

Brief Curriculum Vitae

SILVIA N. GOYANES

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PERSONAL INFORMATION

First name / Surname: Silvia Nair Goyanes

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Nationality: Argentina

Date of birth: 01/04/1964

CURRENT POSITIONS

- FULL PROFESSOR, Physics Department, Faculty of Exact and Natural Sciences (FCEN), Buenos Aires University (UBA) (2019-current)
- RESEARCHER at CONICET (Argentina). Level: SUPERIOR (2019-current).
- HEAD of POLYMERS AND COMPOSITE MATERIALS GROUP, Department of Physics, FCEN-UBA (2003-current)
- SCIENTIFIC DIRECTOR of THE CENTER FOR BIODEGRADABILITY AND COMPOSTABILITY OF PLASTICS (UBATEC-UBA) 2018-current)

EDUCATION

- Postdoctoral Research - Materials + Technologies Research Group, University of Basque Country, Spain (November 1998 – March 1999).
- Ph.D in Physics - Buenos Aires University, Argentina (1996)
- Licenciada en Ciencias Físicas (Physics M.Sc) - Buenos Aires University, Argentina (1990)

MAIN RESEARCH AREAS

Materials Physics. Polymers, Nanostructures and Nanomaterials. Design, synthesis and application of functional polymers and composites materials for energy, sustainable packaging, and water remediation.

PUBLICATIONS, BOOKS CHAPTERS AND PROCEEDINGS OF INTERNATIONAL CONFERENCES

ORCID: [0000-0002-2200-0576](https://orcid.org/0000-0002-2200-0576). **SCOPUS:** AU-ID (Goyanes, Silvia 7003934728)

- Publications in international journals (SCI): 154, most of them in the first quartile (Q1),
- Books: 1; Books Chapter: 20 (Wiley: 6, Nova: 3, Springer: 7, CRC Press: 1, Taylor & Francis Group: 2, Elsevier: 1)
- H index (**Scopus h = 37**, Citations: **4966** // Google Scholar: **h = 43**, Citations: **6741**, i10 = 105)
- Proceedings of International/Latin American Conferences > 125
- Invited speaker International/Latin American/National Conferences: 40.

Included in the Stanford-Elsevier Ranking of Top 2% Top-cited Researchers within her specialty (2019 - 2021)(September 2022 data-update for "Updated science-wide author databases of standardized citation indicators" (<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw>)(Table 1 Authors singleyr 2021 pubs since 1788 wo pp extracted 202209b.xlsx))

TECHNOLOGY TRANSFER

- **Products transferred to companies, currently marketed in Argentina: 4**

Atom Protect → social mask and Atom Protect N95 Plus → mask marketed by the company KOVI SRL. More than 10,000,000 units sold that generated a net profit of USD 40,000,000, amount calculated at the official dollar exchange rate (CONICET Reports).

ANTIVIR→ social mask and mask for hearing impaired marketed by the company INDALTEX SRL (<https://antivir.com.ar/>)

- **Technology Transfer Agreement in progress: 2:**

Resistant Starch to SAPORITI S.A.; Hydrophobic - Oleophilic Blankets to Emerald Resources company.

- **Patent Application: 10. Granted: 7** (4 Argentina, 1 (México, Brasil y Perú), 2 España). (Not counting international extensions or patenting in different countries)

([https://www.lens.org/lens/search/patent/list?q=\(Goyanes%20Silvia\)&p=0&n=10&s=_score&d=%2B&f=false&e=false&l=en&authorField=author&dateFilterField=publishedDate&orderBy=%2B_score&presentation=false&preview=true&stemmed=true&useAuthorId=false](https://www.lens.org/lens/search/patent/list?q=(Goyanes%20Silvia)&p=0&n=10&s=_score&d=%2B&f=false&e=false&l=en&authorField=author&dateFilterField=publishedDate&orderBy=%2B_score&presentation=false&preview=true&stemmed=true&useAuthorId=false)).

- **Third-party patent citing international publications by S. Goyanes: 13.** (Including companies such as Michelin & Cie, Styron Europe GmbH, Molecular Rebar Design Llc)

(https://www.lens.org/lens/search/patent/list?p=0&n=10&s=date_published&d=%2B&f=false&e=false&l=en&authorField=author&dateFilterField=publishedDate&orderBy=%2Bdate_published&presentation=false&preview=false&scholarQueryId=83ca6d2c-0ffd-4c41-abe3-a75532c0c46a&stemmed=true&useAuthorId=false)

- **Leader of research contract with company: 8**

YPF-TECNOLOGÍAS (2); VARTECO QUÍMICA PUNTANA SA (1), ISOLANT SA (1), SAPORITI SA (1), KOVI SRL (2), INDALTEX SRL (1)

- **Technical advice and service / joint development project with companies and cooperatives**

FATE SAICI., CTI SOLARI Y ASOCIADOS SRL, TENARIS SA, SAPORITI SA., MANIOC COOPERATIVE CLUSTER MISIONES ARGENTINA, CAI SA, YPF SA, EMERALD RESOURCES LTD, etc.

- **Technical Talks for Industries: 20**

DOW-CHEMICAL SA, GRUPO ARCOR SA, ISOLANT SA, LABORATORIOS ANDRÓMACO SAICI, SAPORITI SA, BODEGAS BIANCHI SA, TOYOTA ARGENTINA SA, BASF ARGENTINA SA, CTI SOLARI Y ASOCIADOS SRL, DARMEX SA, VARTECO QUÍMICA PUNTANA SA, FATE SAICI, PIGNANELLI E HIJOS SA, Y-TEC, GRUPO ORTOPEDIA ALEMANA SA, LABORATORIOS S.L. SA, etc.

HONORS AND AWARDS

- Ibero-American Award for Innovation and Entrepreneurship (Ibero-American General Secretariat) 2010. (First Place: "Biodegradable Films")
- Resolution of the Honorable Chamber of Senators of the Argentine Republic. Expressing Satisfaction with The Scientific Development Purpose of The Ibero-American Award, 2011. (File No: 1136-D -2011)
- L'ORÉAL-UNESCO National Awards for Women in Science,2012 (Special Mention)
- UBATEC Award for Innovation and Applied Research, 2016(First Place: "Eco-Tendencia. Envases Para Un Mundo Más Limpio")
- INNOVAR 2017 Category: Innovative Product and Design (3rd Prize)."PAbs 50: Paños Absorbentes para Remediación Ambiental". INNOVAR 2022 (
- L'ORÉAL-UNESCO -National Awards for Women in Science,2018 (Winner)
- MENCIÓN DE HONOR "SENADOR DOMINGO FAUSTINO SARMIENTO" AWARD. Awarded by the Honorable Chamber of Senators of the Argentine Republic. 2019. Award for the developments made to improve people's quality of life.
- ADA BYRON AWARD FOR WOMEN IN TECHNOLOGY (2020) Argentina
- CONSAGRACION Award 2020 by the National Academy of Exact, Physical and Natural Sciences (ANCEFN). Category: Engineering.
- SABATO Award 2021. Distinction as Researcher of the Argentina Nation.
- Konex Award 2023 Merit Diploma - Engineering

FUNDING HISTORY

INTERNATIONAL (ARGENTINE Director)

- 7TH EU FRAMEWORK PROGRAMME IN NANOTECHNOLOGY - POCO PROJECT (CP-IP: 213939-1) – NOVEMBER 2008 TO NOVEMBER 2012 - www.poco-project.org.
- COOPERATIVE PROJECT MINCYT (ARGENTINA) - COLCIENCIAS (COLOMBIA) (CO/08/09),2009 - 2011.
- COOPERATIVE PROJECT MINCYT(ARGENTINA) - CONCYTEC (PERU) (PE/11/02), 2012 – 2013.
- COOPERATIVE PROJECT MINCYT(ARGENTINA) - FONDECYT (CHILE) 2014 – 2016
- COOPERATIVE PROJECT MINCYT(ARGENTINA) –CAPES (BRASIL), 2014 – 2016.
- COOPERATIVE PROJECT ESPAÑA-COSTA RICA-ARGENTINA **CSIC Programme of Scientific Cooperation for Development (i-COOP 2020 - COOPB20502** ARSENIC-FREE, NEW NANO-STRUCTURED MULTIFUNCTIONAL MATERIALS TO REMOVE ARSENIC IN GROUNDWATER

NATIONAL PROJECTS (DIRECTOR AND PI)

- 21 Research projects founded by Governmental Science Organizations: UBACYT; CONICET; ANPCyT.

RESEARCH SUPERVISION AND MENTORING ACTIVITIES

• **CONICET Researcher: 6**

• **CONICET Postdoctoral Fellow: 8**

COMPLETED PhD THESIS: 14

All received an outstanding qualification. The supervised PhDs have been inserted in different companies (FATE SAICI, YPF TECHNOLOGY, CRISIL IREUNA ARGENTINA SA, LABORATORIOS S.L. SA, NASA SA, PLUSPETROL SA), Science and Technology Centers in Argentina and Brazil, or are leaders of a Research+Development+Innovation group in Argentina or Colombia.

List of PhD Thesis Supervised

- *PhD Thesis in Physis Science. University of Buenos Aires (11)*
- *PhD Thesis in Chemistry. University of Buenos Aires (2). National University of San Martín (1).*

PhD THESIS IN PROGRESS: 5

Physics Science UBA (3), Chemistry UNSAM (1), Industrial Quality INCALIN-INTI (1)

COMPLETED MSc THESIS: 17

International MSc in food technology of University of Buenos Aires, Argentina and Parma University, Italy (2). MSc in Biotechnology Processes of National Technological University, Argentina (1). **Licentiate Thesis in Physics, University of Buenos Aires (equivalent to MSc) (14).**

ORGANIZATIONAL SKILLS AND COMPETENCIES

- Founder and Head of Polymer and Composite Materials Group, Department of Physics, FCEN-UBA. (2003-current)
- Coordinator of the National Scientific and Technical Research Council (CONICET) Advisory Committees (Promotion to "Superior" Researcher 2021- current)
- Coordinator of the CONICET Advisory Committees. Research Promotion and Evaluation (Physical Area 2017-2018)
- Member of the CONICET Advisory Committees. Research Promotion and Evaluation (Process Engineering Area 2008-2009 and 2012-2013, Materials Science Area 2014-2016)
- Member of the advisory board YPF- TECHNOLOGIES (2014-2016)
- Head of the Nanomaterials Y-TEC Innovation Space (IFIBA-DF-FCEN-UBA) (2016-2017).
- Advisory Board Member of FONCYT-MINCYT (Chemical Engineering and Food) 2013
- Physics Department Council Member, FCEN-UBA (2003-2005 and 2019-2020)
- Editor of Springer Book: "Industrial Applications of Renewable Biomass Products: Past, Present and Future". (2017)
- Member of Several Organization or Scientific Committees Latin American/National Conferences and Schools in Polymers.
- Coordinator of the Energy Technology, Mining, Mechanical and Materials Commission of FONCyT 2015-2016

PARTICIPATION IN EVALUATION COMMITTEE

- Jury Member of Several Scientific Awards: L'ORÉAL – UNESCO National Award 2016 and 2020 // Best PhD Thesis in Polymers (Argentina 2015 and 2017) // ARCOR Award for Innovation 2019// JCI TOYP Award 2020 // ADA BYRON Award 2021
- Member of the evaluation committee for the selection of Directors of CONICET Research Centres. IITEMA (2018), CETMIC (2018), IDIT (2015). INTEMA 2023 (Appointed Jury by CONICET)
- Member of the evaluation committee for the selection of Assistant Professor (UBA, UNLP, UNS-Argentina).
- Member of the evaluation committee for the selection of the Research Proposals in Peru, Colombia, Uruguay and Chile
- Member of PhD thesis committee in more than 30 occasions in Argentina (>25) and in Basque Country University (6).
- First Argentine representative in NANOANDES (the first Latino-American network on nanotechnology, created in 2010), Lima, Perú (2010).

SPECIALIZED TEACHING ACTIVITIES AND INVITED PROFESSOR

- Master in Renewable Materials Engineering, University of the Basque Country – San Sebastian (2008, 2012, 2019). University of Basque Country, SPAIN "Materials + Technologies" Research Group.

- VISITING ASSOCIATE RESEARCHER, University of Basque Country (July 2002, April 2004, September 2005, December 2007 to March 2008, October 2009, December 2009, February 2012, June 2013, June 2015, June 2019).
- VISITING ASSOCIATE RESEARCHER (2015) University of Chile (Chile)
- VISITING ASSOCIATE RESEARCHER (2013/2016) Catholic University of Chile (Chile)
- VISITING ASSOCIATE RESEARCHER (2019, 2022) National Nanotechnology Laboratory (LANOTEC). National High Technology, Costa Rica.
- VISITING ASSOCIATE RESEARCHER (2022) Material Physics Centre (CFM – CSIC -University of the Basque Country). Spain