CURRICUMLUM VITAE of Silvia LASALA

■ Personal information

Family name, First name:	**Lasala, Silvia**
Researcher unique identifiers:	ORCID: 0000-0002-4013-9336
Date of birth:	10/05/1988
Nationality:	Italian
Professional address:	Université de Lorraine, ENSIC-LRGP, 1 rue Grandville, Nancy
Professional email:	silvia.lasala@univ-lorraine.fr
Professional phone number:	+33 3 72 74 37 64

■ Current position

From 2018 Associate professor at **Université de Lorraine**, **Ecole Nationale Supérieure des Industries Chimiques - Laboratoire Réactions et Génie des Procédés.**

Keywords of main current research activities: *Energy process design and optimisation; Energy efficiency; Power plants; Heat pumps; Thermodynamic cycles; Thermodynamic and transport properties of fluids; Equations of state development and implementation; Reaction and molecular design; Working fluids for thermodynamic cycles.*

■ Education

2024 **Habilitation to direct research** "*Towards an improved thermodynamic modelling and enhanced efficiency of energy conversion systems*". Diploma obtained in March, 2024. *ENSIC-LRGP, University of Lorraine, Nancy, France.*

2016 **Ph.D. in "Energy and Nuclear Science and Technology"**, cum laude (with honours)
Ph.D. thesis entitled "Advanced cubic equations of state for accurate modelling of fluid mixtures. Application to CO_2 capture systems"
Energy Department, Politecnico di Milano, Milano, Italy.
Name of PhD Supervisor: Professor P. Chiesa

2012 **Master in "Energy Engineering"**, mark: 110 cum laude (with honours)
Politecnico di Milano, Milano (Italy)

2010 **Bachelor in "Energy Engineering"**, mark: 110 cum laude (with honours)
Politecnico di Milano, Milano (Italy)

■ Previous positions

2016 Postdoctoral researches funded by Air Liquide investigating, mainly, the modelling of the thermodynamics and the kinetics of the reaction ortho-H_2=para-H_2, in **hydrogen liquefaction** processes; 2) the optimal selection of working fluids for power cycles.
LRGP - Centre National de la Recherche Scientifique (CNRS), France.

2011 Six-month internship with the aim to model the **interactions between combustion instabilities, combustor acoustics and flame characteristics** in rich-burn and lean-burn aerospace engines.
Combustion & Casings department, Rolls-Royce, Derby, United Kingdom.

■ Prizes and fellowships

2024 Elected member of the network "Femmes de Tech" of the ***Académie des Technologies***

2023 Prize "**Médaille de Bronze**" of the CNRS.

2022 Prize "**Susanne Zivi**" conferred by the ***Académie de Stanislas*** to award young researchers of University of Lorraine. Nancy, France.

2017 Fellowship: $9000 awarded by *the* ***Knowledge Centre on Organic Rankine Cycles*** (KCORC) to support postdoctoral researches on ORC technologies.

2017 Prize: Ph.D. thesis awarded by the ***European Federation of Chemical Engineering*** **(EFCE)** with the **second prize "Excellence Award in Thermodynamics and Transport Properties"**, at 29th European Symposium on Applied Thermodynamics, Bucarest, Romania.

2016 Prize: Ph.D. thesis awarded with **"Ermanno Grinzato" prize, by *Associazione Italiana Proprietà Termofisiche*** (AIPT), at XXII congress of AIPT, Bologna, Italy.

■ Research grants

- **Current grants I obtained as Principal Investigator (Coordinator)**

Project Title	Funding source	Amount	Period
Carboxylic acids as REAcTIVE refrigerants to make heat pumps efficient (CREATIVE)	**ERC Proof of Concept (Individual Project)** funded by European Union (Programme Horizon Europe)	**150 k€**	June 2025-November 2026
Reactive fluids for intensified thermal energy conversion (REACHER)	**ERC Starting Grant (Individual Project)** funded by European Union (Programme Horizon Europe)	**1.5 M€**	April 2022 – March 2027
Fluides réactifs pour intensifier la conversion de l'énergie thermique	**ANR-JCJC (Individual Project)** funded by the French Council of Scientific Research (ANR) *I had to decline this funding because it overlaid with the ERC Starting Grant.*	**300 k€**	February 2022 – January 2026

- **Current grants as Partner (CNRS) for which I am the Scientific Responsible**

Project Title	Funding source	Amount	Period
Revolutionizing energy production plants efficiency (SPARTA)	**Collaborative National project** Programme France2030	7.1 M€ (total budget) **1.7 M€** (our -partner CNRS- budget in the project)	September 2024 – December 2028
Next REnewable multi-GENeration technology enabled by TWO-phase fluids machines (REGEN-BY-2)	**Collaborative European project** funded by European Union (Programme H2020)	5.4 M€ (total budget) **225 k€** (our -partner CNRS- budget in the project)	September 2020 – August 2024 (delayed to May 2025)

- **Proposals submitted as Scientific Responsible currently under evaluation**

Project Title	Funding source	Amount	Period
REHEAT	**Collaborative National project** (Programme France2030 – PEPR SPLEEN)	1.5 M€ (total budget) **300 k€** (our -partner CNRS- budget in the project)	4.5 years project

■ Summary of the scientific production

36 papers; 3 patents; 4 chapters in books + 1 edited book; 35 oral communications.
N. of citations = 1028, h-index = 17 (source: Google Scholar).

■ Other activities

- □ Supervision activity: 4 postdocs; 6 PhD students; more than 10 research internships.
- □ Member of 10 doctoral committees.
- □ Expert evaluator for the European Commission (for Marie-Curie fellowships, H2020 and Horizon Europe programmes).
- □ Chair-person of the next European Conference of Thermophysical Properties (ECTP2026), held in Chantilly (France) from the 21 to the 24th of June 2026).
- □ Involved in different communication activities (Nuit des chercheur(e)s 2022, Pint of Science 2023, Journée du matrimoine 2022, Show Industrie 2024).