**Curriculum Vitae**

**Fabio BELLOT NORONHA**

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National Institute of Technology

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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 National Institute of Technology (INT). He worked in a postdoctoral position with Prof. Daniel Resasco at Oklahoma University from 1999 – 2000. He is as 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 since 2019. He is researcher of The National Council for Scientific and Technological Development (CNPq), category 1A and researcher of the State of Rio de Janeiro (FAPERJ). Since 2008, he is one of the Brazilian representatives on The International Association of Catalysis Societies. In 2021, he was appointed to the Brazilian Academy of Sciences and he was elected in 2023 as a Fellow of The World Academy of Sciences (TWAS) for the advancement of science in developing countries. He is interested to understand 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 anodes for solid oxide fuel cells. 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.

**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**

2019 – present 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.; HOMS, 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.**

**Proccedings 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

2021 – present – Member of the Brazilian Academy of Sciences

2012 – 2018 – Member of the Natural Gas Conversion Board

2008 - present – Brazilian representative on The International Association of Catalysis Societies

1997 – present - Member of the Brazilian Catalysis Society

**Grants**

⚫ 39 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**

⚫ 51 Master dissertations

⚫ 27 PhD thesis

⚫ 17 Postdoctoral Researchers

**On-going**

⚫ 03 Master dissertations

⚫ 08 PhD thesis

⚫ 03 Postdoctoral Researchers

**Scientific Production**

198 papers

H index = 55 (9074 citations; Scopus; 18/04/2023)

2 Books

4 Chapters of books

3 Patents

366 National and international conferences presentations

**5 most relevant publications**

1- Marinho, A.L.A.; Toniolo, F.S.; **Noronha, F.B.**; Epron, F.; Duprez, D.; BION, N., Highly active and stable Ni dispersed on mesoporous CeO2-Al2O3 catalysts for production of syngas by dry reforming of methane. ***Applied Catalysis B: Environmental***, 281 (2021) 119459.

2- Marinho, André L.A.; Rabelo-Neto, Raimundo C.; Epron, Florence; Bion, Nicolas; Toniolo, Fabio S.; N**oronha, Fabio B.**

Embedded Ni nanoparticles in CeZrO2 as stable catalyst for dry reforming of methane. ***Applied Catalysis B: Environmental***, 268 (2020) 118387.

3- 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.

4- 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.

5- de Lima, Sania M.; Silva, A. M.; Costa, L. O. O.; Graham, U. M.; Jacobs, G.; Davis, B. H.; Mattos, L. V.; N**oronha, 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.