

THOMAS ACKERMANN, Ph.D.

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Energynautics GmbH
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Languages: German, English



SELECTED WORK EXPERIENCE IN

Germany, Armenia, Australia, Austria, Bahamas, Barbados, Chile, China, Costa Rica, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Greece, Guatemala, Honduras, India, Indonesia, Ireland, Japan, Jordan, Kenya, Lebanon, Mongolia, Netherlands, New Zealand, Oman, Philippines, Seychelles, Sweden, Thailand, United Arab Emirates, USA, Vietnam.

Since 06/2000 CEO and founding partner of Energynautics GmbH, a Germany-based research and consulting company in the area of renewable and distributed generation.

www.energynautics.com

since 07/1998 Research fellow at the Royal Institute of Technology (KTH),
(part time since 2002) Department of Electric Power Engineering, Stockholm, Sweden

07/1997 – 06/1998 Industrial Research Limited (IRL), Science and Technology
Research Company, Christchurch, New Zealand, Position:
Research Engineer

03/1996 – 05/1997 DesignPower Ltd., Engineering Consultants, Wellington, New
Zealand, Position: Project leader

03/1995 – 01/1996 Tacke Windtechnik GmbH, Wind Turbine Manufacturer, Germany

EDUCATION

07/1998 – 05/2004

Ph.D. from Royal Institute of Technology, Department of

02/1996 – 05/1997

Master of Science in Physics, from University of Otago, New Zealand

09/1988 – 02/1995

Diplom Wirtschaftsingenieur, equivalent to a combined Master's Degree in Mechanical Engineering & Business Administration, from the Technical University of Berlin, Germany. In some countries this degree is called Master of Industrial Engineering.

EDUCATIONAL ACTIVITIES

Continuously

Lecturing various courses related to wind/renewable energy and wind/renewable power integration into power system, such as:

- **Wind Energy Systems Course**, KTH, Stockholm, Sweden (since 2000, annually)
- **Wind Energy Part of the Renewable Energy Technology Course 1**, KTH, Stockholm, Sweden (since 2000, annually)
- **Wind Energy Part of the Renewable Energy Technology Course 2**, KTH, Stockholm, Sweden (since 2005, annually)
- **Renewable Energy Short Course**, Hector Business School, KIT Karlsruhe, Germany (since 2015, annually)

07/2016

Visiting Erskine Fellow, Department of Electrical and Computer Engineering, College of Engineering at the University of Canterbury, Christchurch, New Zealand (1 month)

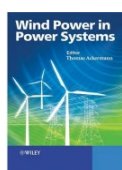
2011 – 2014

Lecturing the course on **Renewable Energies** at Technische Universität Darmstadt, Germany

- 2009 – 2014 Lecturing the course on **Wind Power Development and Use**, SIDA/Life.se, Karlstad, Sweden
- 2008 – 2012 Lecturing the course on **Frontiers of the Multidimensional Energy Society on Smartgrids**, School of Industrial Engineering and Management, KTH, Stockholm, Sweden
- 2005 – 2012 Lecturing the **Wind Power Short Course**, UWIG, USA

SELECTED PUBLICATIONS

Books and contributions to books



1. Ackermann, T. [Editor]: **“Wind Power in Power Systems”**, 2nd Edition, 1120 pages, published in April 2012, John Wiley & Sons, UK. The book includes the following seven chapters completely or partly written by Ackermann, Thomas, ISBN 0-470-974168:



2. Ackermann, T. (ed.): **“Wind Power in Power Systems”**, Japanese Edition, November 2013, Ohmsha Ltd., Japan. ISBN-10: 4274214761.

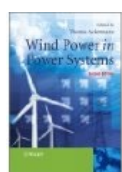


3. Ackermann, T. [Editor]: **“Wind Power in Power Systems”**, 1st Edition, 742 pages, published in January 2005, John Wiley & Sons, UK. The book includes the following seven chapters completely or partly written by Ackermann, Thomas, ISBN 0-470-855088:

4. Ackermann, T.; Kuwahata, R.: **“Global Wind Power Installations”**. In Robert A. Meyers (ed.) **Encyclopedia of Sustainability Science and Technology**, 2012, Springer Verlag. Volume 7, pp. 4474- 4492. ISBN 978-0-387-89469-0.



5. Ackermann, T.; Kuwahata, R.: **“Global Wind Power Installations”**. In Martin Kaltschmitt, Nickolas J. Themelis, Lucien Y. Bronicki, Lennart Soeder and Luis A. Vega (eds.) **Renewable Energy Systems**, 2013, Springer, New York. pp. 1020-1038. ISBN 978-1-4614-5862-3.



6. Ackermann, T.: Chapter 6: **“Windfarm Power Connection”**. In Gaetano Gaudiosi and John Twidell (eds.): **Offshore Wind Power**, 2009, Multi Science, UK. ISBN 978-0906522-639.

Ackermann, T.; Yasuda, Y. (translation): Chapter 6: **“Windfarm Power Connection”**. In Gaetano Gaudiosi and John Twidell (eds.) **Offshore Wind Power (Japanese Edition)**. Translation by Japan

Wind Energy Association, Kajima Publishing Co., Tokyo, November 2011. ISBN 4306024350.

Journals



1. Ackermann, T. (Editor) **IET Renewable Power Generation**, Vol. 9., Issue 1, January 2015



2. Ackermann, T. (Co-editor): **Wind Energy** Journal (since November 2004), Wiley & Sons.

Reports

1. Ackermann, T., Fernández, F., Schierhorn, P.-P., Montoya, F.: **“Red Costa Rica Study - Analysis of Options for Managing a Greater Incorporation of Renewable Variable Energies”**, Inter-American Development Bank, 2017.
2. IRENA, (Authors: Ackermann, T., Martensen, N., Brown, T., Schierhorn, P.-P., Boshell, F. G., & Ayuso, M.): **“Scaling up variable renewable power: The role of grid codes”**, 2016.
3. Ackermann, T.; Martensen, N.; Untsch, S.; Brown, T.; et al: **“Entwicklung und Durchführung einer Impactanalyse für den Klimaschutzplan Nordrhein-Westfalen”**, Berlin, September 2014.
4. Ackermann, T.; Brown, T.; Martensen, N.; Langanke, S.; Narasimhan, B.; Geidel, S.; Becker-Birck, C.; Ferrey, S.; Chessin, E.; Crowe, J.; Rickerson, W.: **“Consultancy Services for The Assessment of Grid Absorption Capacity, Grid Code, Feed-In Tariffs and Model Power Purchase Agreements for Renewable Energy Systems”**, Darmstadt/Boston, August 2014.
5. Teske, S.; Brown, T.; Tröster, E.; Schierhorn, P.-P.; Ackermann, T.: **“powE[R] 2030 – A European Grid for 3/4 Renewable Electricity by 2030”**, Greenpeace Germany, March 2014.
6. Tröster, E.; Untsch, S.; Brown, T.; Geidel, S.; Narasimhan, B.; Schierhorn, P.-P.; Ackermann, T.: **“Kurzgutachten zur Eigenstromerzeugung in Rheinland-Pfalz”**, Darmstadt, March 2014.
7. Ackermann, T.; Martensen, N.; Brown, T.; Untsch, S.; Troester, E.; Geidel, S.; et al: **“Distribution System Study Rhineland-**

Reports

Palatinat“(English Summary), Darmstadt, Freiburg, Munich, January 2014.

continued

8. Ackermann, T.; Kuwahata, R. (main authors): **“A Guide to Operational Impact – Analysis of Variable Renewables: Application to the Philippines”**, The World Bank Group, May 2013.
9. Ackermann, T.; Cherevatskiy, S.; Brown, T.; et al: **“Smart Modeling of Optimal Integration of High Penetration of PV (Smooth PV)”**, May 2013.
10. Ackermann, T.; Kuwahata, R.: **“Lessons learned from international Wind Integration Studies - AEMO Wind Integration WP4(A)”**, Langen, Germany, December 2011.
11. Fürsch, M.; Hagspiel, S.; Jägemann, C.; Nagl, S.; Lindenberger, D.; Glotzbach, L.; Tröster, E.; Ackermann, T.: **„Roadmap 2050 – a closer look: Cost-efficient RES-E penetration and the role of grid extensions“**, Cologne and Langen, Germany, October 2011.
12. Tröster, E., Kuwahata, R., Ackermann, T.: **“European Grid Study 2030/2050”**, Darmstadt/Langen, Germany, January 2011.

Scientific articles with review

1. Ackermann, T. ; Prevost, T. ; Vittal, V; Roscoe, A. J. ; Matevosyan, J.; Miller, N.: **“Paving the Way: A Future Without Inertia Is Closer Than You Think”**, 18th October 2017, Published in: IEEE Power and Energy Magazine (Volume: 15 , Issue: 6 , Nov.-Dec. 2017)
2. Brown, T.; Ackermann, T.; Martensen, N.: **“Solar Power Integration on the Seychelles Islands” / “Intégration de l’énergie solaire aux Seychelles”**, FACTS Reports, Veolia Institute, Second Semester 2016, pp. 46-53.
3. Ackermann, T.; Carlini, E. M.; Ernst, B.; Groome, F.; Orths, A.; O’Sullivan, J.; de la Torre Rodriguez, M.; Silva, V.: **“Integrating Variable Renewables in Europe: Current Status and Recent Extreme Events”**, IEEE power & energy magazine, Volume 13, Number 6, November/December 2015.
4. Ackermann, T.; Ellis, A.; Fortmann, J.; Matevosyan, J.; Muljadi, E.; Piwko, R.; Pourbeik, P.; Quitmann, E.; Sorensen, P.; Urdal, H.;

Scientific articles
with review

continued

- Zavadil, B.: **“Code Shift – Grid Specifications and Dynamic Wind Turbine Models”**, IEEE power & energy magazine, Volume 11, Number 6, November/December 2013.
5. Martensen, N., Lund, P., Kley, H., Tröster, E, Ackermann, T.: **“The Danish cell project – Status and perspective of a smart grid demonstration”**, VGB Power Tech., Vol. 91/2011, pp. 64-68.
 6. Dubaric, E., Giannoccaro, D., Bengtsson, R., Ackermann, T.: **“Patent data as indicators of wind power technology development”**, World Patent Information, (2011), Volume 33, Issue 2, June 2011, Pages 144-149.
 7. Ackermann, T., Ancell, G., Borup, L.D., Eriksen, P.B., Ernst, B., Groóme, F., Lange, M., Möhrten, C., Orths, A.G., O'Sullivan, J., DeLa Torre, M.: **“Where the Wind Blows”**, IEEE Power and Energy Magazine, 7 (6), 2009, pp. 65-75.
 8. Smith, J.C., Thresher, R., Zavadil, R., DeMeo, E., Piwko, R., Ernst, B., Ackermann, Thomas: **“A Mighty Wind”**, IEEE Power and Energy Magazine, 7 (2), 2009, pp. 41-51.
 9. Ackermann, T., Abbad, Juan Rivier; Dudurych, Ivan M.; Erlich, Istvan, Holttinen, Hannele; Kristoffersen, Runge, Jesper and Sørensen, Poul Ejnar: **“European Balancing Act”**, IEEE PES Magazine, Power and Energy for a Special Issue on Wind Power, November/December 2007, pp. 90–103.
 10. Ackermann, Thomas: **“Distributed Resources and Re-Regulated Electricity Markets”**, Electric Power Systems Research (Elsevier), Volume 77, Issue 9, July 2007, pp. 1148-1159.

Total number of reviewed scientific publications: >60
plus approximately 80 workshop/seminar publications

Updated: February 2022