, G.; Seitenfuss, A.B., 2017. One-Dimensional Investigation of Boundary-Layer Effects in Peridynamics. In: *6th International Symposium on Solid Mechanics - MecSol 2017*, Joinville, SC.
20. Seitenfuss, A.B.; Aguiar, A.R.; Pereira, M., 2016. Numerical and Theoretical Study of the Properties of a Linear Elastic Peridynamic Material. In: *XXXVII CILAMCE - Iberian Latin American Congress on Computational Methods in Engineering*, Brasília, DF.
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22. Aguiar, A.R.; Prado, E.B.T., 2015. An Investigation of Material Stability in Periodic Two-Phase and Hyperelastic Laminates. In: *Meeting on Aeronautical Composite Materials and Structures - MACMS 2015*, São Carlos, SP.
23. Aguiar, A.R.; Prado, E.B.T., 2015. Study of Material Stability in Laminates using Transversely Isotropic Bodies. In: *Fifth International Symposium on Solid Mechanics - MecSol 2015*, Belo Horizonte, MG.
24. Aguiar, A.R.; Fosdick, R., 2013. The Plane Bonded Punch Problem: Linear vs. Nonlinear Theory. In: *The 4th Canadian Conference on Nonlinear Solid Mechanics - CanCNSM 2013*. Montréal, QC, Canada.
25. Aguiar, A.R.; Pérez-Fernández, L.D.; Prado, E.B.T., 2013. Investigation of Bifurcation Solutions of Plane Problems for a Class of Hyperelastic Laminates. In: *Thirteenth Pan-American Congress of Applied Mechanics - PACAM XIII*. Houston, TX, USA.
26. Aguiar, A.R.; Prado, E.B.T., 2013. Numerical Simulation of Bilaminates with Periodic Hyperelastic Phases. In: *Fourth International Symposium on Solid Mechanics - MecSol 2013*. Porto Alegre, RS.
27. Aguiar, A.R.; Fosdick, R.L., 2012. A Constitutive Model for a Linearly Elastic Peridynamic Body. In: *23<sup>rd</sup> International Congress of Theoretical and Applied Mechanics - ICTAM 2012*, August 19th to 24th. Beijing, China.
28. Aguiar, A.R.; Pérez-Fernández, L.D., 2012. An Asymptotic Homogenization Approach To Study Hyperelastic Laminates With Functionally Graded Constituents Exhibiting Softening. In: *12<sup>th</sup> Pan American Congress of Applied Mechanics - PACAM XII*, January 3rd. Port of Spain, Trinidad & Tobago.
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  - 1- Aguiar, A.R.; Fosdick, R., Self-Intersection in an Anisotropic Solid in the Absence of Singularity - Part I: Analytical Results.
  - 2- Aguiar, A.R.; Fosdick, R.; Sánchez, J. A. G., Self-Intersection in an Anisotropic Solid in the Absence of Singularity - Part II: Computational Results.
  - 3- Bravo-Castillero, J.; Rodríguez-Ramos, R.; Guinovart-Díaz, R.; Sabina, F. J.; Aguiar, A.R., Effective Coefficients of Transversely Isotropic Piezoelectric Composites with Empty Fibres.
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37. Aguiar, A.R., A Numerical Treatment of Overlapping for a Family of Three-Dimensional Elasticity Problems. In: *XXVI CILAMCE - Iberian Latin American Congress on Computational Methods in Engineering*, Guarapari, ES, Brazil. October 20, 2005.
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42. *Sixth Pan American Congress of Applied Mechanics - PACAM VI*:
  - 1- Aguiar, A.; Fosdick, R., Singular Problems in Elasticity: Linear vs. Nonlinear Theory.
  - 2- Aguiar, A.; Angel, Y., Wave Propagation in an Elastic Solid Containing a Random Distribution of Cylindrical Cavities.

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• **Conferences - Abstracts**

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2. Aguiar, A., Rocha, L.A., On the Emergence of Non-Smooth Deformation in the Interior of a Compressed Nonlinear Elastic Disk. In: *2023 Society of Engineering Science Annual Technical Meeting*, Oct. 08 - 11, 2023, Minneapolis, MN, USA.
3. Aguiar, A., Rocha, L.A., Non-uniqueness in a Constrained Minimization Problem of Orthotropic Elasticity. In: *Second International Conference on Modern Problems in Modeling Materials for Mechanical, Medical and Biological Applications (MPMM&A-2022)*, September 26-30, 2022, Rostov-on-Don, Russia.
4. Aguiar, A., Rocha, L.A., Analytical and Computational Investigations of Nonuniqueness in a Constrained Minimization Problem of Elasticity. In: *Virtual Technical Meeting - Society of Engineering Science - SES 2020*, Sep. 29 - Oct. 01, 2020, online, USA.
5. Aguiar, A., Patriota, T.V.B., Brittle Fracture Modeling Using Ordinary State-Based Peridynamics with Continuous Bond-Breakage Damage. In: *Virtual Technical Meeting - Society of Engineering Science - SES 2020*, Sep. 29 - Oct. 01, 2020, online, USA.
6. Aguiar, A., Seitenfuss, A.B., Validation of Properties of a Lineally Elastic Peridynamic Material Based on Equilibrium. In: *56<sup>th</sup> Annual Technical Meeting - Society of Engineering Science - SES 2019*, Oct. 13 - 15, 2019, Washington University in St. Louis, St. Louis, MO, USA.
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8. Aguiar, A.; Bravo-Castillero, J.; Da Silva, U.P., Effective Electroelastic Moduli of 3-1 Porous Piezoelectric Solids of Class 6. In: *15th International Symposium on Computer Methods in Biomechanics and Biomedical Engineering and 3rd Conference on Imaging and Visualization (CMBBE 2018)*, 2018, Lisbon, Portugal.
9. Aguiar, A.R.; Seitenfuss, A.B., Analytical and Computational Investigation of Properties of a Lineally Elastic Peridynamic Material. In: *14th U.S. National Congress on Computational Mechanics*, 2017, Montreal, QC, Canada.
10. Aguiar, A., Strong Ellipticity Conditions for a Class of Transversely Isotropic Bodies in Plane Strain. In: *53<sup>rd</sup> Annual Technical Meeting - Society of Engineering Science - SES 2016*, Oct. 02 - 05, 2016, University of Maryland, College Park, MD, USA.
11. Aguiar, A.R., Propagation of Waves in a Slab Containing a Random Distribution of Cavities. *XXXVI Congresso Nacional de Matemática Aplicada e Computacional (CNMAC 2016)*, Sept. 05 - 09, 2016, Gramado, RS.
12. Aguiar, A.R.; da Silva, U.P.; Bravo-Castillero, J., On the Effective Properties of Porous Piezoelectric Medium with Matrix Material of Crystal Class 6. In: *Society for Engineering Sciences 2015 Technical Meeting*, 2015, College Station, TX, USA.
13. Aguiar, A.R.; Prado, E.B.T., Analytical and Numerical Simulation of Hyperelastic Two-Phase Periodic Laminates. In: *13th International Symposium on Multiscale, Multifunctional and Functionally Graded Materials - MM&FGM 2014*, 2014, Atibaia, SP, Brazil.
14. Aguiar, A.R.; Pérez-Fernández, L. D.; Prado, E.B.T., Influence Of Material Properties On The Failure Of Ellipticity For A Class Of Hyperelastic Laminates. In: *14th Pan-American Congress of Applied Mechanics (PACAM XIV)*, 2014, Santiago, Chile.

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16. Aguiar, A.R.; Fosdick, R., On a Linear Constitutive Model in Peridynamics. In: *13th International Symposium on Multiscale, Multifunctional and Functionally Graded Materials - MM&FGM 2014*, 2014, Atibaia, SP, Brazil.
17. Aguiar, A.R., On the Corner Behavior of a Nonlinear Elastic Wedge. In: *14th Pan-American Congress of Applied Mechanics (PACAM XIV)*, 2014, Santiago, Chile.
18. Aguiar, A.R.; Fosdick, R. A Constitutive Model for a Linearly Elastic Nonordinary Peridynamic Body. In: *Thirteenth Pan-American Congress of Applied Mechanics (PACAM XIII)*, 2013, Houston, TX, USA.
19. Aguiar, A.R.; Pérez-Fernández, L.D.; Prado, E.B.T., Numerical and Asymptotic Investigation of a Bifurcation Phenomenon in a Class of Hyperelastic Laminates. In: *SES 50th Annual Technical Meeting and ASME-AMD Annual Summer Meeting*, 2013, Providence, RI, USA.
20. Aguiar, A.R.; da Silva, U.P; Bravo-Castillero, J.; Rodríguez-Ramos, R., Effective Electromechanical Properties of a Medium Containing Unidirectional Cylindrical Holes Embedded in a 622 Piezoelectric Matrix. In: *49th Annual Technical Meeting of the Society of Engineering Science (SES 2012)*, 2012 Atlanta, GA, USA.
21. Aguiar, A.R.; Bravo-Castillero, J.; da Silva, U.P; Rodríguez-Ramos, R., Effective Electromechanical Properties Of 622 Piezoelectric Medium with Unidirectional Cylindrical Holes. In: *12th Pan American Congress of Applied Mechanics (PACAM XII)*, 2012, Port of Spain, Trinidad & Tobago.
22. Aguiar, A.R., The Imposition of the Injectivity Constraint on a Class of Spherically Uniform Linear Anisotropic Elastic Solids under Radial Compression - Part I: Analytical Results, Part II: Numerical Results. In: *Ninth Pan American Congress of Applied Mechanics (PACAM IX)*, Mérida, Yucatan, México. January 03, 2006.
23. Sánchez, J.A.G.; Aguiar, A.R., Investigação da Convergência de Soluções Aproximadas de Problemas Singulares em Elasticidade Anisotrópica (*with honor distinction*). In: *13<sup>o</sup> Simpósio Internacional de Iniciação Científica da Universidade de São Paulo (13<sup>o</sup> SIICUSP)*, São Carlos, SP, November 09, 2005. Obs.: This work was chosen by USP to be presented at *13<sup>a</sup> Jornada Nacional de Iniciação Científica (13<sup>a</sup> JNIC/SBPC)*, Florianópolis, SC, July 16 to 27, 2006.
24. Aguiar, A.R., The Interior Penalty Method Applied to the Constraint of Local Injectivity in Elasticity. In: *XXVII Congresso Nacional de Matemática Aplicada e Computacional (XXVII CNMAC)*. PUC-RS, Porto Alegre, RS, September 14, 2004.
25. Aguiar, A.; Angel, Y., Singular Solution of an Integro-Differential Equation in Elastodynamics, *The 2002 Society of Engineering Science Conference*. The Pennsylvania State University, University Park, PA. October 16, 2002.
26. *XXV National Congress of Computational and Applied Mathematics (XXV CNMAC)*, September 19, 2002, Bucsky Hotel, Nova Friburgo, RJ, Brazil:
  - 1- Aguiar, A.; Fosdick, R., An Investigation of the Self-Intersection Anomaly in Elasticity.
  - 2- Aguiar, A.; Angel, Y., Propagation of Waves in a Porous Elastic Solid.
27. Aguiar, A., Asymptotic and Computational Study of Singular Problems in Elasticity, *1999 ASME Mechanics and Materials Conference*, June 30, 1999, Virginia Tech, Blacksburg, VA.
28. Aguiar, A.; Angel, Y., Ultrasonic Reflection from Randomly Distributed Cylindrical Cavities, *Ultrasonics International / World Congress on Ultrasound - UI'99/WCU99*, Technical University of Denmark, Copenhagen, Denmark. July 1, 1999.
29. Aguiar, A.; Fosdick, R., Singular Problems in Elasticity: Linear vs. Nonlinear Theory, *35<sup>th</sup> Annual Technical Meeting - Society of Engineering Science - SES98*, Sept. 30, 1998, Washington State University, Pullman, WA.

## • Symposia on Scientific Initiation

1. Aguiar, A. R.; Pallu, A.G.; Queiroz, G.N., 2021. Modelamento numérico de barra peridinâmica bidimensional com orifício. Presented at *XL Congresso Nacional de Matemática Aplicada e Computacional (XL CNMAC) - Evento Virtual*. UFMS, Campo Grande, MS. In: *Proceeding Series of the Brazilian Society of Computational and Applied Mathematics*, **8**:1, 010210-1 - 010210-2.
2. Pallu, A.G.; Patriota, T.V.B; Aguiar, A.R., Análise de Convergência de Soluções Numéricas de Problema de Barra Peridinâmica Elástica Linear. In: *28<sup>o</sup> Simpósio Internacional de Iniciação Científica e Tecnológica da USP - XXVIII SIICUSP*, 2020, São Carlos, SP, Brazil.
3. Queiroz, G.N.; Patriota, T.V.B; Aguiar, A.R., Simulação Numérica de Barras Elásticas Lineares Utilizando a Teoria Peridinâmica Baseada em Estado. In: *28<sup>o</sup> Simpósio Internacional de Iniciação Científica e Tecnológica da USP - XXVIII SIICUSP*, 2020, São Carlos, SP, Brazil.
4. Aguiar, A.R.; Patriota, T.V.B., 2017. Numerical studies of unidimensional peridynamic problems. Presented at *XXXVII Congresso Nacional de Matemática Aplicada e Computacional (XXXVII CNMAC)*, Sept. 19 - 22, São José dos Campos, SP. In: *Proceeding Series of the Brazilian Society of Computational and Applied Mathematics*, **6**:1, 010204-1 - 010204-2.
5. Patriota, T.V.B; Aguiar, A.R., Analysis of Unidimensional Peridynamic Constitutive Models. In: *24<sup>o</sup> Simpósio Internacional de Iniciação Científica e Tecnológica da USP - XXIV SIICUSP*, 2016, São Paulo, SP, Brazil.
6. Aguiar, A.R.; Pereira, M., Distribuição Axissimétrica de Temperatura em um Cilindro com Múltiplas Camadas Poliméricas. In: *21<sup>o</sup> Simpósio Internacional de Iniciação Científica da Universidade de São Paulo (XXI SIICUSP)*, 2013, São Carlos, SP, Brazil.
7. Aguiar, A.R.; Silva, W.C., O Método de Galerkin Descontínuo Aplicado a um Problema da Elasticidade Linear Anisotrópica. In: *15<sup>o</sup> Simpósio Internacional de Iniciação Científica da Universidade de São Paulo (XV SIICUSP)*, São Carlos, SP, Nov. 09, 2007.
8. Aguiar, A.R.; Silva, W.C., Influência da Velocidade Angular sobre o Comportamento de um Disco Anisotrópico. In: *14<sup>o</sup> Simpósio Internacional de Iniciação Científica da Universidade de São Paulo (XIV SIICUSP)*, São Paulo, SP, Nov. 09, 2006.

## • Supervision

### ◦ Post-Doctoral Scholars

- \* **Uziel Paulo da Silva**, 2015 - 2018 (FAPESP), 2019 - 2020.
- \* **Edmar Borges Théophilo Prado**, 2013 - 2015. (FAPESP), 2017 - 2018 (CAPES), 2019 - 2020.
- \* **Leslie Darien Pérez Fernández**, 2010 - 2012, (CNPq).

### ◦ Doctoral Students

- \* **Lucas Almeida Rocha**, since 2021. Pursuing a doctoral degree in Structural Engineering. Support from CAPES and FAPESP.
- \* **Alan Bourscheidt Seitenfuss**, 2018 - 2021. Pursuing a doctoral degree in Structural Engineering. Support from FAPESP.
- \* **Gabriel Lopes da Rocha**, 2017. D.Sc. in Bioengineering. Support from CAPES.
- \* **Uziel Paulo da Silva**, 2014. D.Sc. in Bioengineering. Support from CAPES.
- \* **Edmar Borges Théophilo Prado**, 2013. D.Sc. in Structural Engineering. Support from CAPES.

### ◦ Master's Students

- \* **Matheus Correa Valdastrri**, since 2024. Master's degree in Structural Engineering. Support from CAPES.
- \* **Luis Daniel Guerrero Rivera**, since 2023. Master's degree in Bioengineering. Support from CAPES.

- \* **Lucas Almeida Rocha**, 2021. Master's degree in Structural Engineering. Support from CAPES.
  - \* **Túlio Vinicius Berbert Patriota**, 2019. Master of Science in Mechanical Engineering. Politecnico di Milano, Milan, Italy. Co-supervision.
  - \* **Alan Bourscheidt Seitenfuss**, 2018. M.Sc. in Structural Engineering. Support from CAPES.
  - \* **Juliana Facchini de Souza**, 2012. M.Sc. in Bioengineering. Support from CAPES and FAPESP.
  - \* **Gabriel Lopes da Rocha**, 2012. M.Sc. in Bioengineering. Support from CAPES.
  - \* **Uziel Paulo da Silva**, 2009. M.Sc. in Bioengineering. Support from CAPES.
  - \* **Maria do Socorro Martins Sampaio**, 2009. M.Sc. in Structural Engineering. Support from CNPq and FAPESP.
  - \* **Edmar Borges Theóphilo Prado**, 2008. M.Sc. in Structural Engineering. Support from CAPES.
  - \* **Jesús Antonio García Sánchez**, 2008. M.Sc. Degree in Structural Engineering. Support from CAPES.
- o Trainee
    - \* **Leon Silveira Abramovith**, 2020. Support from CNPq, Technical Support Fellowship.
    - \* **Túlio Vicinius Berbert Patriota**, 2020. Support from FAPESP, Technical Training III.
    - \* **Luciana Pereira Maciel**, 2019. Support from FAPESP, Technical Training III.
- o Undergraduate Students
    - a) Scientific Initiation
      - \* **Gabriel Neves Queiroz**, 2021. Pursuing a B.Sc. degree in Civil Engineering. Support from CNPq.
      - \* **Marcos Vinicius Araújo Geraldes Mariani**, 2020 - 2021. Pursuing a B.Sc. degree in Civil Engineering. Support from USP.
      - \* **Alyson Eduardo Silva Abrão**, 2020 - 2021. Pursuing a B.Sc. degree in Civil Engineering. Support from CNPq.
      - \* **Alan Gomes Pallu**, 2019 - 2021. Pursuing a B.Sc. degree in Civil Engineering. Support from USP and CNPq.
      - \* **Túlio Vinicius Berbert Patriota**, 2015 - 2017. Pursuing a B.Sc. degree in Mechatronics Engineering. Support from USP, *Mobilidade Internacional Santander*, and FAPESP.
      - \* **Antonio José Zambianco**, 2013. Pursuing a B.Sc. degree in Civil Engineering. Support from USP.
      - \* **Leandro Ito Ramos**, 2013. B.Sc. in Mechanical Engineering. Support from USP.
      - \* **Maurício Pereira**, 2011, 2012. B.Sc. in Mechanical Engineering. Support from USP.
      - \* **William Cadamuro Silva**, 2007. B.Sc. in Civil Engineering. Support from FAPESP.
      - \* **Jesús Antonio García Sánchez**, 2005. B.Sc. in Civil Engineering.
    - b) Trainee
      - \* **Gabriel Neves Queiroz**, 2019 - 2021. Pursuing a B.Sc. degree in Civil Engineering. Support from FAPESP, Technical Training I.
    - c) Teaching Improvement Program - PAE (Supported by USP Graduate Office)
      - \* **Wesley Camargo Lopes**, 2024.
      - \* **Murilo Henrique Campana Bento**, 2023.
      - \* **Lucas Almeida Rocha**, 2022.
      - \* **Caio Silva Ramos**, 2019.
      - \* **Gabriel Lopes da Rocha**, 2016.
      - \* **Uziel Paulo da Silva**, 2012.
      - \* **Edmar Borges Theóphilo Prado**, 2010.

- \* **Isabella Andreczevski Chaves**, 2005.
  - \* **André Luis Christoforo**, 2005.
  - \* **José Américo Alves Salvador Filho**, 2004.
  - \* **Francisco Adriano de Araújo**, 2004.
- d) Teaching Assistantship (Supported by USP Undergraduate Office)
- \* **Nicolas Almeida Verras**, 2021-2.
  - \* **Jonas Abib José Castorino de Oliveira**, 2021-1, 2021-2.
  - \* **Helena Tanoue Vizioli**, 2020-2.
  - \* **Caio Corte da Silva**, 2020-1.
  - \* **Matheus Campanini Mughrabi**, 2018-2.
  - \* **Bruno Henrique de Souza**, 2018-1.
  - \* **Miguel Braga Baraldi**, 2018-1.
  - \* **Vanessa Cristina Rodrigues**, 2017-2.
  - \* **Thiago Ribeiro Moura**, 2016-1, 2016-2.
  - \* **Henrique Pereira Leal**, 2015-1.
  - \* **Júlio Sousa Sender**, 2014.
  - \* **Leandro Henrique Moreno Guimarães**, 2013, 2014.
  - \* **Joao Henrique Ribeiro Dainezi**, 2014.
  - \* **Leandro Ito Ramos**, 2013.
  - \* **Marco Antonio Covielo**, 2013.
  - \* **Maurício Pereira**, 2012.
  - \* **Bárbara Ribeiro de Andrade Ramos**, 2012.