

CURRICULUM VITAE ET STUDIORUM



NAME Sabrina Pricl		CURRENT ACADEMIC POSITION Associate Professor	
DATE OF BIRTH 01/08/1961	MARITAL STATUS Married, two kids		
TRAINING			
INSTITUTION	DEGREE	YEARS	FIELD OF STUDY
Università degli Studi di Trieste	Master Degree	1980-1986	Chemistry
Stevens Institute of Technology	Fellowship	1986	Biomacromolecular Chemistry and Physics
Area Science Park, Trieste, Italy	Fellowship	1987-1990	Physical and Organic Chemistry of Biopolymers

1. Bibliometrics

Scopus: Total number of ISI documents: **309**; total number of citations: **9296**; overall h-index: **54**

Web of Science (WOS): Total number of ISI documents: **323**; total number of citations: **8623**; overall h-index: **52**

Google Scholar: Overall h-index: **60**; i10-index: **230**; total number of citations: **13536**

Orcid: [0000-0001-8380-4474](https://orcid.org/0000-0001-8380-4474)

2. Academic records

15/11/1990-19/02/2002	Assistant Professor, Italian Scientific Sector ING-IND/24: Principles of Chemical Engineering, Faculty of Engineering, University of Trieste, Trieste, Italy.
20/2/2002-today	Associate Professor, Italian Scientific Sector ING-IND/24: Principles of Chemical Engineering, Department of Engineering and Architecture (DEA), University of Trieste, Trieste, Italy.
2012-today	National Scientific Habilitation to Full Professor, Italian Scientific Sector ING-IND/24: Principles of Chemical Engineering.
2012-today	National Scientific Habilitation to Full Professor, Italian Scientific Sector ING-IND/34: Industrial Bioengineering.
2012-today	National Scientific Habilitation to Full Professor, Italian Scientific Sector BIO/11: Molecular Biology.
2017-today	National Scientific Habilitation to Full Professor, Italian Scientific Sector CHIM/02: Physical Chemistry.
2017-today	National Scientific Habilitation to Full Professor, Italian Scientific Sector CHIM/07: Fundamentals of Chemical Technologies.

3. Teaching Activity

Academic year (AY) 1990-91 to AY 1998-99: *General Chemistry*, Graduate Course, School of Engineering, University of Trieste, Italy

AY 1994-95 to AY 2001-2002: *Physical and Technological Properties of High Polymers*, Graduate Course, School of Engineering, University of Trieste, Italy

AY 1996-97 to AY 2010-2011: *General Chemistry*, Undergraduate Course, Schools of Engineering, University of Trieste, Trieste, Italy.

AY 2002-03 to AY 2004-2005: *Thermodynamics and Transport Properties*, Graduate Course, School of Engineering, University of Trieste, Trieste, Italy

AY 2002-03 to AY 2009-2010: *Basic Principles of Chemical Engineering*, Graduate Course, School of Engineering, University of Trieste, Trieste, Italy.

AY 2004-2005 to 2020: *Molecular Simulations*, Graduate Course in Material, Chemical and Biochemical Engineering, School of Engineering, University of Trieste, Trieste, Italy.

AY 2004-05 to 2020: *Molecular Simulations*, Graduate Course in Medicinal Chemistry, School of Pharmaceutical Chemistry and Technology, University of Trieste, Trieste, Italy.

AY 2012-13 to present: *Thermodynamics*, Undergraduate Course in Industrial Engineering, School of Engineering, University of Trieste, Trieste, Italy.

AY 2016-17 to present: *Molecular Biology*, Graduate Course in Material, Chemical and Biochemical Engineering and Graduate Course in Clinical and Biomedical Engineering, School of Engineering, University of Trieste, Trieste, Italy

AY 2020-21 to present: *Advanced Molecular Simulation Techniques*, Graduate Course in Material, Chemical and Biochemical Engineering, School of Engineering, University of Trieste, Trieste, Italy

AY 2020-21 to present: *Chemico-Physical Characterization Techniques for Nanobiotechnology*, Graduate Course in Material, Chemical and Biochemical Engineering, School of Engineering, University of Trieste, Trieste, Italy

4. Undergraduates, graduates, PhDs, and PostDocs supervision

1/1/1990-today: Supervision of di 350+ undergraduate and graduate students in:

- *Materials, Chemical and Process Engineering* (Graduate Course), *Clinical and Biomedical Engineering* (Graduate Course), and *Industrial Engineering* (Undergraduate Course), Department of Engineering and Architecture (DEA), University of Trieste (UniTS)

- *Pharmaceutical Chemistry and Technology* (Graduate Course), Department of Chemical and Pharmaceutical Sciences (DSCF), UniTS

- 20+ PhD students in *Chemical and Process Engineering* (PhD jointed School of Chemical Engineering, University of Trieste and Padua), and in *Nanotechnologies*, (PhD School in Nanotechnology, UniTS)

- 15+ Post-Docs in *Chemical and Process Engineering*, *Molecular Biology* and in *Nanotechnology*, DEA, UniTS

5. Supervision of Selected Early Career Researchers (with first/key destinations)

1. Paola Posocco, currently Associate Professor (ING/IND-24), Department of Engineering and Architecture (DEA), UniTs (<http://www.units.it/persona/index.php/from/abook/persona/11660>)

2. Erik Laurini, currently Associate Professor (ING-IND/24), DEA, UniTs (<http://www.units.it/persona/index.php/from/abook/persona/10242>)

3. Suzana Aulic, currently PostDoc at the International Center for Genetic Engineering and Biotechnology (ICGEB), Area Sciednce Park, Padriciano (Trieste), Italy (<https://www.icgeb.org/biotechnology-development>)

4. Domenico Marson, currently Assistant Professor (ING-IND/24), DEA, UniTs (<http://www.units.it/persona/index.php/from/abook/persona/16578>)

6. Professional memberships

2002-American Chemical Society

2000-American Association of Chemical Engineers

2004-American Association for Cancer Research

2004-European Association for Research and Treatment of Cancer

2008-European Society of Nanomedicine

7. Ten-year track records (2023-2014)

a. Organization and/or oral presentations to national/international scientific conferences

1. In the period 2023*-2014, speaker/presenter at 31 international conferences (excluding lectures at Italian, European, and extra-european Universities)
2. Member of the Organizing Committee of the 8th *Eastern Mediterranean Chemical Engineering Conference* (EMCC8), Technion, Haifa, Israel, 2017 February 26 – March 1.
3. Member of the Scientific Committee of the *Foundations of Molecular Modeling and Simulation 2018* (FOMMS 2018), The Lake Lawn Resort, Delavan (WI), USA, 2018 July 15 – 20.
4. Member of the Scientific Committee of the *1st CA17140 COST Conference*, Riga, Latvia, 2019 October 15 – 17.
5. Chair of the *Foundations of Molecular Modeling and Simulation 2022* (FOMMS 2022), The Lake Lawn Resort, Delavan (WI), USA, 2022 July 17 – 21.
6. Chair of the *Final CA17140 COST Conference*, Rome, Italy, 2022 October 25 – 26.

*since March 2020 all events at which my participation was scheduled as an invited/keynote/oral speaker have been either cancelled or, mostly, moved on to 2022/2023 due to the COVID-19 pandemic.

b. Selected examples of ongoing collaboration with National and International Research Groups (with role of Research Unit/Project Principal Investigation (PI))

- **Dr. Alfonso Quintas-Cardama**, formerly at the MD Anderson Cancer Center, Houston, TX, USA now at Glaxo Smithkline, Philadelphia, PA, USA alfonso.x.quintas@gsk.com. Research topic: *Translational characterization of oncogenes and their role in resistance to cancer therapy*.
- **Prof. Carlo V. Catapano**, Institute of Oncology Research, Oncology Institute of Southern Switzerland (IOSI), Bellinzona, Switzerland carlo.catapano@ior.iosi.ch. Research topic: *Design and development, characterization, structural and molecular biology, and binding thermodynamics of molecular- and gene-targeted therapeutics*.
- **Dr. Palma Rocchi**, Institut National de la Santé e de la Reserche Médicale (INSERM), Marseille, France palma.rocchi@inserm.fr. Research topic: *Computational structural biology, protein-protein interactions and experimental/computational ligand/protein interactions in oncology*.
- **Prof. Enzo Di Fabrizio**, formerly at KAUST University, The Kingdom of Saudi Arabia now at the Department of Applied Science and Technology, Turin Polytechnic, Turin, Italy enzo.difabrizio@polito.it. Research topic: *Computational/esperimental structural and thermodynamic study of DNA/protein and DNA/small molecules interaction*.
- **Prof. Bernhard Wünsch**, Institut für Pharmazeutische und Medizinische Chemie, Westfälische Wilhelms-Universität, Munster, Germany wuensch@uni-muenster.de. Research topic: *Design, synthesis, quantitative structure-property (QSP) and structure-activity (QSA) relationships, and thermodynamics of transmembrane receptor-ligand binding*.
- **Prof. David K. Smith**, Department of Chemistry, University of York, United Kingdom david.smith@york.ac.uk. Research topic: *Self-assembling nanosystems as nanovectors and/or multivalent ligands for biological polyanions of biomedical interest*.
- **Prof. Ling Peng**, CNRS Research Director, Centre Interdisciplinaire de Nanoscience de Marseille, Aix-Marseille University, Marseille, France ling.peng@univ-amu.fr. Research topic A): *design, synthesis,*

characterization and in vitro/in vivo activity of nanovectors for drug and gene delivery; Research topic B); chemico-physical studies of intra- and intermolecular interactions of organic molecules.

- **Prof. Mauro Ferrari**, MD Anderson Cancer Center/Brown Institute of Molecular Medicine, Houston TX, USA (now at the Houston Methodist Hospital) mferrari@houstonmethodist.org. Research topic: *Multiscale modeling of protein transport in nanoconfined spaces.*
- **Prof. Francesco Stellacci**, Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland francesco.stellacci@epfl.ch Research topic: *Multiscale computational and experimental characterization of functionalized nanoparticles and their interaction with the protein corona.*
- **Dr. Matthew R.G. Taylor**, Adult Clinical Genetics, Department of Medicine, University of Colorado at Denver, Denver, CO, USA matthew.taylor@ucdenver.edu. Research topic: *Computational and experimental approaches to the prediction and determination of mutation effects on the structural, chemico-physical and mechanical properties of proteins located within the cardiac nucleare membrane.*
- **Prof. Laurence Charles**, Institut de Chimie Radicale, Aix-Marseille University, Marseille, Francia laurence.charles@univ-amu.fr. Research topic: *Development of new analytical methodologies based on spectroscopic techniques for biomaromolecular systems.*
- **Prof. Galder Kortaberria**, Department of Chiminal and Environment Engineering, Universidad del País Vasco, Donostia/San Sebastian, Spain galder.cortaberria@ehu.eus. Research topic: *Design, synthesis and characterization of polymer nanocomposites.*
- **Prof. Konstantinos Karatasos**, Department of Chemical Engineering, University of Thessaloniki, Thessaloniki, Greece karatas@eng.auth.gr. Research topic: *Multiscale molecular simulations for morphology and thermodynamic property prediction of industrial and biomedical polymers.*
- **Prof. Maria Isabel Rodriguez-Franco**, Instituto de Quimica Medica, Consejo Superior de Investigaciones Cientificas (IQM-CSIC), Madrid, Spain isabelrguez@iqm.csic.es. Research topic: *Design, synthesis, characterization, and receptor-ligand binding interactions in neurosciences.*
- **Prof. Johannes Fraaije**, Faculty of Science, Leiden Institute of Chemistry, Leiden, **The Netherlands** j.fraaije@chem.leidenuniv.nl. Research topic: *Design, synthesis, and characterization of polymer (bio)nanocomposites.*
- **Dr. Silvana Pilotti**, Molecular Pathology Laboratory, Department of Pathology, IRCCS National Institute for the Study and Treatment of Cancer, Milan, Italy silvana.pilotti@istitutotumori.mi.it Research topic: *Combined experimental/computation characterization of structural, biochemical, and chemico-physical properties of mutant oncogenes, their interactions with targeted therapies, and mechanisms of resistance in cancer therapies.*
- **Dr. Vittorio Perfetti**, Internal Medicine Operative Unit, SS. Annunziata Hospital, Pavia, Italy vittorio_perfetti@asst.-pavia.it. Research topic: *Combined experimental/computation characterization of structural, biochemical and chemico-physical properties of mutant oncogenes, their interactions with targeted therapies, and mechanisms of resistance in cancer therapies.*
- **Prof. Antonio Carta**, Department of Chemistry and Pharmacy, University of Sassari, Sassari, Italy acarta@uniss.it. Research topic: *Design, synthesis, characterization, and mechanism of action of new antiviral and anticancer drugs.*
- **Prof.ssa Simona Collina**, Department of Pharmaceutical Sciences, University of Pavia, Pavia, Italy simona.collina@unipv.it. *Design, synthesis, quantitative structure-property (QSP) and structure-activity (QSA) relationships, and thermodynamics of transmembrane receptor-ligand binding.*

c. Leading role in national and international research projects granted by private/public research institutes

1/1/2010-31/12/2014

Project: **Development of new inhibitors of STAT3 in oncology.** Funding agency:

- Otsuka Pharmaceuticals/Oncology Institute of Italian Switzerland (IOSI). Role: Scientific leadership and coordination, economical management, Total project duration: 5 years. Project topic: *Development of new inhibitors of the Signal Transducer and Activator of Transcription 3 (STAT3) protein and determination of the mechanism of action via an integrated approach based on experimental and computational structural, biochemical, and molecular biology approach.*
- 4/12/2012-31/12-2014 Project: **Auxiliary processes: adhesive joints and repairing (PRADE)**. Funding agency: Italian Ministry for Economical Development (MISE) Call: PON-REC 2007-2013. Role: Scientific leadership and coordination, economical management. Total project duration: 2 years. Research topic: *development of computational methods for the prediction of new adhesives and as a design tool for new functionalized adhesive materials.*
- 15/6/2013-15/12/2014 Project: **IN Silico Description and prediction of drug Resistance in cancer targeted therapy (INSIDER)**. Funding Agency: CINECA. Call: ISCRA. Ruolo: Scientific leadership. Total project duration: 18 months. Research topic: *exploiting High Performance Computing (HPC) for the application of advanced molecular simulation techniques to the conformational, thermodynamic, and kinetic characterization of oncogenes and their interactions with targeted ligands.*
- 4/8/2015-6/8/2015 Project: **Self-assembled multivalent nanoscience (SAM-NANO)**. Funding agency: Elettra Synchrotron Trieste S.p.A. Ruolo: Scientific leadership. Research topic: *granted access to the Elettra Synchrotron radiation SAXS beamline for the structural characterization of self-assembled nanovectors and their complexes with biological polyanions.*
- 15/3/2015-15/9/2016 Project: **Atomistic Simulation for the Prediction of the frictional behavior of Aluminum Surface (ASPAS)**. Funding Agency: CINECA. Call: ISCRA. Ruolo: Scientific leadership. Total project duration: 18 months. Research topic: *exploiting High Performance Computing (HPC) in understanding experimental microscopy evidence on metal friction.*
- 15/2/2016-21/2/2016 Project: **Collective enhanced IR-SR absorption microscopy for protein structural studies**. Funding agency: Elettra Synchrotron Trieste S.p.A. Ruolo: Scientific leadership. Research topic: *granted access to the Elettra Synchrotron radiation SISSI beamline for the study, by SEIRAS spectroscopy, of protein structures.*
- 1/6/2016-1/9/2016 Project: **Novel BCR-ABL1 hot-spot mutations in CML: friends or foes?** Funding agency: CERIC-ERIC. Ruolo: Scientific leadership. Research topic: *granted access to the Elettra Synchrotron radiation SAXS beamline and to the 800 MHz DAVID NMR for the characterization of mutant isoforms of the BCR-ABL1 tyrosine kinase protein per se and in complex with different inhibitors.*
- 1/2/2017-1/8/2018 Project: **Nanovector/drug interactions: Drug diffusivity and release kinetics from Nanovectors (DIVINATION)**. Funding Agency: CINECA. Call: ISCRA. Ruolo: Scientific leadership. Total project duration: 18 months. Research topic: *exploiting High Performance Computing (HPC) for the structural and kinetic characterization of self-assembled nanovectors, their drug complexes, and their drug release performance.*
- 15/12/2018-14/12/2019 **Project: High-Performance computing in nanomedicine (HIPPIE)**. Funding Agency: CINECA. Call: ISCRA. Ruolo: Scientific leadership. Total project duration: 12 months. Research topic: *exploiting High Performance Computing (HPC) for the design and in silico characterization of novel self-assembling nanovectors for gene therapy.*
- 1/1/2020-31/12/2020 Project: **Predicting SARS-CoV-2 variants by HPC (PRAY)**. Funding Agency: CINECA. Call: ISCRA. Ruolo: Scientific leadership. Total project duration: 12 months. Research topic: *exploiting High Performance Computing (HPC) for the application of*

advanced molecular simulation techniques to the prediction of possible SARS-CoV-2 variants and their conformational, thermodynamic, and kinetic characterization.

1/1/2021-31/12/2021 Project: **moNoclonal Antibodies Vs the SARS-CoV-2 spike protein (NAIVETE)**. Funding Agency: CINECA. Call: IS CRA. Ruolo: Scientific leadership. Total project duration: 12 months. *Research topic: exploiting High Performance Computing (HPC) for the application of advanced molecular simulation techniques to the conformational, thermodynamic, and kinetic characterization of the interaction between SARS-CoV-2 spike protein variants of concern and different monoclonal antibodies.*

5/3/2022-present Project: **tarGETiNg rarE BRAf muTants in melanoma wltH fda-approVed iNhibitors (GENERATION)**. Funding Agency: CINECA. Call: IS CRA. Ruolo: Scientific leadership. Total project duration: 18 months. *Research topic: exploiting High Performance Computing (HPC) for the application of advanced molecular simulation techniques to the conformational, thermodynamic, and kinetic characterization of rare BRAF mutant isoforms in melanoma and their interactions with FDA-approved BRAF inhibitors.*

d. Selection of leading role in national and international scientific research projects granted upon participation to competitive calls and subjected to peer-review

01/11/2023-present Project: **Sustainable flexible food packaging: accelerating material discovery via multiscale modelling (SPM³)**. Funding agency: European Commission/Italian Ministry of University and Research. Call: National Recovery and Resilience Plan (NRRP) – Innovation Grant, call 1. **Role: Scientific leadership**. Total project duration: 2 years. Project topic: Development, implementation, and application of new, high-performance computing-based multiscale simulation techniques for the design of new materials for redesigning the standards for a responsible and circular eco-design of new materials for packaging.

01/05/2024-present Project: **Harnessing HPC: Granarolo's bio-driven revolution for sustainable packaging (PISA)**. Funding agency: European Commission/Italian Ministry of University and Research. Call: National Recovery and Resilience Plan (NRRP) – Innovation Grant, call 3. **Role: Scientific leadership**. Total project duration: 2 years. Project topic: Development, implementation, and application of new, high-performance computing-based multiscale simulation techniques to support Granarolo aims for sustainable production by reducing fossil-based plastics and cutting 2,500 tons of CO₂ emissions by 2026.

01/9/2022-present Project: **National Center for HPC, Big Data and Quantum Computing - High Performance Simulations, Computation and Data Analysis. Spoke 7 - Materials & Molecular Sciences**. Funding agency: European Commission/Italian Ministry of University and Research. Call: National Recovery and Resilience Plan (NRRP). **Role: Scientific leadership and coordination of the University of Trieste spoke members for the Engineering sector**. Total project duration: 5 years. Project topic: Development, implementation, and application of new, high-performance software for the design of new materials and complex molecular systems based on multiscale molecular modeling.

19/5/2018-27/3/2023 Project: **Cancer nanomedicine - from the bench to the bedside (NANO2CLINIC)**. Funding Agency: European Commission. Call: COST ACTION CA17140. Ruolo: **Action Chair, Scientific Communication and Dissemination Manager, and Management Committee Leader for Italy**. Total project duration: 4 years. Project topic: *development of nanosystems for the transport and release of anticancer agents from their design to their pre-clinical validation.*

6/5/2019-6/5/2022 Project: **Study of the BRAF oncogene and its mutations for the selection of**

- melanoma patients eligible for target therapies based on specific inhibitors.** Funding agency: Autonomous Region Friuli-Venezia Giulia. Call: Call 2017 for grants based on clinical, translational, fundamental, epidemiological, and organizational research, art. 15, comma 2, lett. b), regional law no. 17/2014. **Scientific leadership and coordination.** Total project duration: 3 years. Project topic: *Computational/experimental study on the possibility of targeting non-V600E BRAF mutants in melanoma patients using specific BRAF inhibitors.*
- 31/12/2016-31/12/2020 Project: **Nanotechnology based immunotherapy for glioblastoma (NANOGLIO).** Funding agency: European Commission. Call: Euronanomed II Joint Transnational Call for Proposals (2016) for "European Innovative Research & Technological Development Projects in Nanomedicine". Role: **Scientific leadership and coordination of research unit.** Total project duration: 3 years. Project topic: *design, development, and testing of new nanovectors for the delivery of immunomodulators for the treatment of glioblastoma.*
- 1/4/2017-31/3/2020 Project: **Novel direct TEM imaging of nucleic acids, DNA/proteins interaction and cell membrane structure.** Funding agency: King Abdullah University of Science and Technology (KAUST), Thuwal, Kingdom of Saudi Arabia. Call: 2016 Competitive Research Grants Program (CRG2016) annual competition. Role: **Scientific leadership and coordination of the Italian team.** Total project duration: 3 years. Project topic: *combined computational/experimental study of the interactions among biological systems (e.g., DNA/ or RNA/protein), and of membrane ion channels.*
- 31/12/2016-31/12/2020 Project: **Multi-scale Composite Material Selection Platform with a Seamless Integration of Material Models and Multidisciplinary Design Framework. (COMPOSELECTOR).** Funding agency: European Commission. Call: H2020-NMBP-2016-2017 NMBP-23-2016. Role: **Scientific leadership and coordination of the Italian research unit, WP leadership.** Total project duration: 4 years. Project topic: *development of a business decision support system (BDSS) in which material multiscale modeling, business decision models, and databases are integrated to sustain the complex decisional process at the basis of the selection and design of polymeric nanocomposite systems.*
- 5/2/2017-4/2/2020 Project: **New designed triazoloquinolones in combination with Pgp inhibitors as useful chemical probe to investigate quinolone resistance in Mycobacterium Tuberculosis: an approach to face an old re-emerging disease with new tools.** Funding agency: Italian Ministry of University and Research. Call: PRIN 2015. Role: **Scientific leadership and coordination.** Total project duration: 3 years. Project topic: *synergic in silico/in vitro design, synthesis, and activity of new anti-tubercular drugs.*
- 1/05/2017-30/04/2019 Project: **Plastic cover for marine engine (PLASTICO).** Funding Agency: EC/Autonomous Region Friuli-Venezia Giulia. Call: POR-FESR 2014-2020 Pillar 1 Activity 1.3.b. Role: **Scientific leadership and coordination.** Total project duration: 21 months. Project topic: *design and characterization of the physico-chemical and structural properties of new nanostructured materials as sustainable replacement for currently adopted metal parts in marine engines.*
- 1/1/2016-31/12/2018 Project: **Novel hot-spot mutations in BCR-ABL1: role in resistance to CML target therapy.** Funding agency: Italian Association for Cancer Research (AIRC). Role: **Scientific leadership and coordination.** Total project duration: 3 years. Project topic: *determination of the molecular role of new mutation of the BCR-ABL oncogene in the resistance to chronic myeloid leukemia targeted cancer therapy.*
- 1/1/2014-31/12/2016 Project: **Modeling of morphology development of micro- and nanostructures (MoDeNa).** Funding Agency: European Commission. Call: FP7 NMP.2013.1.4-1. Role: **Scientific leadership and coordination of the Italian research unit, WP leadership.** Total project duration: 3 years. Project topic: *development and validation*

of an integrated multiscale simulation software platform for the prediction of mechanical, thermophysical and transport properties of complex materials.

1/11/2012-31/10/2016 Project: **Soft Materials Advanced Research Training Network (SmartNet)**. Funding agency: European Commission. Call: FP7-PEOPLE-2012-ITN. Role: **Scientific leadership and coordination – managing ESRs and engagement in network**. Total project duration: 4 years. Project topic: *Initial Training Network at the interface between chemistry, physics, and biology for the study of scientific problems in the field of soft matter systems.*

1/6/2012-31/5/2015 Project: **Development of multifunctional nanostructured coatings (NANOSTRATA)**. Funding agency: Italian Ministry for Economical Development (MISE). Call: Industry 2015 Call “New Technologies for the Made in Italy”. Role: **Scientific leadership and coordination**. Total project duration: 3 years. Project topic: *design and production of innovative coatings to enhance the interface performances between components of different nature.*

e. Editorial board of international journals, encyclopedias, or other editorial collections

11/1/2018-present: Associate Editor of the international peer-reviewed journal Chemistry Africa (Springer, ISSN: 2522-5758, <https://www.springer.com/journal/42250/editors>)

1/1/2020-31/8/2021 Guest Editor of the special issue of "Cancer Nanomedicine-From the Bench to the Bedside" of the international peer-reviewed journal Pharmaceutics (MDPI, https://www.mdpi.com/journal/pharmaceutics/special_issues/cancer_nanomed)

1/7/2022-present Guest Editor of the special issue of "Cancer Nanomedicine-From the Bench to the Bedside" of the international peer-reviewed journal European Journal of Pharmaceutical Sciences (Elsevier, <https://www.sciencedirect.com/journal/european-journal-of-pharmaceutical-sciences/about/call-for-papers#cancer-nanomedicine-from-the-bench-to-the-bedside>)

f. Teacher Board of PhD Schools

1/11/2006-today: Member of the teacher board of the PhD School in Nanotechnology, University of Trieste, Italy

g. Fellowship and/or visiting professor activity at qualified international institutions

2014 Visiting Professor, University of York, York, United Kingdom (Prof. David K. Smith)

2015 Visiting Professor, University of Marseille, France (Prof. Ling Peng)

2016 Visiting Professor, University of Münster, Germany (prof. Bernhard Wunsch)

2017 Invited Professor, University of Marseille, France (Prof. Aura Tintaru)

2018 Visiting Professor, Vanderbilt University, Nashville, TN, USA (Prof. Peter T. Cummings)

2019 Visiting Professor, University of Lodz, Poland (Prof. Barbara Klajnert-Maculewicz)

h. Prizes and honors

13/8/2013-13/8/2015 Appointed Evaluator of Talents FVG Fellowship Programme, 2nd edition, supported by the European Social Fund, Area of Research Science Park, Trieste, Italy

1/2/2015 Cover of Molecular Oncology for the publication *Smoothened (SMO) receptor mutations dictate resistance to vismodegib in basal cell carcinoma*, 2015, 9(2), 389–397

9/6/2015-16/9/2015	Appointed Evaluator of the Piscopia - Marie Curie Fellowship Programme applications, University of Padua, Italy
3/7/2015	Finalist of the Start-Cup FVG 2015 Competition for technology transfer and start-up ideas, Piazza San Giacomo, Udine, 2015 July 3, with the start-up in initiative SmartNanoLab (role: Scientific Advisor)
30/3/2016-present	Appointed officer expert for the evaluation of ongoing and new project proposals of all European HPC centers of excellence and HPC-based projects in materials and life sciences under the the H2020, Horizon Europe, HADEA and EuroHPC JU framework programs.
1/7/2016	Cover of Small for the publication <i>Mastering dendrimer self-assembly for efficient siRNA delivery: from conceptual design to in vivo efficient gene silencing</i> , 2016, 12 (27), 3667-3676
21/12/2017	Direct assignemnt of an Assistant Professor position after the nomination of one of the best researcher of the University of Trieste (Rectoral Decree n. 938 del 21/12/2017), with the project Cystic Fibrosis Revisited: New Self-assembled Multivalent Nanovectors for Gene Delivery in Cystic Fibrosis (CyFRe) https://web.units.it/sites/default/files/ccr/ricerca/bandi/3%20-%20all.2%20progetto%20Pricl%20rtd%20A.pdf
17/10/2017	Winner of a 40000 Euro grant for the acquisition of a far UV-CD/stopped flow. Funding agent: Fondazione Cassa di Risparmio di Trieste, Trieste, Italy
28/11/2018	Cover of Journal of the American Chemical Society for the publication <i>A dual targeting dendrimer-mediated siRNA delivery system for effective gene silencing in cancer therapy</i> , 2018, 140(47), 16264-16274
28/9/2018-27/3/2023	Appointed Chair, Scientific Dissemination Manager, and Management Committee Leader for Italy per the COST CA17140 "Cancer Nanomedicine – from the bench to the bedside" (Nano2Clinic) https://www.cost.eu/actions/CA17140/ e https://www.nano2clinic.eu/
30/9/2019-31/05/2024	Appointed member of the Research and Innovation Committee of the Trento Autonomous Province, Trento, Italy
1/10/2020-present	Appointed Scientific Member of the Faculty of Biology and Environmental Protection at the University of Lodz, Lodz, Poland
17/9/2020	Frontispiece of Small for the publication <i>Surface charge of supramolecular nanosystems for in vivo biodistribution: a microSPECT/CT imaging study</i> , 16(37), e2003290
14/7/2022	Cover of Nanoscale for the publication <i>Dynamic self-assembling supramolecular dendrimer nanosystems as potent antibacterial candidates against drug-resistant bacteria and biofilms</i> , 2022, 14(26), 9286-9296.

i. Results obtained from technology transfer in terms of contribution to new start-up generation and in patent deposition

12/7/1989-present	Molteni G, Nicora C, Cesaro A, Pricl S. Modified galactomannans and process for their preparation. European Patent EP0323627 A2, July 12, 1989 and US Patent n. 4,970,876, October 2, 1990.
1/4/2016-present	University Spin-off SmartNanoLab. Mission: computer-assisted design, production, and characterization of nano-engineered materials with enhanced properties for industrial and biomedical applications. Ruolo: Founder and Scientific Advisor.

Ten-year track record publications (2024-20014) on peer-review ISI journals (in blue publications featuring French collaborations)

1. Lyu, Z. Ralahya, B, Perles-Barbacaru, T.-A., Ding, L., Jiang, Y., Lian, B., Roussel, T., Liu, X., Galanakoua, C., Laurini, E., Tintaru, A., Giorgio, S., **Pricl, S.**, Liu, X., Bernard, M., Iovanna, J., Viola, A., Peng, L. Self-assembling dendrimer nanosystems for specific fluorine MRI and effective theranostic treatment of tumors. (2024) **Proceedings of the National Academy of Sciences of the United States of America**, 121, art. no. e2322403121, accepted, in press (<https://doi.org/10.1073/pnas.2322403121>)
2. Cavalieri, G., Marson, D., Giurgevich, N., Valeri, R., Felluga, F., Laurini, E., **Pricl, S.** Molecular ballet: investigating the complex interaction between self-assembling dendrimers and human serum albumin via computational and experimental methods. (2024) **Pharmaceutics**, 16 (4), art. no. 533.
3. Ludwig, F.A., Laurini, E., Schmidt, J., **Pricl, S.**, Deuther-Conrad, W., Wünsch, B. [¹⁸F]Fluspidine-a PET tracer for imaging of σ 1 receptors in the central nervous system. (2024) **Pharmaceutics**, 17 (2), art. no. 166.
4. Cavalieri, G., Cilurzo, G., Pettorosso, L., Mansueto, A., Laurini, E., **Pricl, S.** Biophysical and docking study on the interaction of anticancer drugs encorafenib and binimetinib with human serum albumin. (2023) **European Journal of Pharmaceutical Sciences**, 189, art. no. 106550.
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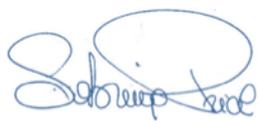
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1. **Pricl S.** Of (computer) mice and men: the long journey of an organic chemist among test tubes, high-performance computers, and in vitro/in vivo experiments in bio(nano)technology. 14th Hellenic Polymer Society International Conference (POLYCONF14), Aristotle University Research Dissemination Center, 2023 November 22-25, Thessaloniki, Greece (**KL**)
2. Laurini E, Marson D, Cavalieri G, **Pricl S.** A molecule for all seasons: from in silico to in vivo development of a versatile amphiphilic dendron family for different nanomedicine applications. 4th International Computational Science and Engineering Conference (ICSEC23), 2023 October 16-17, Doha, Qatar (**IL**)
3. **Pricl S.** The small, the smart, the future: the long journey of an organic chemist from her first 386S IBM to high-performance supercomputers in bio(nano)technology. Catalan Institute of Nanoscience and Nanotechnology (ICN2), Campus de la Universitat Autònoma de Barcelona, May 4, 2023, Bellaterra, Barcelona, Spain (**IL**)
4. **Pricl S.** Trials, travails, and triumphs (?): the long journey of an organic chemist from her first 386S IBM to the world of high-performance supercomputers. Fédération Sciences Chimiques Marseille, University of Marseille, 2023 March 24, Marseille, France (**IL**)
5. Laurini E, Marson D, Aulic S, Fermeglia M, **Pricl S.** Mix and match: computers and test tubes in deciphering some peculiar aspects of nanomedicines. NMCOST Action CA17140 "Cancer nanomedicine – from the bench to the bedside" WG1 meeting, Universidade de Madeira, 2019 July 12-13, Funchal, Portugal (**IL**)
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13. **Pricl S,** Fermeglia M, Alulic S, Marson D, Laurini E. Structural, thermodynamics and kinetics role of novel hot-Spot mutations of BCR-ABL1 in resistance towards "lbs" inhibitors; 2017 AIChE Annual Meeting, 2017 October 29-November 3, Minneapolis, MN, USA (**OC**)
14. **Pricl S,** Fermeglia M, Laurini E. Structural, thermodynamics and kinetics role of novel hot-spot mutations of BCR-ABL1 in resistance towards "lbs" inhibitors. Second International Computational Science and Engineering Conference (ICSEC 2017), 2017 October 23-24, Doha, Qatar (**KN**)
15. Laurini E, Aulic S, Marson D, Boccardo S, Fermeglia M, **Pricl S.** Experimental/computational thermodynamics/kinetics of ligand binding in cancer therapy. 2nd European Conference on Physical Chemistry, 2017 September 24-27, Borgo, France (**IL**)
16. **Pricl S,** σ_1 receptor structure: the quest for the holy grail. Physiopathology of sigma-1 (σ_1) receptors: an European symposium, 2017 May 29-30, Barcelona, Spain (**IL**)
17. Laurini E, Marson D, Boccardo S, Fermeglia M, **Pricl S.** Structural, thermodynamics and kinetics role of novel hot-spot mutations of BCR-ABL1 in resistance towards "lbs" inhibitors. 2017 AACR Annual Meeting, 2017 April 1-5, Washington

DC, USA (OC)

18. Marchisio D, Karimi M, Laurini E, Fermeglia M, **Pricl S**. Mind the gap: bridging molecular and fluid dynamics simulations in the polyurethane foam industry, 2016 AIChE Annual Meeting, November 13-18, San Francisco, CA, USA (OC)
19. Laurini E, Posocco P, Marson D, Fermeglia M, **Pricl S**. Modeling: a tool for experimentalists. design, synthesis and evaluation of self-assembling dendrons for gene/drug delivery. 2016 AIChE Annual Meeting, November 13-18, San Francisco, CA, USA (OC)
20. Laurini E, Fermeglia M, **Pricl S**. Of (computers, cells) mice and men: integration of simulations and experiments in biomedical sciences. The 4th International Conference on Molecular Simulation (ICMS16), 2016 October 23-26, Shanghai, China (KL)
21. **Pricl S**, Laurini E, Storici P, Giabbai B, Marcovich I, Baralle M, Romano M. Novel hot spot mutations in BCR-ABL1: are we looking the right way to TKI resistance? 18th Annual John Goldman Conference on Chronic Myeloid Leukemia: Biology and Therapy, 2016 September 15-18, Houston, TX, USA (IL)
22. **Pricl S**, Laurini E, Fermeglia M, Donato NJ, Quintas-Cardama, A. Are we really looking the right way at resistant BCR-ABL1 kinase domain mutations in chronic myeloid leukemia? Platinum Jubilee, Tata Memorial Centre, A Conference of New Ideas in Cancer: Challenging Dogmas. 2016 February 26-2, Mumbai, India (OC)
23. Laurini E, Marson D, Posocco P, Fermeglia M, **Pricl S**. Synthesis and activity of computer-designed nanovectors for gene and drug delivery. V Bioengineering National Conference, 2016 June 20-22, Università di Napoli Federico II, Naples, Italy (OC)
24. Posocco P, Laurini E, Marson D, **Pricl S**, Fermeglia M. iCOMEX: an integrated computational – experimental approach for the design of advanced nano-bio systems. 14th International Conference on Properties and Phase Equilibria for Product and Process Design (PPEPPD2016), 2016 May 22-26, Porto, Portugal (OC)
25. Laurini E, Marson D, Posocco P, Smith DK, Fermeglia M, **Pricl S**, DNA likes it one-way, heparin does it both ways: mechanisms of self-assembled, multivalent nanovectors selectivity towards these two fundamental polyanions. 8th International Conference Times of Polymers and Composites (TOP), 2016 June 19-23, Ischia, Italy (OC)
26. Laurini E, Civenni G, DeMonte C, Sereni F, Carbone GM, Wünsch B, Fermeglia M, Catapano CV, **Pricl S**. On the mitochondrion's secret service: Genetic knockdown and ligand binding define the role of the chaperone sigma-1 receptor in blocking metabolic stress response in cancer cells. 2015 AIChE Annual Meeting, 2015 November 8-13, Salt Lake City, UT, USA (OC)
27. Colombo C, De Cecco L, Belfiore A, Paielli N, Canevari S, Barrera M, **Pricl S**, Laurini E, Fiore M, Stacchiotti S, Palassini E, Pilotti S, Gronchi A, Perrone F. Gene expression analysis identifies a potential role of immune system in CTNNB1 mutated desmoid tumors. 2015 Meeting of the Connective Tissue Oncology Society (CTOS2015), 2015 November 4-7, Salt Lake City, UT, USA (OC)
28. **Pricl S**, Laurini E, Fermeglia M, Dal Col V, Storici P, Giabbai B, Semrau M, De March M, Donato NJ, Quintas-Cardama A. Bcr-Abl1 V304D mutation in CML: Friend or foe? 2015 AIChE Annual Meeting, 2015 November 8-13, Salt Lake City, UT, USA (OC)
29. **Pricl S**, Laurini E, Fermeglia M, Dal Col V, Storici P, Giabbai B, Semrau M, De March M, Donato NJ, Quintas-Cardama A. Bcr-Abl1 V304D mutation in CML: Friend or foe? European Cancer Congress 2015 (ECC2015), 2015 September 25-29, Wien, Austria (OC)
30. Laurini E, Posocco P, Fermeglia M, **Pricl S**. Of (computers, cells) mice and men: Integration of simulations and experiments in biomedical sciences. Conference on Foundations of Molecular Modeling and Simulation 2015 (FOMMS2015), 2015 July 12-16, Mt. Hood, OR, USA (IL)
31. **Pricl S**, Fermeglia M, Posocco P, Marson D, Laurini E. Of (computers, cells) mice and men: Integration of simulations and experiments in molecular medicine. First International Computational Science and Engineering Conference (ICSEC15), 2015 May 11-12, Doha, Qatar (IL)
32. **Pricl S**, Posocco P, Laurini E, Dal Col V, Marson D, Fermeglia M. E pluribus unum: smart self-assembling materials in nanomedicine Eurofillers and Polymer Blends 2015, 2015 April 26-30, Montpellier, France (OC)
33. Genini D, Brambilla L, Laurini E, Civenni G, Pinton S, Sarti M, Garcia-Escudero R, Perez L, Carbone GM, **Pricl S**, Catapano CV. Novel inhibitors of signal transducer and activator of transcription 3 (STAT3) show potent activity in cell cultures and tumor xenografts. 105th Annual Meeting of the American Association for Cancer Research (AACR) 2014 April 5-9, San Diego, CA, USA (OC)

A handwritten signature in blue ink, appearing to read 'Sabrina Prici', with a large, stylized initial 'S'.

Trieste, June 1, 2024