

Curriculum Vitae

Fabio BELLOT NORONHA

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Resume

Fabio B. Noronha received his B.S. degree from Federal University of Rio de Janeiro in 1987, M.Sc. degree in 1989, from COPPE / Federal University of Rio de Janeiro, and Ph.D. degree in 1994 from COPPE / Federal University of Rio de Janeiro and Institut des Recherches sur la Catalyse – Lyon / France. In 1996, he joined the Catalysis group of the National Institute of Technology (INT). He worked in a postdoctoral position with Prof. Daniel Resasco at the University of Oklahoma from 1999 to 2000. He was a visiting Professor in a research Chair at Ecole Centrale Lille in the Biomass Valorisation Group at Unité de Catalyse et de Chimie du Solide – UCCS from 2019 to 2023. He is a researcher of the National Council for Scientific and Technological Development (CNPq), category 1A, and a researcher of the State of Rio de Janeiro (FAPERJ). From 2008 to 2023, he was one of the Brazilian representatives on the International Association of Catalysis Societies. In 2021, he was appointed to the Brazilian Academy of Sciences, and in 2023, he became a Fellow of The World Academy of Sciences (TWAS) for the advancement of science in developing countries. He is interested in understanding the fundamental relationships between catalytic performance and the catalyst structure. He has been involved in studies for the conversion of natural gas to syngas and fuels, hydrogen production from biomass, including the steam reforming of ethanol and biogas, technologies for the conversion of lignocellulosic biomass into fuels and high-value-added chemicals, such as gasification, pyrolysis, and fractionation processes, and CO₂ conversion into biomethane, olefins, and methanol. Current research projects involve process intensification by using multifunctional reactors such as membrane reactors, combining reaction and separation steps, or structured reactors like monoliths and plate reactors. Currently, he has published 221 articles in journals, presenting an H factor = 63 (11928 citations, Scopus; 02/08/2026).

Education

1989 – 1994 D.Sc., Chemical Engineering, Federal University of Rio de Janeiro and
Institute de Recherches sur la Catalyse
1987 – 1989 M.Sc., Chemical Engineering, Federal University of Rio de Janeiro
1982 – 1986 B.S., Chemical Engineering, Federal University of Rio de Janeiro

Employment History

2025 – 2025	Visiting Professor, Centrale Lille, France
2024 – 2024	Visiting Professor, Centrale Lille, France
2019 – 2023	Visiting Professor, Centrale Lille, France
2018 – present	Professor, Graduate Program in Biosystems Engineering, Universidade Federal Fluminense, Brazil
2016 - 2016	Visiting Professor, Université de Poitiers, France
2010 - present	Professor, Graduate program in chemistry, Instituto Militar de Engenharia, Brazil
1999 - 2000	Postdoctoral Researcher, The University of Oklahoma, USA
1996 - present	Research Scientist, Instituto Nacional de Tecnologia, Brazil
1995 - 1996	Postdoctoral Researcher, Federal University of Rio de Janeiro

Member of the editorial board

2023 – present	Catalysis Reviews
2016 – present	Applied Catalysis B: Environmental
2013 - present	Catalysis Letters
2013 - present	Topic in Catalysis
2006 - 2009	Applied Catalysis A: General

Guest editor

DUPREZ, D.; **NORONHA, F. B.**; EFSTATHIOU, A.; HOMES, N.; MIRODATOS, C.
Fuel roadmap for the mid-21st century: Advanced catalytic processes and strategies, Catalysis Today, v 242 (2014).

NORONHA, F. B.; MOTA, C. J. A.; PASSOS, F. B.; SILVA, V.T.
Gas to Liquid Technology. Catalysis Today, vol. 101 (2005).

SCHMAL, M., SILVA, V.T., **NORONHA, F.B.**
Proceedings of the 3rd International Symposium on Group Five Elements, Catalysis Today, vol. 57 (2000)

Memberships, Executive board

2023 – present - Fellow of The World Academy of Sciences (TWAS) for the advancement of science in developing countries, TWAS
2021 – present – Member of the Brazilian Academy of Sciences
2012 – present – Member of the Natural Gas Conversion Board
2008 - 2024 – Brazilian representative on The International Association of Catalysis Societies
1997 – present - Member of the Brazilian Catalysis Society

Grants

- 51 Research grants (CNPq, FAPERJ, FINEP, Petrobras, CAPES-COFECUB, Office of Navy Research) from 1997 – present

Prizes, awards

2018- Researcher of The National Council for Scientific and Technological Development (CNPq), category 1A
2018- Researcher of the State of Rio de Janeiro (FAPERJ)
2016- V Prize CREA-RJ of Scientific and technological works 2016 - PhD, CREA-RJ
2007- Prize Inventor 2007, Petrobras
2003- Researcher in Catalysis- Brazilian Catalysis Society
2000- Young Scientist of the State of Rio de Janeiro, FAPERJ

Supervision of students

Completed

- 53 Master dissertations
- 32 PhD thesis
- 23 Postdoctoral Researchers

On-going

- 04 Master dissertations
- 04 PhD thesis
- 02 Postdoctoral Researchers

Scientific Production

218 papers
H index = 60 (11.402 citations; Scopus; 06/01/2026)
2 Books
5 Chapters of books
3 Patents
366 National and international conferences presentations

5 most relevant publications

- 1- MARINHO, ANDRÉ L.A.; RABELO-NETO, RAIMUNDO C.; EPRON, FLORENCE; BION, NICOLAS; TONIOLO, FABIO S.; **NORONHA, F. B.**
Embedded Ni nanoparticles in CeZrO₂ as stable catalyst for dry reforming of methane. *Applied Catalysis B: Environmental*, 268 (2020) 118387.
- 2- SOUZA, P. M.; RABELO NETO, R. C.; Borges, L.E.P.; JACOBS, G.; DAVIS, B. H.; SOOKNOI, T.; Resasco, D.E.; **NORONHA, F.B.**
Role of keto-intermediates in the hydrodeoxygenation of phenol over Pd on oxophilic supports. *ACS Catalysis*, 5 (2015) 1318 – 1329.
- 3- MATTOS, L. V.; JACOBS, G.; DAVIS, B.; **NORONHA, F.B.**
Production of Hydrogen from Ethanol: Review of Reaction Mechanism and Catalyst Deactivation. *Chemical Reviews*, 112 (2012) 4094 – 4123.
- 4- DE LIMA, SANIA M.; SILVA, A. M.; COSTA, L. O. O.; GRAHAM, U. M.; JACOBS, G.; DAVIS, B. H.; MATTOS, L. V.; **NORONHA, F.B.**
Study of catalyst deactivation and reaction mechanism of steam reforming, partial oxidation, and oxidative steam reforming of ethanol over Co/CeO₂ catalyst. *Journal of Catalysis*, 268 (2009) 268 - 281.
- 5- STAGG, S.; **NORONHA, F. B.**; FENDLEY, E. C.; RESASCO, D.E.,
CO₂ Reforming of CH₄ over Pt/ZrO₂ Catalysts Promoted with La and Ce Oxides. *Journal of Catalysis*, 194 (2000) 240 - 249.