

Maria Aparecida Soares Ruas

Academic Background and Qualifications

This section details the researcher's solid educational background, from her undergraduate studies to obtaining her habilitation title, including periods spent at renowned international institutions.

- **1967 – 1970:** Bachelor's degree in Mathematics from Universidade Estadual Paulista Júlio de Mesquita Filho (UNESP).
- **1971 – 1974:** Master's degree in Mathematics from the Universidade de São Paulo (USP). Title: *Finitely determined germs*. Advisor: Gilberto Francisco Loibel. CAPES scholarship recipient.
- **1975 – 1979:** Specialization – Advanced training/Specialization from Brown University, United States.
- **1980 – 1983:** PhD in Mathematics from the Universidade de São Paulo (USP). Title: C^L – Finite Determinacy and Applications. Advisor: Luiz Antonio Favaro.
- **1992:** Habilitation (*Livre-Docência*) from the University of São Paulo (USP). Title: *Singularities of differentiable mappings: general theory and applications*.

Professional Performance and Management Positions

The researcher had a career marked by high-level leadership positions at USP and in national bodies that regulate and promote science.

- **Universidade Estadual Paulista Júlio de Mesquita Filho (UNESP):**
 - **1971 – 1981:** Assistant Professor – Full-time dedication.
- **Universidade de São Paulo (ICMC-USP):**
 - **1981 – 1983:** Assistant Professor.
 - **1983 – 1992:** Professor.
 - **1992 – 1996:** Associate Professor.
 - **1996 – 2012:** Full Professor.

- **2012 – 2025:** Senior Professor.
- **Administrative and Management Positions:**
 - **1995 – 1997:** Head of Department at ICMC-USP.
 - **1998 – 2002:** Vice-Director of ICMC-USP.
 - **2001 – 2002:** President of the Research Committee of ICMC-USP.
- **National Societies and Organizations:**
 - **1994 – 1998 / 2009 – 2011:** Member of the Board of Directors of the Brazilian Mathematical Society (SBM).
 - **2009 – 2011:** Member of the Executive Board of the Brazilian Mathematical Society (SBM).
 - **2004 – 2006 / 2013 – 2015:** Evaluation Committee Member of CAPES Institution (Coordination for the Improvement of Higher Education Personnel).
 - **2016 – 2018 / 2022 – 2025:** Mathematics and Statistics Advisory Committee Member of CNPq Institution (National Council for Scientific and Technological Development).

Research Projects and International Cooperation

This section presents research projects funded by national and international funding agencies, highlighting leadership in research networks and collaborative initiatives in Brazil and abroad.

- **2014 – 2019:** FAPESP Thematic Project: *Singularities of Differentiable Mappings: Theory and Applications*. (Principal Investigator).
- **2012 – 2013:** CAPES-JSPS International Project: *Singularity Theory of Differentiable Mappings and Applications*, in collaboration with Yokohama University, Hokkaido University, and Kyushu University, Japan. (Principal Investigator).
- **2012 – 2013:** Science Without Borders Project: Special Visiting Professor Program – Jean-Paul Brasselet. (Principal Investigator).
- **2008 – 2012:** PROCAD-CAPES Project: *Interregional Network on Singularities and Algebraic Geometry. Theory and Applications*, involving USP, UNESP, UEM, and UFPB. (Principal Investigator).

- **2008 – 2012:** FAPESP Thematic Project: *Singularities, Geometry, and Differential Equations*. (Principal Investigator).
- **2008 – 2009:** USP–COFECUB International Project: *Topology of Singularities*. Collaboration with the Institut de Mathématiques de Luminy, Université de la Méditerranée, and the Centre d’Informatique et Mathématiques, Université de Provence, France. (Principal Investigator).
- **2005 – 2007:** CAPES–DAAD–PROBRAL International Project: Cooperation with the Universities of Halle and Rostock, Germany. (Principal Investigator).
- **2005 – 2007:** CNPq Universal Research Grant Project. (Principal Investigator).
- **2003 – 2007:** FAPESP Thematic Project: *Qualitative Theory of Differential Equations and Singularity Theory*. (Research Team Member).
- **2003 – 2006:** CAPES–MECD International Project: *Singularities, Differential Equations and Geometry*. Scientific exchange with the University of Valencia, Spain. (Principal Investigator).
- **2001 – 2005:** Project: Scientific exchange with researchers from UEM and IBILCE–UNESP (São José do Rio Preto), fostering cooperation among USP, UNESP, and UEM. (Principal Investigator).

Editorial Board Membership

- **2022 – 2025** *São Paulo Journal of Mathematical Sciences*. Periódico: São Paulo Journal of Mathematical Sciences
- **2022 – 2025:** *Ensaaios Matemáticos*
- **2010 – 2017:** *Journal of Singularities*

Advisory Committee Membership

- **2015 – 2025:** Funding Agency: National Council for Scientific and Technological Development (CNPq), Brazil.
- **2011 – 2013:** Funding Agency: Coordination for the Improvement of Higher Education Personnel (CAPES), Brazil.

Awards, Honors, and Recognition

The distinctions listed below reflect the recognition and esteem earned by the researcher within the international scientific community.

- **2025:** Mathematical Leadership in Latin America Award, conferred by the Institute of Mathematical Sciences of the Americas (IMSA).
- **2025:** Elected Full Member of The World Academy of Sciences (TWAS).
- **2021:** Honorary Associate Membership of the Brazilian Mathematical Society (SBM).
- **2011:** Patron of the 2010 Graduating Class, Institute of Mathematics and Computer Sciences (ICMC-USP).
- **2010:** Commander of the National Order of Scientific Merit, awarded by the Presidency of the Federative Republic of Brazil.
- **2010:** Commencement Speaker for the Mathematics Graduating Class, ICMC-USP.
- **2009:** Patron of the 2008 Graduating Class, ICMC-USP.
- **2008:** Full Member of the Brazilian Academy of Sciences (ABC).

Selected Publications

The scientific publication is extensive, including numerous articles published in leading international journals, as well as books and conference proceedings that have become important references in the field.

- **Books and Conference Proceedings:**
 - Izumiya, S. ; ROMERO-FUSTER, M. C. ; **RUAS, M. A. S.** ; TARI, F. . *Differential Geometry from a Singularity Theory Viewpoint*. 1. ed. Cingapura: World Scientific, 2016. v. 1. 384p.
 - BRASSELET, J.P. (Org.) ; **RUAS, M. A. S.** (Org.) . Real and Complex Singularities-São Carlos Workshop 2004. 1. ed. Birksauser, 2006. v. 1. 364p.
 - **RUAS, M. A. S.**; Terence Gaffney (Org.) . Real and Complex Singularities. 1. ed. Providence: American Mathematical Society, 2004. v. 1. 324p.
 - **RUAS, M. A. S.**; -EDITORA (Org.) . Workshop On Real And Complex Singularities. SOCIEDADE BRASILEIRA DE MATEMATICA, 1997. 219p .

- **RUAS, M. A. S.**; -EDITORA (Org.) . Workshop On Real And Complex Singularities. SOCIEDADE BRASILEIRA DE MATEMÁTICA, 1993. 216p .
- **Book Chapters:**
 - **RUAS, M. A. S.** *Old and New Results on Density of Stable Mappings*. In: José Luis Cisneros-Molina; Lê Dung Tráng; José Seade. (Org.). Old and New results on density of stable mappings. Ied.Cham, Suíça: , 2022, v. III, p. 1-80.
 - **Ruas, M. A. S.** *Basics on Lipschitz geometry*. In: Anne Pichon; Walter Neumann. (Org.). Introduction to Lipschitz geometry of singularities. Ied.Cham: Springer, 2020, v. 2280, p. 111-155.

Articles in Peer-Reviewed Journals

1. BIVIÀ-AUSINA, C. ; KOURLIOUROS, K. ; **RUAS, M. A. S.** . Bruce-Roberts numbers and quasihomogeneous functions on analytic varieties. RESEARCH IN THE MATHEMATICAL SCIENCES, v. 11, p. 46, 2024.
2. BENEDINI RIUL, PEDRO ; OSET SINHA, RAÚL ; **Ruas, Maria Aparecida Soares** . Curvature loci of 3-manifolds. MATHEMATISCHE NACHRICHTEN, v. 296, p. 1-17, 2023.
3. LOPES, DÉBORA ; **Ruas, Maria Aparecida Soares** ; SANTOS, IGOR CHAGAS . Singularities of 3-parameter line congruences in. PROCEEDINGS OF THE ROYAL SOCIETY OF EDINBURGH SECTION A-MATHEMATICS, v. 153, p. 1045-1070, 2023.
4. RODRIGUES HERNANDES, M E ; **RUAS, M A S** . Join operation and A-finite map-germs. QUARTERLY JOURNAL OF MATHEMATICS, v. 74, p. 1415-1434, 2023.
5. RIUL, PEDRO BENEDINI ; **Ruas, Maria Aparecida Soares** ; SACRAMENTO, ANDREA DE JESUS . Singular 3-manifolds in $\mathbb{R}^5$. Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matematicas, v. 116, p. 56, 2022.

6. CÂMARA, LEONARDO MEIRELES ; **Ruas, Maria Aparecida Soares** . On the Moduli Space of Quasi-Homogeneous Functions. BULLETIN BRAZILIAN MATHEMATICAL SOCIETY (ONLINE), v. 53, p. 895–908, 2022.

7. OSET SINHA, R. ; **RUAS, M. A. S.** ; WIK ATIQUE, R. . The extra-nice dimensions. Mathematische Annalen, v. 384, p. 1243–1273, 2022.

8. Farnik, M. ; JELONEK, Z. ; **RUAS, M.A.S.** . Finite $\mathcal{A}$ -determinacy of generic homogeneous map germs in $\mathbb{C}^3$. Journal of Mathematical Society Japan, v. 73, p. 211–220, 2021.

9. GAFFNEY, TERENCE ; **Ruas, Maria Aparecida** . Equisingularity and EIDS. AMERICAN MATHEMATICAL SOCIETY. PROCEEDINGS, v. 149, p. 1593–1608, 2021.

10. NGUYEN, NHAN ; **Ruas, Maria** ; TRIVEDI, SAURABH . Classification of Lipschitz simple function germs. PROCEEDINGS OF THE LONDON MATHEMATICAL SOCIETY, v. 121, p. 51–82, 2020.

11. KASEDOU, MASAKI ; NABARRO, ANA CLAUDIA ; **Ruas, Maria Aparecida Soares** . Singular 4-Webs of Asymptotic Lines of Spacelike Surfaces in de Sitter 5-space. BULLETIN BRAZILIAN MATHEMATICAL SOCIETY (ONLINE), v. 51, p. 293–315, 2020.

12. BIVIÀ-AUSINA, CARLES ; **Ruas, Maria Aparecida Soares** . Mixed Bruce–Roberts numbers. PROCEEDINGS OF THE EDINBURGH MATHEMATICAL SOCIETY, v. 63, p. 456–474, 2020.

13. GIBLIN, PETER ; JANEČZKO, STANISŁAW ; **Aparecida Ruas, Maria** . Reflexion maps and geometry of surfaces in $\mathbb{R}^4$. JOURNAL OF SINGULARITIES, v. 21, p. 84–96, 2020.

14. Farnik, M. ; JELONEK, Z. ; **RUAS, M. A. S.** . Whitney theorem for complex polynomial mappings. Mathematische Zeitschrift, v. 295, p. 1039–1065, 2020.

15. **RUAS, M.A.S.**; SILVA, O.N. . Whitney equisingularity of families of surfaces in C^3 . Mathematical Proceedings of the Cambridge Philosophical Society, v. 166, p. 353–369, 2019.

16. AHMED, IMRAN ; **Ruas, Maria Aparecida Soares** . Determinacy of determinantal varieties. MANUSCRIPTA MATHEMATICA, v. 159, p. 269–278, 2019.

17. RODRIGUES HERNANDES, M E ; **RUAS, M A S** . Parametrized monomial surfaces in 4-space. QUARTERLY JOURNAL OF MATHEMATICS (ONLINE), v. 70, p. 473–485, 2019.

18. BENEDINI RIUL, P ; **RUAS, M A S** ; OSET SINHA, R . The geometry of corank 1 surfaces in R^4 . QUARTERLY JOURNAL OF MATHEMATICS, v. 70, p. 767–795, 2019.

19. GRULHA JUNIOR, N. G. ; Terence Gaffney ; **RUAS, M. A. S.** . The local Euler obstruction and topology of the stabilization of associated determinantal varieties. MATHEMATISCHE ZEITSCHRIFT, v. 291, p. 905–930, 2019.

20. EYRAL, CHRISTOPHE ; **Ruas, Maria Aparecida Soares** . On the Zariski multiplicity conjecture for weighted homogeneous and Newton nondegenerate line singularities. INTERNATIONAL JOURNAL OF MATHEMATICS, v. 30, p. 1950053, 2019.

21. KERNER, DMITRY ; PEDERSEN, HELGE MØLLER ; **RUAS, MARIA A. S.** . Lipschitz normal embeddings in the space of matrices. Mathematische Zeitschrift, v. 290, p. 485–507, 2018.

22. BICH THUY, NGUYEN THI ; **APARECIDA SOARES RUAS, MARIA** . On singular varieties associated to a polynomial mapping from C^n to C^{n-1} . Asian Journal of Mathematics, v. 22, p. 1157–1172, 2018.

23. BRASSELET, JEAN-PAUL ; CHACHAPOYAS, NANCY ; **RUAS, MARIA A. S.** . Generic sections of essentially isolated determinantal singularities. INTERNATIONAL JOURNAL OF MATHEMATICS, v. 28, p. 1750083, 2017.

24. NISHIMURA, T. ; OSET SINHA, R. ; ICHIKI, S. ; **RUAS, M. A. S.** . Generalized distance-squared mappings of the plane into the plane. *Advances in Geometry*, v. 16, p. 189–198, 2016.

25. NISHIMURA, T. ; OSET SINHA, R. ; **RUAS, M. A. S.** ; WIK ATIQUE, R. . Liftable vector fields over corank one multigerms. *Mathematische Annalen*, v. 366, p. 573–611, 2016.

26. SINHA, R. OSET ; **RUAS, M. A. S.** ; ATIQUE, R. WIK . On the Simplicity of Multigerms. *Mathematica Scandinavica (Papirform)*, v. 119, p. 197, 2016.

27. DOMITRZ, W. ; Janeczko, S. ; RIOS, P. P. M. ; **RUAS, M. A. S.** . Singularities of affine equidistants: extrinsic geometry of surfaces in 4-space. *Bulletin Brazilian Mathematical Society (Impresso)*, v. 47, p. 1155, 2016.

28. EYRAL, CHRISTOPHE ; **Ruas, Maria Aparecida Soares** . Topological triviality of linear deformations with constant Lê numbers. *Kodai Mathematical Journal*, v. 39, p. 189–201, 2016.

29. EYRAL, CHRISTOPHE ; **Ruas, Maria Aparecida Soares** . Deformations with constant Lê numbers and multiplicity of nonisolated hypersurface singularities. *Nagoya Mathematical Journal*, v. 218, p. 29–50, 2015.

30. KASEDOU, M. ; NABARRO, A. C. ; **RUAS, M. A. S.** . Second order geometry of spacelike surfaces in de Sitter 5-space. *Publicacions Matemàtiques*, v. 59, p. 449–477, 2015.

31. DIAS, FABIO SCALCO ; OSET SINHA, RAÚL ; **Ruas, Maria Aparecida Soares** . A formula relating inflections, bitangencies and the Milnor number of a plane curve. *Proceedings of the American Mathematical Society*, v. 142, p. 2353–2368, 2014.

32. Jelonek, Zbigniew ; JANECKO, S. ; **RUAS, M. A. S.** . Symmetry defect of algebraic varieties. *The Asian Journal of Mathematics*, v. 18, p. 525, 2014.

33. OSET SINHA, R. ; **RUAS, M. A. S.** ; WIK ATIQUE, R. . Classifying codimension two multigerms. *Mathematische Zeitschrift*, v. 278, p. 554–573, 2014.

34. **RUAS, M. A. S.**; PEREIRA, M. S. . Codimension Two Determinantal Varieties with Isolated Singularities. *Mathematica Scandinavica (Papirform)*, v. 115, p. 161–172, 2014.

35. DOMITRZ, W. ; RIOS, P. DE M. ; **RUAS, M. A. S.** . Singularities of affine equidistants: projections and contacts. *JOURNAL OF SINGULARITIES*, v. 10, p. 67–81, 2014.

36. COSTA, J. C. F. ; NISHIMURA, T. ; **RUAS, M. A. S.** . Bi-Lipschitz $\mathcal{A}$ -equivalence of $\mathcal{H}$ -equivalent map-germs. *Revista de la Real Academia de Ciencias Exactas, Fisicas y Naturales. Serie A. Matematicas*, v. 108, p. 173–182, 2014.

37. AHMED, IMRAN ; **Ruas, Maria Aparecida Soares** ; TOMAZELLA, JOÃO NIVALDO . Invariants of topological relative right equivalences. *Mathematical Proceedings of the Cambridge Philosophical Society*, v. 155, p. 307–315, 2013.

38. FERNANDES, Alexandre ; **RUAS, M. A. S.** . Rigidity of bi-Lipschitz equivalence of weighted homogeneous function-germs in the plane. *Proceedings of the American Mathematical Society*, v. 141, p. 1125–1133, 2013.

39. Tibar, M. ; DIAS, L. R. G. ; **RUAS, M. A. S.** . Regularity at infinity of real mappings and a Morse-Sard theorem. *Topology (Oxford)*, v. 5, p. 323–340, 2012.

40. **RUAS, M. A. S.**; TARI, F. . A note on binary quintic forms and lines of principal curvature on surfaces in $\mathbb{R}^5$. *Topology and its Applications*, v. 159, p. 562–567, 2012.

41. AHMED, I. ; **RUAS, M. A. S.** . Invariants of relative right and contact equivalences. *Houston Journal of Mathematics*, v. 37, p. 773–786, 2011.

42. **RUAS, M. A. S.**; Valette, Guillaume . C^0 and bi-Lipschitz $\mathcal{H}$ -equivalence of mappings. *Mathematische Zeitschrift*, v. 269, p. 293–308, 2011.

43. BUOSI, M. ; Izumiya, S. ; **RUAS, M. A. S.** . Horo-tight spheres in hyperbolic spaces. *Geometriae Dedicata*, v. 154, p. 9–26, 2011.
44. CHALLAPA, L. S. ; **RUAS, M. A. S.** . Index of an implicit differential equation. *Publicacions Matemàtiques*, v. 54, p. 173–186, 2010.
45. J. E. Furter ; **RUAS, M. A. S.** ; SITTA, Angela Maria . Singularity theory and forced symmetry breaking in equations. *Publicacions Matemàtiques*, v. 52, p. 263–315, 2010.
46. BUOSI, M. ; Izumiya, S. ; **RUAS, M. A. S.** . Total Absolute Horospherical Curvature of Submanifolds in Hyperbolic Space. *Advances in Geometry (Print)*, v. 10, p. 603–620, 2010.
47. BRASSELET, J.P. ; GÓES JÚNIOR, N. G. ; **RUAS, M. A. S.** . The Euler obstruction and the Chern obstruction. *Bulletin of the London Mathematical Society (Print)*, v. 42, p. 1035–1043, 2010.
48. Carlos Gustavo Moreira ; **RUAS, M. A. S.** . The curve selection lemma and the Morse–Sard theorem. *Manuscripta Mathematica*, v. 129, p. 401–408, 2009.
49. RIEGER, J. H. ; **RUAS, M. A. S.** ; ATIQUE, R. G. W. . M-deformations of $\mathcal{A}$ -simple germs from $\mathbb{R}^n$ to $\mathbb{R}^{n+1}$. *Mathematical Proceedings of the Cambridge Philosophical Society*, v. 144, p. 181–195, 2008.
50. ROMERO-FUSTER, M. C. ; **RUAS, M. A. S.** ; TARI, F. . Asymptotic curves on surfaces in $\mathbb{R}^5$. *Communications in Contemporary Mathematics*, v. 10, p. 309–335, 2008.
51. RIEGER, J. H. ; **RUAS, M. A. S.** ; ATIQUE, R. G. W. . Real deformations and invariants of map-germs. *Banach Center Publications*, v. 82, p. 183–199, 2008.

52. NABARRO, A. C. ; **RUAS, M. A. S.** . Vector fields in $\mathbb{R}^2$ with maximal index. Quarterly Journal of Mathematics (Online), v. 58, p. 81-90, 2007. [[doi>](#)]
53. BIRBRAIR, L. ; COSTA, J. C. F. ; FERNANDES, A. C. G. ; **RUAS, M. A. S.** . $\mathcal{K}$ -bi-Lipschitz equivalence of real function-germs. Proceedings of the American Mathematical Society, v. 135, p. 1089-1095, 2007.
54. HERNANDES, M. E. R. ; HERNANDES, M. E. ; **RUAS, M. A. S.** . Ae-codimension of germs of analytic curves. Manuscripta Mathematica, v. 124, p. 237-246, 2007.
55. **RUAS, M. A. S.**; LABOURIAU, I. S. . Invariants for bifurcations. Houston Journal of Mathematics, Houston, U.S., v. 32, n.2, p. 445-458, 2006.
56. **RUAS, M. A. S.**; RIEGER, J. H. . M-deformations of $\mathcal{A}$ -simple Σ_{n-p+1} -germs from $\mathbb{R}^n$ to $\mathbb{R}^p$, $n \geq p$. Proc. Camb. Ph. Soc., v. 139, 2005.
57. **RUAS, M. A. S.**; SANTOS, R. N. A. . Real Milnor Fibrations and (C) -Regularity. Manuscripta Mathematica, v. 117, n.2, p. 207-218, 2005.
58. **RUAS, M. A. S.**; FERNANDES, A. C. G. . Bilipschitz determinacy of quasihomogeneous germs. Glasgow Mathematical Journal, 2004.
59. **RUAS, M. A. S.**; TOMAZELLA, J. N. . Topological triviality of families of sections of analytic varieties.. Nagoya Mathematical Journal, v. 175, p. 39-50, 2004.
60. **RUAS, M. A. S.**; Carlos Gustavo Moreira . O Lema de seleção da curva e o Teorema de Morse-Sard. Matemática Universitária, v. 36, p. 23-32, 2004.
61. **RUAS, M. A. S.**; MOCHIDA, D. H. ; FUSTER, M. C. R. . Inflection points and non-singular embeddings of surfaces in $\mathbb{R}^5$. The Rocky Mountain Journal of Mathematics, Estados Unidos, v. 33, n.3, 2003.

62. **RUAS, M. A. S.**; GUTIERREZ, C. . Indices of Newton non-degenerate vector fields and a conjecture of Loewner for surfaces in $\mathbb{R}^4$. Lecture Notes in Pure and Applied Mathematics, v. 232, p. 245–253, 2003.

63. **RUAS, M. A. S.**; MANCINI, S. ; TEIXEIRA, M. A. . On divergent diagrams of finite codimension. PORTUGALIAE MATHEMATICA, Portugal, v. 59, n.2, 2002.

64. **RUAS, M. A. S.**; VERJOVSKY, A. ; SEADE, J. . On Real singularities with a Milnor fibration. Trends in Mathematics, Birkhauser Verlag, 2002.

65. CARRARA, V. L. ; **RUAS, M. A. S.** ; SAEKI, O. . Maps Of Manifolds Into The Plane Which Lift To Standard Embeddings In Codimension Two. TOPOLOGY AND ITS APPLICATIONS, v. 110, p. 265–287, 2001.

66. **RUAS, M. A. S.**; FUSTER, M. C. R. ; MOCHIDA, D. H. . Singularities and duality on flat geometry of hypersurfaces. Contributions to Algebra and Geometry / Beitrage zur Algebra und Geometrie, Alemanha, v. 42, n.1, 2001.

67. GARCIA, R. ; MOCHIDA, D. ; ROMERO-FUSTER ; C, M. ; **RUAS, M. A. S.** . Inflection Points And Topology Of Surfaces In 4-Space. TRANSACTIONS OF THE AMERICAN MATHEMATICAL SOCIETY (A APARECER), v. 352, p. 3029–3043, 2000.

68. MARAR, W. L. ; MONTALDI, J. A. ; **RUAS, M. A. S.** . Multiplicities Of Zero-Schemes In Quasihomogeneous Corank-1 Singularities C^N To C^N . CAMBRIDGE UNIVERSITY PRESS, v. 263, p. 353–367, 1999.

69. MOCHIDA, D. ; ROMERO-FUSTER ; C, M. ; **RUAS, M. A. S.** . Osculating Hyperplanes And Asymptotic Directions Of Codimension Two Submanifolds Of Euclidean Spaces. GEOMETRIAE DEDICATA, v. 77, n.3, p. 305–315, 1999.

70. **RUAS, M. A. S.**; SAIA, M. . C^L -Determinacy Of Weighted Homogeneous Germs. HOKKAIDO JOURNAL OF MATHEMATICS, v. 26, p. 89–99, 1997.

71. LABOURIAU, I. S. ; **RUAS, M. A. S.** . Singularities Of Hodgkin-Huxley Equations. DYNAMICAL AND STABILITY OF SYSTEMS, v. 11, n.2, p. 91-108, 1996.

72. ★ MOCHIDA, D. H. ; ROMERO-FUSTER ; C, M. ; **RUAS, M. A. S.** . The Geometry Of Surfaces In 4-Space From A Contact View-Point. GEOMETRIAE DEDICATA, v. 54, p. 323-332, 1995.

73. **RUAS, M. A. S.**; SAIA, M. . The Polyhedron Of Equisingularity Of Germs Of Hypersurfaces. PITMAN RESEARCH NOTES IN MATHEMATICS, v. 333, p. 37-48, 1995.

74. **RUAS, M. A. S.**. On The Equisingularity Of Families Of Corank-1 Generic Germs. CONTEMPORARY MATHEMATICS, v. 161, p. 113-121, 1994.

75. ROMERO-FUSTER ; C, M. ; **RUAS, M. A. S.** . Some Stability Questions Concerning Caustics For Different Propagationlaws. PORTUGALIA MATHEMATICA, v. 55, p. 595-605, 1994.

76. MANCINI, S. ; **RUAS, M. A. S.** . Bifurcations Of Generic One-Parameter Families Of Functions On Foliated Manifolds. MATHEMATICA SCANDINAVICA, v. 72, p. 5-19, 1993.

77. MANCINE, S. ; **RUAS, M. A. S.** ; FUSTER, M. C. R. . Stability And Genericity Of Composition Of Maps. MATEMÁTICA CONTEMPORÂNEA, v. 5, p. 29-51, 1993.

78. BRUCE, J. W. ; **RUAS, M. A. S.** ; SAIA, M. J. . A Note On Determinacy.. PROCEEDINGS OF THE AMERICAN MATHEMATICAL SOCIETY, v. 115, n.3, p. 865-871, 1992.

79. RIEGER, J. H. ; **RUAS, M. A. S.** . Classification Of A-Simple Germs 'K Pot N' To 'K Pot 2'.. COMPOSITIO MATHEMATICA, v. 79, p. 99-108, 1991.

80. MENDES, C. M. ; **RUAS, M. A. S.** . Hyperbolic Motions Of Conics.. AMERICAN MATHEMATICAL MONTHLY, v. 94, n.9, p. 825-845, 1987.

81. **RUAS, M. A. S.** On The Degree Of C Pot L - Determinacy.. MATHEMATICA SCANDINAVICA, v. 59, n.1, p. 59-70, 1986.
82. **RUAS, M. A. S.** C Pot.L - K-Determinação Finita e Campos Holomorfos de Tipo Morse.. ANAIS DA ACADEMIA BRASILEIRA DE CIÊNCIAS, SP., v. 57, n.3, p. 380-381, 1985.

Supervisions

The researcher has trained a substantial academic lineage, supervising students over several decades and contributing significantly to the development of new generations of researchers.

PhD Theses

Supervised **23 Ph.D. graduates**, many through international co-supervision.

- **Igor Chagas Santos (2023):** *Line and plane congruences from a singularity theory viewpoint.*
- **Tito Alexandro Medina Tejeda (2021):** *New approach to the differential geometry of frontals in the Euclidean space.*
- **Pedro Benedini Riul (2019):** *Geometria diferencial de segunda ordem de variedades singulares em espaços euclidianos.*
- **Otoniel Nogueira da Silva (2017):** *Superfícies com singularidades não isoladas.*
- **Tito Alexandro Medina Tejeda (2017):** *Geometria de variedades singulares.*
- **Nancy Carolina Chachapoyas Siesquen (2014):** *Invariantes de variedades determinantis.*
- **Luis Renato Gonçalves Dias (2013):** *Regularity at infinity and global fibrations of real algebraic maps.*
- **Nilva Rodrigues Ribeiro (2012):** *Singularidades no infinito de funções polinomiais.*
- **Miriam da Silva Pereira (2010):** *Variedades determinantis e singularidades de matrizes.*
- **Nivaldo de Góes Grulha Junior (2007):** *Obstrução de Euler de aplicações (cotutela com o IML, França).*

- **Lizandro Sanchez Challapa (2006):** *Índice de equações diferenciais binárias.*
- **Maria Elenice Rodrigues Hernandez (2005):** *Invariantes analíticos para curvas irredutíveis.*
- **João Carlos Ferreira Costa (2005):** *Equivalências de contato topológica e bi-Lipschitz de germes de aplicações diferenciáveis.*
- **Marcelo Buosi (2004):** *Imersões horojustas de variedades.*
- **Alexandre Cesar Gurgel Fernandes (2002):** *Teoria Métrica de Curvas Complexas.*
- **Raimundo Nonato Araújo dos Santos (2002):** *Fibrações de Milnor Reais.*
- **João Nivaldo Tomazella (1999):** *Seções de Variedades Analíticas.*
- **Roberta Godoi Wik Atique (1998):** *Classificação e Topologia de Variedades Singulares Parametrizadas Por Multigerms* (Doutorado Sanduíche USP/São Carlos-U. Warwick).
- **Antonio Carlos Nogueira (1998):** *Superfícies Em R^4 e Dualidade - Coorientação* (Doutorado Sanduíche USP/São Carlos-U. Liverpool).
- **Angela Maria Sitta (1994):** *Teoria de Singularidades e Problemas de Bifurcação Com Simetria Nos Parâmetros - Coorientação* (Doutorado Sanduíche USP/São Carlos-U. Warwick).
- **Dirce Kyiomi Hayashida Mochida (1993):** *Geometria Genérica de Subvariedades Em Codimensão Maior Que 1 Em R^n - Coorientação.*
- **Marcelo Jose Saia (1991):** *Poliedros de Equisingularidade de Germes de Hipersuperfícies.*
- **Solange Mancini (1989):** *φ -Equivalência.*

Master's Dissertations

Supervised 11 master's theses throughout her academic career:

- **Evandro Alves Nakajima (2013):** *Campos de vetores em variedades singulares.*
- **Nancy Carolina Chachapoyas Siesquén (2010):** *Curvas determinantis simples.*
- **Rodrigo Lopes Costa (2009):** *Geometria de teias.*
- **Giuliano Zugliani (2008):** *Teoremas de tipo Poincaré-Hopf e classes características de variedades singulares.*
- **Rodrigo Martins (2004):** *Singularidades de superfícies regradas.*

- **José Carlos de Sousa Junior (1999):** *Duais de hipersuperfícies projetivas.*
- **Ana Claudia Nabarro (1997):** *Equações Diferenciais Binárias e Geometria Diferencial.*
- **Antonio Carlos Nogueira (1993):** *Imersões Justas de Superfícies Em Espaços Euclidianos.*
- **João Nivaldo Tomazella (1992):** *O Número de Milnor.*
- **Miriam Garcia Manoel (1991):** *D_n -Simetria em Bifurcação de Pontos Estacionários.*
- **Valter Locci (1990):** *O Problema do Reconhecimento Em Teoria de Bifurcação.*

Postdoctoral Supervision

Supervised **21 postdoctoral projects** among Brazilian and international researchers.

- Hellen Monção de Carvalho Santana (2023).
- Débora Lopes da Silva (2021).
- Saurabh Trivedi (2019).
- Nhan Nguyen (2019).
- Helge Möller Pedersen (2018).
- Andrea de Jesus Sacramento (2018).
- Nguyen Thi Bich Thuy (2014).
- Raúl Oset Sinha (2013).
- Imran Ahmed (2012).
- Aurelio Menegon Neto (2012).
- Fabio Scalco Dias (2011).
- Masaki Kasedou (2011).
- Alexandre Cesar Gurgel Fernandes (2010).
- Nivaldo de Góes Grulha Júnior (2009).
- Lizandro Sanchez Challapa. 2008.
- João Carlos Ferreira Costa (2006).
- Walter dos Santos Motta Junior (2006).
- Jawad Snoussi (2004).
- Fuensanta Aroca Bisquert (2004).
- Ana Claudia Nabarro (2000).
- Yasuhiro Kurokawa (1998).

Undergraduate Project Supervision

Supervised 9 undergraduate students:

- **Emílio de Carvalho (2004):** *Introduction to Singularity Theory*.
- **Daniel Vieira da Rocha (2004):** *Introduction to Singularity Theory*.
- **José Roberto Rosolen (2000):** *Introduction to Singularities and Differential Equations*.
- **Marcelo José Fávaro (2000):** *Singularities and Differential Equations*.
- **Rogério Monteiro de Siqueira (1999):** *Introduction to Singularity Theory*.
- **José Carlos de Souza Junior (1994):** *An Introduction to Algebra and Algebraic Geometry*.
- **André Chainho Gandini (1992):** *Introduction to Chaotic Dynamical Systems*.
- **Luciano de Moraes Rita (1992):** *Differential Geometry of Curves and Surfaces*.
- **Rosane Tomi Monroe Ushirobira (1986):** *Introduction to Plane Algebraic Curves*.

Examination Committees and Scientific Events.

- **Doctoral Thesis Committees:** About 50 PhD thesis committees at institutions including USP, UNESP, UNICAMP, and UFRJ, as well as international universities such as the University of Valencia (Spain) and the University of Oslo (Norway).
- **Master's Dissertation Committees:** About 35 master's thesis committees.
- **Full Professor Promotion Committees:** Numerous committees for Full Professor appointments.
- **Scientific Events:** More than 90 scientific events, frequently as invited speaker and member of scientific committees for both international conferences and national meetings, including the Brazilian Mathematics Colloquium.

At the time of her passing, Professor Cidinha remained actively engaged in the Department of Mathematics at ICMC-USP as a Senior Professor. She was involved in several research projects, graduate supervision activities, and the supervision

of postdoctoral researchers, maintaining an active role in research and academic mentoring until the end of her career.