CURRICULUM VITAE, S. Zafeiratos

PERSONAL DATA

Surname/Name	Zafeiratos Spyridon
Marital status	Married (2 children)
Birth date	25 /7 /1971
Citizenship	Greek (by descent)/French (through naturalization)
Professional address	ICPEES-UMR 7515 du CNRS, 25, rue Becquerel, F 67087 Strasbourg https://icpees.unistra.fr/institut/pages-persos/spiros-zafeiratos/
e-mail	spiros.zafeiratos@unistra.fr
Tel.	++33(0)3 68 85 27 55

EDUCATION

2011	Habilitation à diriger des recherches (HDR), Univ. of Strasbourg, France
2000	Ph.D. in Surface Science, Chemical Engineering Department, University of Patras, Greece.
1998	Master of Science in «Science and Technology of materials», Chemical Engineering Department, University of Patras.
1995	Bachelor of Science –Department of Physics, University of Patras

ACADEMIC POSITIONS (after PhD title)

10/2018 – now	Research Director (DR2) CNRS, ICPEES, UMR7515 CNRS and Strasbourg University
10/2007 – 9/2018	Chargé de recherche au CNRS de classe normale, ICPEES, UMR7515 du CNRS, Strasbourg.
7/2004 – 9/2007	Post-doctoral fellow, Max Plank Gesellschaft, Fritz Haber Institute, Inorganic Chemistry Department, Berlin , Germany
1/2002 – 6/2004	Post-doctoral fellow, Catalysis and Electrochemistry Laboratory, ICE-HT/FORTH, Patras, Greece
9/2000 – 1/2002	Military service, Hellenic Air Force

*NUMBER OF PUBLICATIONS AND RESHEARCH CONFERENCES (1/2026)**

Publications in peer reviewing journals	157
Times cited	>8700
H-index	48
Book Chapters	4
Edition of books	2
Announcements in conferences	~50 *(20 invited)*

**Source : Scopus*

TEACHING ACTIVITIES

- **Ecole européenne de Chimie, Polymères et Matériaux de Strasbourg (ECPM)**: Chimie analytique (3ème cycle-3AC). **Course Title**: *Characterization of surfaces and nanomaterials* (*Cours magistraux*). 21 h annually
- Preparation and distribution of lecture notes consisting of more than 500 pages.

ADMINISTRATION ACTIVITIES:

- Responsible of the department "Materials and Catalysis" at ICPEES (4 research groups and 21 permanent personnel)
- Responsible of the research platform «Surface analysis by photoelectron spectroscopy» of ICPEES.
- Member of the scientific council of ICPEES
- Member of the Hydrogen Research Federation in France (FRH2)

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

- 8 Postdocs,
- 10 PhD students (8 graduated)
- 7 master students

RESHEARCH ACTIVITIES

- Heterogeneous Catalysis: preparation, characterization and evaluation of model and realistic catalytic formulations for environmental or energy applications.
- Catalytic and electrocatalytic H_2 production (seam reforming of alcohols, water electrolysis).
- Surface chemistry studies: evaluation of surface characteristics by means of advanced characterization techniques (Synchrotron XPS, AFM, etc.) to establish a structure-performance relationship.
- Polymer Electrolyte Membrane (PEM) and Solid Oxide Fuel and Electrolysis Cells (SOFC & SOEC).
- Development of catalytic materials for integrated CO_2 capture and conversion

SELECTED PUBLICATIONS (2023-2025)

1. Zafeiratos, S.; Ulrich, G.; Nhut, J.M.; Michon, C.; Pham-Huu, C. Electrification of Catalytic Processes with Induction Heating: The Possible Hidden Role of Non-Thermal Magnetic Fields. *Materials Today Catalysis* 2026, *12*, 100134, doi:10.1016/j.mcata2025.100134.
2. Pappa, A.; Pham-Huu, C.; Papaefthimiou, S.; Zafeiratos, S. Catalytic Approaches for CO_2 Conversion to Value-Added Products: An Overview of Life Cycle Assessment Studies. Advanced *Energy and Sustainability Research* 2025, 2400399. https://doi.org/10.1002/AESR.202400399.
3. Barreau, M.; Salusso, D.; Zhang, J.; Haevecker, M.; Teschner, D.; Efimenko, A.; Bournel, F.; Gallet, J.J.; Borfecchia, E.; Sobczak, K.; et al. Uncovering the Critical Function of Lanthanum in CH_4 Production from CO_2 Using Exsolved $LaNiO_3$ Perovskite Catalysts. *J Mater Chem A* 2024, 12, 7605–7621.
4. Zhang, J.; Barreau, M.; Dintzer, T.; Haevecker, M.; Teschner, D.; Efimenko, A.; Luo, W.; Zafeiratos, S. Unveiling Key Interface Characteristics of Ni/Yttria-Stabilized Zirconia Solid Oxide Cell Electrodes in H2O Electroreduction Using Operando X-Ray Photoelectron Spectroscopy. ACS Appl Mater Interfaces 2024, 16, 37915–37926, doi.org/10.1021/acsami.4c05046.
5. Barreau, M.; Salusso, D.; Li, J.; Zhang, J.; Borfecchia, E.; Sobczak, K.; Braglia, L.; Gallet, J.J.; Torelli, P.; Guo, H.; Lin, S.; Zafeiratos, S. Ionic Nickel Embedded in Ceria with High Specific CO2 Methanation Activity. *Angewandte Chemie International Edition* 2023, 62, e202302087.