

## YARÚ MÉNDEZ HERNÁNDEZ

Prof. Dr.-Ing. (EE)  
Partner  
Electrical Engineering, Power Systems & Renewable Energy

Expert Centre for Technology | Consulting Engineers Preis & Persigehl PartmbB  
Branch Office LATAM  
Caracas, Venezuela  
+58 412 639 7064  
[mendez@experten-zentrum.tech](mailto:mendez@experten-zentrum.tech)



Yarú joined Expert Centre for Technology / Experten Zentrum für Technik (EZT) as a consultant in 2021; since 2025, he works as Director LATAM.

Additionally, since 2015 he is lecturer in electrical engineering (EE) at the Universidad Simón Bolívar (USB) and at the Universidad Metropolitana (UNIMET) in Caracas, Venezuela; covering the major electric power systems, renewable energy (solar and wind), grounding systems and high voltage for under- and postgraduate students.

Previously, he worked as “Principal Engineer” at the wind turbine rotor blade manufacturer LM Wind Power A/S (a GE Vernova Company) covering the topics of lightning protection, ice mitigation systems (IMS) and condition monitoring systems (CMS) for modern wind turbines.

Also, he served as „Director of Engineering“ at the company Raycap GmbH in Munich, Germany, and as “Research Engineer” at the

company General Electric Global Research (GEGR) in Munich, Germany, covering the working topics of renewable energy (wind and solar) and their interaction to the grid in terms of lightning and electromagnetic transients (Lightning and grid events, such as switching).

Main focus of his professional and academic activities are electromagnetic transients, grounding, power systems and renewable energy (solar and wind).

Concerning his education, he owns a degree in electrical engineering in power systems from the Universidad Simón Bolívar (USB), a Dr.-Ing. degree from the University of Kassel (UNIK) in Germany and an MBA degree from the University of Applied Sciences Munich (HM) in Germany.

Currently, he owns 20 patents, as main- and co-inventor and has published 62 scientific publications and one book chapter.

## Yarú Méndez

### Recent (Scientific) Publications

- 2020 Book chapter: “Renewable energy systems — Photovoltaic Systems” in the book titled: “Lightning Interaction with Power Systems”, authored by Prof. Dr. Alexandre Piantini. IET-Books, ISBN: 978-1-83953-092-0. London, United Kingdom, 2020.
- 2020 A. Serrano and Y. Méndez, "Aplicación Local de Modelo de Planificación Energética Sostenible / Local Application on Sustainable Energy Planning". Revista Ciencia e Ingeniería, Universidad de los Andes (ULA), ISSN 1316-7081. Vol. 41, Núm. 3. Mérida, Venezuela, 2020.
- 2020 L. Ramírez and Y. Méndez, "Recurso Eólico y Solar del Territorio Venezolano". Revista TEKHNÉ-UCAB, ISSN:1316-3930. Vol. 23, Núm. 1. Caracas, Venezuela, 2020.
- 2021 Y. Méndez, F. González, I. Acosta, y M. Rubinstein, “A Novel E-Field Activity Detector Based on Gas Ionization for Wind Turbine Rotor Blades”. 35th International Conference on Lightning Protection (ICLP SIPDA). Colombo, SriLanka, 2021.
- 2021 F. Preis and Y. Méndez, “Model-based Risk Assessment on Wind Turbine Blade’s Failure Caused by Composite Material’s Dielectric Strength Breakdown During Lightning”. 35th International Conference on Lightning Protection (ICLP SIPDA). Colombo, Sri Lanka, 2021.
- 2022 Y. Méndez, R. Deshagani, L.B. Hansen, S. Brault, E. Santana, A. Ramírez, A. Laudani, V. Ghandikota and H. Mashal, “An Experimental Validation of the Bergeron Transmission Line Model Applied to Rotor Blades During Lightning”. 36th International Conference on Lightning Protection (ICLP). Johannesburg, South Africa, 2022.

## Yarú Méndez

### Recent (Scientific) Publications

- 2023 Y. Méndez, R. Deshagani, J.A. Cardoso, L.B. Hansen, M.A. Sepúlveda, D. Miguel, P. Fontanes, M. Arcanjo and H. Mashal, “Transient Response of a Rotor Blade Multi-Receptor Lightning Protection System During Initial Lightning Attachment Testing”. CIGRE ICLPS-SIPDA 2023 Conference. Suzhou, China, 2023.
- 2024 Y. Méndez, H. Candela, R. Deshagani, P. Fontanes, L.B. Hansen, M.A. Sepúlveda, M. Arcanjo and F. Preis, “An Approach in Rotor Blade Fast Transient Model Comparison During Lightning”. 37th International Conference on Lightning Protection (ICLP). Dresden, Germany, 2024.
- 2025 Y. Méndez, M. Arcanjo, H. Candela, P. Fontanes, S.F. Madsen, F. Preis, A. Smith-Perera and K. Yamamoto “Wind Turbine’s Electromagnetic Transient Response During Impulse and Winter Lightning”. International Symposium on Lightning and Wind Turbines (ISLW2025). Akita, Japan, 2025.
- 2025 H. Candela, Y. Méndez, P. Fontanes, L.B. Hansen, M. Arcanjo and V. Miranda, “A Comparison in Transient Response of Glass & Carbon Fiber Blades During Lightning”. XVII SIPDA International Symposium on Lightning Protection (SIPDA 2025). Thessaloniki, Greece, 2025.

## Yarú Méndez

### Recent Patents

US20120141277: Integrated Lightning Receptor System and Trailing Edge Noise Reducer for a Wind Turbine Rotor Blade (Co-Inventor).

US8327710: System for Estimating a Condition of Non-Conductive Hollow Structure Exposed to a Lightning Strike (Co-Inventor).

US20100240492: System for Vehicle Propulsion Having and Method of Making Same (Co-Inventor).

US8395279: Shadow Detection Apparatus Using Fiber Optics for Solar-Based Power Generation Plants (Lead-Inventor).

US8409327: Control of Grounded Surface Geometry in Electrostatically Enhanced Fabric Filters (Co-Inventor).

US20100240491: System for Vehicle Propulsion Having and Method of Making Same (Co-Inventor).

US20130002197: Systems and Methods for Charging (Lead-Inventor).

US20140090621: Systems and Methods for Improved Combustion (Lead-Inventor).

WO/2024/068670: Method of Determining a Temperature of a Heating Element of a Wind Turbine Blade (Co-Inventor)

WO/2025/036906: Lightning Protection of a Segmented Wind Turbine Blade (Lead-Inventor).

MX2025003710: Method of Determining a Temperature of a Heating Element of a Wind Turbine Blade.

EP4598266: Heating Circuit for a Heating System of a Wind Turbine And Methods of Operating Same.