

## VISUAL PRESENTATION VB1

### Global, Regional and National Policies and Markets

- VB1.1** A. Hamroun  
Tunisian Company of Electricity and Gas,  
Zahrouni, Tunisia  
**“Sidi Daoud”: First Wind Park in Tunisia**
- VB1.2** R. Kipke  
Lahmeyer International, Bad Vilbel, Germany  
R. Alizadeh  
Moshanir Power Consultants, Tehran, Iran  
**Wind Conditions and Wind Farm Projects in Iran**
- VB1.3** A. Arzumanyan  
3E-Round Table, Yezevan, Armenia  
**The Mechanisms of Creation and Functioning of the First Private Electricity Generation Wind Power Company in Armenia and in the Region**
- VB1.4** G.S. Dmitriev & V.A. Minin  
Russian Academy of Sciences, Apatity City,  
Russia  
D.A. Hoystad  
VetroEnergo, Vollen, Norway  
**Western Second-Hand Wind Turbines Could Have Bright Future at the Russian North**
- VB1.5** W.U. Vargas  
Lahmeyer International, Bad Vilbel, Germany  
L.L. Lobo  
ETESA, Ciudad Panamá, Panamá  
**Wind Energy Development in Panama**
- VB1.6** A.J. S. A Bezerra  
NBZ, Brazil  
P.C. Marques de Carvalho  
DEE-UFC, Fortaleza, Brazil  
**Wind Energy as a Climate Change Mitigation Option: The Contribution of the Northeast Region, Brazil**
- VB1.7** W. Joerss  
IZT, Berlin, Germany  
**Future Challenges for Wind Energy in the EU Liberalised Electricity Market: A Comparative Study of Selected Wind Farms in Denmark, Germany and Spain**
- VB1.8** D.R. Poudel  
Centre for Rural Technology, Kathmandu, Nepal

**A Policy of Speeding Energy of Wind Energy (Electricity) and its Market for the Unserved Hilly Areas for Rural Development**

- VB1.9** W. Gang  
Xinjiang Goldwind Science & Technology,  
Urumqi, P.R. China  
**Wind Energy Development in Xinjiang**
- VB1.10** V. Tselmovitch  
NOOCHORA & UIPE RAS, Borok, Russia  
**Development of Wind Power on Flat Reservoirs in Russia**
- VB1.11** P. Stroev  
Economic Institute of Belarus, Minsk, Russia  
**Wind Energy Policy in Belarus**
- VB1.12** F. Elgumati, A. Hwass & A. Yagoub  
Center for Solar Energy Studies, Tripoli, Libya  
**Wind Power and its Role in Pollution Reduction**

**VISUAL PRESENTATION VB2**

**Economic, Social, and Environmental Issues**

- VB2.1** T. Weller  
fair energy consulting, Unterföhring, Germany  
**Securing Wind Energy's Success**
- VB2.2** K. Mittendorf, J. Strybny, A. Uhl, W. Gerasch &  
W. Zielke  
Universität Hannover, Germany  
**Physical Effects of Offshore Wind-Energy-Converters to Their Natural Surroundings**
- VB2.3** J.K. Kaldellis, D.S. Vlachou & K.G. Keramatis  
TEI of Piraeus, Hellinico, Greece  
**Analyzing the Public Attitude Towards Wind Energy Applications in Greece**
- VB2.4** W. Eggersglüß  
LKSH-LUT, Rendsburg, Germany  
**Windenergienutzung – ein Standbein für Landwirte**
- VB2.5** E. Kazarian  
State Engineering University of Armenia,  
Yerevan, Armenia  
A. Amiryan  
Armenian Agricultural Academy, Yerevan,  
Armenia  
A. Kocharyan  
Ministry of Energy of Armenia, Armenia  
S. Vardanyan  
Armenia

## **Ecological Aspects of the Wind Energy in Armenia**

- VB2.6** D. Steffes  
CargoLifter Network, Frankfurt am Main,  
Germany  
**The CargoLifter CL 75 AirCrane, a Revolution in the Installation of Windmills -**  
**a) in Remote / Under Equipped Areas,**  
**b) at Heights / Outreaches Inaccessible to Conventional Lifting Gear**

## **VISUAL PRESENTATION VB3**

### **Integration and Implementation**

- VB3.1** A.M. Palomares Losada  
CIEMAT-DER, Madrid, Spain  
**Wind Power Prediction at the Straits of Gibraltar Based on Perfect Prognosis Method**
- VB3.2** R.I. Mustafayev  
Azerbaijan Research Institute, Baku, Azerbaijan  
**Perspectives of Wind Power Farm Construction in Azerbaijan Republic's Apsheron Peninsula**
- VB3.3** A. Bej  
"Politehnica" University of Timisoara, Romania  
A. Garbacea  
Electromontaj, Timisoara, Romania  
**Sites for Wind Farms in Romania**
- VB3.4** T. Ishihara, A. Yamaguchi & Y. Fujino  
University of Tokyo, Japan  
**A Nonlinear Model for Predictions of Turbulent Flow Over Steep Hill**
- VB3.5** J.B. Bremnes  
Norwegian Meteorological Institute, Oslo,  
Norway  
F. Villanger  
Kjeller Vindteknikk, Norway  
**Probabilistic Forecasts for Daily Wind Power Production**
- VB3.6** D. Schulz, A. Samour & R. Hanitsch  
Technical University Berlin, Germany  
**Harmonics and Interharmonics at the Low and Medium Voltage Level in a Wind Park**
- VB3.7** D. Schulz, K. Moutawakkil, T. Kompa &  
R. Hanitsch  
Technical University Berlin, Germany  
**Voltage Deviations and Flicker on the Low and Medium Voltage Level of Wind Parks**

- VB3.8** F. Böttcher & J. Peinke  
University of Oldenburg, Germany  
**The Dynamical Behaviour of Wind Gusts**
- VB3.9** M. Lange & D. Heinemann  
Carl von Ossietzky University Oldenburg,  
Germany  
**Accuracy of Short Term Wind Power  
Predictions for Typical Weather Situations**
- VB3.10** B. Sørensen  
Roskilde University, Denmark  
**Handling Fluctuations at Large Wind Power  
Penetration**
- VB3.11** C.S. Moehrle  
University College Cork, Ireland  
J.U. Jøgensen  
Danish Meteorological Institute, Copenhagen,  
Denmark  
**HIRPOM in Complex Terrain: Power  
Predictions with an Operational Numerical  
Weather Prediction Model in Ireland**
- VB3.12** R.B. Oliva  
Universidad Nacional de la Patagonia,  
Rio Gallegos, Argentina  
C. Albornoz  
Servicios Públicos Sociedad del Estado,  
Rio Gallegos, Argentina  
**Deployment of a Network of Automatic Wind  
Measurement Stations in South Patagonia**
- VB3.13** C. Vilar, J. Usaola & H. Amarís  
Universidad Carlos III de Madrid, Spain  
**Flicker Propagation in Electrical Networks**
- VB3.14** A. Knauer  
Institute for Energy Technology, Kjeller, Norway  
F.K. Nyhammer  
Kjeller Vindteknikk, Norway  
**Wind Farm Site Evaluation in Complex  
Terrain at the Norwegian Coast with  
Numerical and Experimental Methods**
- VB3.15** F. Nyhammer  
Kjeller Vindteknikk, Norway  
P.H. Clausen  
NTNU, Trondheim, Norway  
**Extreme Wind Estimation Using Linear  
Regression, Gumbel Analyses and Bootstrap  
Techniques**
- VB3.16** A.R. Gravdahl & S. Rørgemoen  
VECTOR, Tonsberg, Norway

**Power Prediction and Siting - When the Terrain Gets Rough**

- VB3.17** A. Albers  
Deutsche WindGuard, Varel, Germany  
**Advanced Site Assessment System**
- VB3.18** P. Cassidy  
Masons, London, United Kingdom  
**Minimizing Costs of Wind Farm Projects (Both On and Offshore) via Risk Control and Operation & Maintenance Strategies**
- VB3.19** K. Cooksley  
Masons, London, United Kingdom  
**Jumping Hurdles: Obtaining Consents and Licences - On and Offshore**
- VB3.20** J.M. Cadierno  
Gonnet, Argentina  
**Wind Energy in Argentina Present State and Future Development Possibilities**
- VB3.21** C.A. Toomer  
Newport, United Kingdom  
J. Sander  
Meteotest, Bern, Switzerland  
**Wind-Potential Estimation for Wind-Farms in Complex Terrain**
- VB3.22** J.L. Rodríguez-Amenedo, S. Arnalte & M. Chinchilla  
Universidad Carlos III de Madrid, Spain  
J.L. Navalpotro, H. Valbuena & T. Lozano  
Iberdrola Ingenieria Consultoria, Madrid, Spain  
**Impact of Wind Power Generation in Radial Distribution Networks**
- VB3.23** Y. Kemmoku, M. Sakamoto, H. Takikawa & T. Sakakibara  
Toyohashi University of Technology, Japan  
**Influence of Input Data Period and Interval on Wind Speed Forecasting**
- VB3.24** K. Kikuyama, Y. Hasegawa & H. Suzuki  
Nagoya University, Japan  
H. Imamura  
Yokohama National University, Japan  
N. Inomata  
Tohoku Electric Power Company, Sendai, Japan  
**Turbulence Characteristics of Wind Flow Over Complex Terrain**

- VB3.25** J. Kabouris, A. Koronides, K. Perrakis & A. Papaioannou  
Hellenic Transmission System Operator, Athens, Greece  
**Transmission System Issues for Large Scale Wind Energy Penetration - The Greek Experience**
- VB3.26** D.-H. Lee, Y.-C. Ju & H.-W. Kim  
Korea  
K.-H. Kim  
Korea Institute of Energy Research, Taejom, Korea  
**Wind Measurement Results and Analysis of the Operational Efficiency for Wind Turbines in Gangwon-Do Province**
- VB3.27** J.-C. Huh  
Cheju National University, Korea  
Y.-S. Yang  
Jeje Local Government, Korea  
K.-H. Kim  
Korea Institute of Energy Research, Taejom, Korea  
**Analysis of the Field Operation at Hangwon Windfarm, Jejudo**
- VB3.28** K. Övermöhle  
Övermöhle Consult & Marketing, Hamburg, Germany  
**Market Analysis for Wind Power Developers in Germany**
- VB3.29** M.L.M. Burlando & C.F. Ratto  
University of Genoa, Italy  
F. Castino  
Regional Agency for Ligurian Environment Protection, Genoa, Italy  
**Validation of a Method for Wind Power Estimation: The Case of Bonifacio**
- VB3.30** A. Marjanyan  
ArmNedWind Project Office, Yerevan, Armenia  
H. den Boon  
E-Connection, Bunnik, The Netherlands  
P.E.J. Vermeulen  
Paul Vermeulen Consultancy, Apeldoorn, The Netherlands  
**Armenia: Wind Power Resource Assessment Projects in Mountainous Terrain**
- VB3.31** J. Sveca & L. Söder  
KTH, Stockholm, Sweden  
**Wind Power in Areas with Limited Export Capability**

*Visual Presentations*

- VB3.32** T. Dragovic & V. Dragovic  
University of Belgrade, Yugoslavia  
**Research and Development of Wind Energy  
and Wind Generators in Yugoslavia**
- VB3.33** C. Ropeter  
aeb ENERGIEprojekte, Göttingen, Germany  
**Possibilities of Advanced Wind Data Analysis  
for Power Predictions**
- VB3.34** C. Bley  
Rope Partner, Santa Cruz, USA  
R. Jatkowski  
Seilpartner, Berlin, Germany  
**Rope Access: An Alternative Approach to the  
Maintenance of Wind Turbines**
- VB3.35** F. Castellani & G. Franceschini  
University of Perugia, Italy  
**Innovative Tools for Wind Site Selection in  
Mountainous Areas: The Umbria Case Study**

## VISUAL PRESENTATION VC1

### Financing

- VC1.1** D. Pethick, C. Clancy & H. Siddique  
Entergy-Koch Trading, London, United Kingdom  
**Financial and Project Risk Management Tools: Recent Developments from the Financial Markets**
- VC1.2** J. Böttcher  
Landesbank Kiel, Germany  
**The Economics of a Wind Energy Project, or: What Makes the Difference Between a Successful and an Unsuccessful Project?**
- VC1.3** V. Hawrych  
Masons, London, United Kingdom  
**Financing Onshore and Offshore Wind Farms and the Issues Associated with Each Method**
- VC1.4** H. Schoolderman & J. de Swart  
PricewaterhouseCoopers, Utrecht,  
The Netherlands  
**Renewable Energy Business Simulator: Integrated Framework to Assess Risks and Controls of Investments in Renewable Energy Projects**
- VC1.5** T. Welther  
FondScope, Berlin, Germany  
**Financing Wind Energy - The Sourcing Model 'Private Fund': Traps, Chances, Background**
- VC1.6** H.F.W. Oelsner  
Darling Independent Power Producer,  
South Africa  
**Insufficient Grant Funding for Pilot Wind Farms: A Developer's Perspective, Using as Example the Darling National Demonstration Wind Farm Project in South Africa**

## VISUAL PRESENTATION VC2

### Offgrid and Specialised Applications

- VC2.1** A.M. Omer  
University of Nottingham, United Kingdom  
**On the Wind Energy Resource of Sudan**
- VC2.2** A. Roy  
Technical Teachers' Training Institute, Bhopal,  
India

**Design of Hybrid Wind-Hydrogen Energy System in Stand Alone Mode**

- VC2.3** C.K.A. News  
IEDS - Friends of the Earth Bangladesh, Dhaka,  
Bangladesh  
**Renewable Energy: Bangladesh Perspective**
- VC2.4** A.D. Grant & R.K. Dannecker  
University of Strathclyde, Glasgow,  
United Kingdom  
**Development of Building-Integrated Wind Turbines**
- VC2.5** A. Sivakumar  
Murugappa Group, Chennai, India  
**Plantation in Wind Farm - Hybrid Energy Project in India**
- VC2.6** T. Robertson  
Robertson & Leaman, Oxfordshire,  
United Kingdom  
**Small Wind Turbines for the Built Environment**
- VC2.7** K.K. Sasi  
Tezpur University, India  
B. Sujay  
Jadavpur University, Calcutta, India  
**Design of a Wind Electric Water Pump**
- VC2.8** M.A. Muntasser, M.F. Bara & G.S. El-Masry  
International Energy Foundation, Tripoli, Libya  
**Economics of Using Wind Energy at Pasture for Water Pumping in Libya**
- VC2.9** V. Lauber  
University of Salzburg, Austria  
**The Ongoing Competition Between the RECs and REFITs**
- VC2.10** A. Bin Omar & A. Bin Awi  
TNB Research, Kajang, Malaysia  
**Improving the Operation and Maintenance of a Pilot 150kW Wind Turbine Generator on Layang-Layang Island, Sabah, Malaysia**
- VC2.11** G. Croce  
Università di Udine, Italy  
M. Marini  
Università di Sassari, Italy  
**Energetical, Environmental and Economical Feasibility Analysis of Wind Powered Desalination Plant in Sardinia**
- VC2.12** P. Schenzle  
Hamburg Ship Model Basin HSVA, Germany

**Wind Propulsion for Coastal and Ocean Transport**

- VC2.13** J. González Hernández & J.A. Carta González  
University of Las Palmas de Gran Canaria,  
Spain  
**Influence of Variations in Frequency and Voltage in Desalination Plants Connected to Wind Systems Isolated From the Main Grid**
- VC2.14** K. Brinkmann  
FernUniversität Hagen, Germany  
**Wind Energy Hybrid Systems with Electric Vehicles**
- VC2.15** H. Motohashi, S. Tan & M. Gotoh  
Tsuruoka National College of Technology, Japan  
**Performance Improvement of a Cross Flow Type Wind Turbine by a Pair of Guide Vanes**
- VC2.16** E. Spinadel & F. Gamallo  
University of Buenos Aires, Argentina  
J. Gil  
AAEE-Argentinean Wind Energy Association,  
Argentina  
**Wind-Powered Electrolysis - An Approach to a Specific Wind Converter Design for Stand-Alone Operation**
- VC2.17** V. Selg & A. Jegorov  
Tallinn Technical University, Estonia  
**Small-Scale Wind Utilization System for Electricity and Heat Production with Vertical-Axis Wind Converter**
- VC2.18** F.G. Cesari, P. Battistella & F. Taraborrelli  
University of Bologna, Italy  
**An Offshore Solution for Small Islands and Coastal Sites**
- VC2.19** C. Pritchard, V. Verbeek & Z. Rahal  
University of Edinburgh, United Kingdom  
**Direct Use of Wind Energy for RO Desalination**
- VC2.20** E. Feitosa & A. Pereira  
Brazilian Wind Energy Centre, Recife, Brazil  
**Increasing Wind Penetration on Fernando de Noronha Island Wind/Diesel System**
- VC2.21** J. Peters & W. Schmidt  
P&T Technology, Hamburg, Germany  
**Power for a Clean Planet**
- VC2.22** C. Johnson, U. Abdulwahid, J.F. Manwell & A. Rogers  
University of Massachusetts, Amherst, USA  
**Design and Modelling of Dispatchable Heat Storage in Remote Wind Diesel Systems**
- VC2.23** S. Mertens  
Delft University of Technology, The Netherlands

## **Aerodynamic Efficiency Prediction of a Wind Turbine Integrated in a Building**

**VC2.24** R. Pineyro, N. Zuchak, P. Ginghson & R. Medina  
UdeMM Buenos Aires, Argentina  
**Estate Project**

**VC2.25** M. Lührs  
Ingenieurbüro Holzmüller & Lührs Süderdeich,  
Germany  
**Technical Checking on Windturbines**

**VC2.26** K. Raghavan & P. Maegaard  
Folkecenter for Renewable Energy, Hurup Thy,  
Denmark  
**Small Wind Turbines for Heating and  
Electricity Requirements of an Off-Grid  
Building**

## **VISUAL PRESENTATION VC3**

### **Generic R&D**

**VC3.1** P. Devereux Belben & C.D. Ziesler  
Powergen UK, Nottingham, United Kingdom  
**Aeolian Uprating: How Wind Farms Can  
Solve Their Own Transmission Problems**

**VC3.2** R. Schmidt  
aerodyn Energiesysteme, Rendsburg, Germany  
H.C. Stadtfeld & C. Weimer  
Universität Kaiserslautern, Germany  
**Design and Development of an Integral Rotor  
Hub and Shaft Combination in Composites**

**VC3.3** H. Dumitrescu & V. Cardos  
Romanian Academy, Bucharest, Romania  
**An Analysis of Boundary Layer Separation-  
Delay on a Rotating Blade**

**VC3.4** H. Sakamoto, T. Uchino & S. Migiwa  
Kochi University of Technology, Japan  
M. Sakamoto  
Sakamoto Giken, Nankoku-city, Japan  
**Collaborative Internet 3D-CAD Design of  
Small-Sized Wind Power Generator**

**VC3.5** J. Tamura  
Kitami Institute of Technology, Japan  
S. Yonaga, Y. Matsumura & H. Kubo  
Hokkaido Electric Power, Sapporo, Japan  
**Simulation Method and Analysis of Transient  
Stability of Power System Including Wind  
Generators**

**VC3.6** J.-C. Hwang, S.-N. Yeh, C.-L. Tseng,  
M.-H. Chen & J.-S. Lin  
National Taiwan University, Taipei, Taiwan

**Development of DSP-Based Power Controller  
for Wind - Drive Permanent - Magnet  
Synchronous Generators**

- VC3.7** T. Hayashi  
Tottori University, Japan  
S. Yamashita  
Institute of Environment Fluid Dynamics,  
Hanamigawa-ku Chiba, Japan  
T. Kawamura  
Ochanomizu University, Bunkyo-ku Tokyo,  
Japan  
**Experimental and Numerical Study of the  
Savonius Rotor Toward Improvement of Its  
Performance**
- VC3.8** T. Kawamura & K. Otsuki  
Ochanomizu University, Bunkyo-ku Tokyo,  
Japan  
T. Hayashi  
Tottori University, Japan  
**Numerical Study of the Flow Around the  
Cross Flow Turbine of Many Blades Type  
with Accessories for Improvement of its  
Performance**
- VC3.9** T. Kawamura & A. Naraoka  
Ochanomizu University, Bunkyo-ku Tokyo,  
Japan  
T. Hayashi  
Tottori University, Japan  
**Numerical Simulation and Visualization of the  
Flow Around the High-Speed Wind Turbine**
- VC3.10** T. Dordea, N. Budisan, O. Prostean & I. Szeidert  
Polytechnical University of Timisoara, Romania  
G. Madescu  
Romanian Academy, Timisoara, Romania  
T. Hentea, E. Pierson & S. Mahil  
Pardue University Calumet, Hammond, USA  
A. Trica & M. Stern  
Hexatronic, North York, USA  
S. Vancu  
UCM Resita, Romania  
**Low Speed Induction Generators for  
Gearless Windmills**
- VC3.11** K. Ohyama  
Fukuoka Institute of Technology, Japan  
S. Arinaga & Y. Yamashita  
Mitsubishi Heavy Industries, Nagasaki, Japan  
**Speed Sensorless Vector Controlled  
Converter for Variable Speed Wind  
Generation System Using Induction  
Generator**

- VC3.12** I. Paraschivoiu  
École Polytechnique de Montréal, Canada  
**Prediction Capabilities in Vertical-Axis Wind Turbine Aerodynamics**
- VC3.13** T. Matsuzaka & N. Kodama  
Hachinohe Institute of Technology, Japan  
N. Inomata  
Tohoku Electric Power Company, Sendai, Japan  
**Power Variation Reduction of a Wind Turbine Generator Using Disturbance Accommodation Control**
- VC3.14** H. Shin, K. Kang & S. Lee  
Seoul National University, Korea  
**HAWT Blade Optimization by Using the Response Surface Method and the Free Wake Analysis**
- VC3.15** Y. Ohguro, R. Suegara & I. Ushiyama  
Ashikaga Institute of Technology, Tochigi-ken, Japan  
K. Seki  
Tokai University, Kanagawa, Japan  
**A Study of Straight Wing With Sail Type Vertical Axis Wind Turbine**
- VC3.16** H. Tokuyama  
Nasu Denki Tekko, Tokyo, Japan  
I. Ushiyama  
Ashikaga Institute of Technology, Tochigi-ken, Japan  
K. Seki  
Tokai University, Kanagawa, Japan  
**The Performance and Wind Tunnel Test of Aerofoil for Small Turbine**
- VC3.17** K. Horiuchi, K. Sagara, K. Seki  
Tokai University, Kanagawa, Japan  
**Calculation about Performance of Vertical Axis Wind Turbines**
- VC3.18** W. Bierbooms  
Delft University of Technology, The Netherlands  
**Offshore Wind and Wave Design Conditions Based on the Next Database**
- VC3.19** Y. Hasegawa, K. Kikuyama & K. Karikomi  
Nagoya University, Japan  
**Effects of Turbulence Characteristics on Aerodynamic Loads Experienced by HAWT Rotor**
- VC3.20** K.A. Kavadias & J.K. Kaldellis  
TEI of Piraeus, Hellinico, Greece

**A Fast-Simplified Aerodynamic Analysis of Small Wind Turbines**

- VC3.21** T. Kogaki & H. Matsumiya  
AIST, Ibaraki, Japan  
**Wind Characteristics over Complex Terrain**
- VC3.22** L. He  
University of Durham, United Kingdom  
**Prediction of Wind Turbine Blade-Tower Interaction Using Unsteady Computational Fluid Dynamics Method**
- VC3.23** R. van Rooij, W.A. Timmer & A. Bruining  
Delft University of Technology, The Netherlands  
**Determination of the Local Inflow Angle on Blades by Application of a Flow Direction Probe**

## VISUAL PRESENTATION VD1

### Technology Development and Certification

- VD1.1** V.M. Lyatkher  
Clean Energy, Cleveland, USA  
**Orthogonal Large Wind Turbines for Conversion of Flow Energy in the Lower and Upper Layers of Atmosphere**
- VD1.2** Y. Trushkov  
Promexim, Donetsk, Ukraine  
A. Tchernyshov  
Association of German Enterprises "Deutsches Heim", Donetsk, Ukraine  
**Alternative Configuration of Wind Turbine Structure**
- VD1.3** P. Junkers  
Barbarino & Kilp – HYTORC-S, Krailling, Germany  
**Safe Tightening and Loosening of Difficult Bolted Connections and Those Requiring Mandatory Inspections in Wind Power Plants as Specified in the Recommended Values of the Commissioning Inspection Commissions**
- VD1.4** G.S. Dmitriev, B.V. Efimov, V.A. Minin & A.N. Danilin  
Russian Academy of Sciences, Apatity City, Russia  
**Investigation of Impulses Parameters of WECs Grounding Systems Under Conditions of High Specific Resistance of Soil**
- VD1.5** B. Schlecht, S. Gutt & T. Schulze  
Dresden University of Technology, Germany  
**Multibody-System-Simulation of Drive Trains of Wind Turbines**
- VD1.6** V.A. Shuripa, Y.-H. Kim, J.-S. Wang, Y.-H. Lee, Y.-S. Kim , C.-D. Nam & J.-S. Oh  
Korea Maritime University, Pusan, Korea  
**Topological Optimization of a Composite Blade Structure Having Honeycomb Filler Elements**
- VD1.7** H. Nomura  
Kochi National College of Technology, Japan  
K. Yamamoto  
Ehime University, Japan  
S. Maeda  
Eco-Energy, Kochi, Japan

**A Predictive Fast MPPT Control Method Suitable for Small Scale Wind-Power Generators**

- VD1.8** Y. Shimizu, Y. Kamada, T. Maeda,  
T. Watanabe & T. Minamikawa  
Mie University, Japan  
**The Power Argumentation Effect for Wind Turbines by Diffuser**
- VD1.9** M. Ziegler  
ICON, Bendestorf, Germany  
**Hurricane Wind Power**
- VD1.10** D. Schulz, R. Abusalem & R. Hanitsch  
Technical University Berlin, Germany  
**Interpretation of the Power Terms Produced by Wind Energy Converters**
- VD1.11** M. Stiebler  
Technical University Berlin, Germany  
**Permanent Magnet Synchronous Generators for Large Wind Energy Systems**
- VD1.12** K. Motto, Y. Li, Z. Xu & A.Q. Huang  
Center for Power Electronics Systems,  
Blacksburg, USA  
**High Frequency Operation of a Megawatt Voltage Source Inverter Equipped with ETOs**
- VD1.13** M. Eboueya  
Université de la Rochelle, France  
D. Christakis & C. Condaxakis  
TEI of Crete, Heraklion, Greece  
S. Trompezinski  
Ecole Nationale Supérieure d'Hydraulique et de Mécanique de Grenoble,  
St. Martin d'Hères, France  
**A Visualisation Tool for Wind Turbines**
- VD1.14** S.N. Jung, K.-M. Dong & C. Shinn  
Chonbuk National University, Chonju, Korea  
**Aerodynamic Performance Prediction of a High Efficiency Counter-Rotating Wind Turbine System**
- VD1.15** M. Janssen  
ALSTOM Power Conversion, Berlin, Germany  
**Dynamic Model of a Wind Energy Converter for Stability and Fault Protection Analysis**
- VD1.16** Y. Tanzawa  
Nippon Institute of Technology, Saitama, Japan  
T. Sato  
Fujii Precision Industries, Nara, Japan

T. Wakui & T. Hashizume  
Waseda University, Tokyo, Japan  
**Experimental Study of a Vertical Wind Turbine Using the Mechanism of Bird Wings**

- VD1.18** C. Trevelyan, D.J. Sharpe & D.G. Infield  
Loughborough University, United Kingdom  
J.A. Michelsen  
Technical University Denmark, Lyngby, Denmark  
**Improved Prediction of the Behaviour of Wind Turbines Using Circulation Control Aerofoils**
- VD1.19** T. Ezaki & Y. Neba  
Fukuoka University, Japan  
**Test Resulting of Wire Suspend Wind Turbine**
- VD1.20** F. Baumjohann & M. Hermanski  
Fachhochschule Bielefeld, Germany  
J. Kröning  
TÜV Nord, Hamburg, Germany  
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Company for Advanced Coating, Kvistgard,  
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**Achieving a Long Term Constant Energy Output with Less Overhauling and Maintenance Costs by Preserving (Coating) the Wind Mill Blades with a New Technology Known as PtFePu or FPU**
- VD1.23** A. Albers, G. Gerdes & K. Rehfeldt  
Deutsche WindGuard, Varel, Germany  
J. Liersch, M. Melsheimer & I. Menz  
DYNAMiX, Berlin, Germany  
**Wind Guarding, An Innovation Aiming to Optimise the Performance of Wind Farms and to Reduce the Cost of Wind Energy**
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DYNAMiX, Berlin, Germany  
**Instationary Balancing of WEC at Site**

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Universidad Carlos III de Madrid, Spain  
**Optimum Selection of Wind Turbine  
Parameters**
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China Electric Power Research Institute, Beijing,  
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Connected Wind Farm in Power System Load  
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**Labour Protection and Occupational Safety in  
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**A Sensorless Initial Rotor Position  
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Controlled Interior Permanent Magnet  
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anemos-jacob, Oldershausen, Germany  
**Quality Assessment of Wind Resource  
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**Tightening Large Bolts**
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Armenian Agricultural Academy, Yerevan,  
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**Study of Dynamic of Motion of the Low-  
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- VD1.34** D. Frey  
Ingenieur Büro Frey, Sprötze, Germany

## **Field Trial Results with Regard to Azimuth Optimization**

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H. Matsumiya  
AIST, Ibaraki, Japan  
**Computational Simulation of the Horizontal Axis Wind Turbine with the Tower**

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Netlab, Düsseldorf, Germany  
**Comparative Test Between Strain Gauges and Optical Fiber Strain Sensors on Wind Turbine Blades**

- VD1.37** M. Finsinger  
Augsburg, Germany  
D. Jovcic  
University of Ulster, United Kingdom  
**Control of a Variable Speed Offshore Wind Turbine with DC-Interconnection**

- VD1.38** H.Selzer  
BIBA-MAQ, Universität Bremen, Germany  
**Large Rotors – Two or Three Bladed?**

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### **Off-Shore Wind Farms**

- VD2.1** Valerie V. Cheboxarov & Victor V. Cheboxarov  
Far Eastern State Technology University,  
Vladivostok, Russia  
**Wemu: Development of Novel Water Supported Wind Power Plant**

- VD2.2** Valerie V. Cheboxarov, Victor V. Cheboxarov,  
N.B. Kondrikov & N.P. Shapkin  
Far Eastern State Technology University,  
Vladivostok, Russia  
**Wemu: A New Concept for Offshore Wind Power**

- VD2.3** P. Schaumann  
University of Hannover, Germany  
W. Richwien  
University of Essen, Germany  
**Support Structures and Foundation Concepts for OWECS**

- VD2.4** R.W.P. Bierens  
Andersen Business Consulting, Rotterdam,  
The Netherlands

*Visual Presentations*

J. van der Tempel  
Delft University of Technology, The Netherlands  
**Interconnectors, the Power of Cables**

- VD2.5** B. Lange  
University of Oldenburg, Germany  
S.E. Larsen, J. Hoejstrup & R. Barthelmie  
Risoe National Laboratory, Roskilde, Denmark  
**Modelling the Vertical Wind Speed and Turbulence Intensity Profiles at Prospective Offshore Wind Farm Sites**
- VD2.6** A. Moller  
Densit, Aalborg, Denmark  
P. Clutterbuck  
Seacore, Cornwall, United Kingdom  
**Efficient Connection Between Offshore Foundation and Wind Turbine Towers**
- VD2.7** J. Blak-Nielsen, C.M. Andersen & M.S. Andersen  
Carl Bro, Glostrup, Denmark  
O. Lund & T. Hemel  
Vindkraftpark, Malmö, Sweden  
**Planning and Design of Foundations for Örestads Wind Park, 48 Offshore Wind Turbines (min. 2 MW) and 1 Transformer Platform at Lillgrunden**
- VD2.8** K. Övermöhle  
Övermöhle Consult & Marketing, Hamburg,  
Germany  
**“Off-Shore Wind Farms”, Forthcoming Projects**
- VD2.9** P. Ali-Zada & E. Imal  
Fatih University, Turkey  
Ö. Özerdem  
Near East University, Cyprus, Turkey  
M. Bagriyanik  
Istanbul Technological University Turkey, Turkey  
C.Ali-Zada  
Azerbaijan Poly University, Baku, Azerbaijan  
**A Combined Converter-Switch for Converting AC Transmission into DC (and back)**
- VD2.10** G.J.W. van Bussel  
Delft University of Technology, The Netherlands  
**Offshore Wind Energy, the Reliability Dilemma**
- VD2.11** R. Nierer  
Rechtsanwälte Luther Willma Buchholz Baierlein  
Nierer, Berlin, Germany

**Offshore Windfarms - Legal Aspects  
Concerning the Exclusive Economy Zone on  
Sea**

**VD2.12** H. Salzmann, A. Mitzlaff & J. Uecker  
IMS Ingenieursgesellschaft, Hamburg, Germany  
**Foundation Design and Offshore Installation  
Methods for Large Offshore Wind Turbines in  
Harsh Environment - Engineering Concepts,  
Safety Aspects and Cost Optimisation**

**VD2.13** M. Grottke & M. Loderer  
WIP-Munich, Germany  
**Offshore Windparks Projected in Europe –  
the Status in 2002**

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**Capacity Building**

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**Energy - A Topic for Teaching?**

**VD3.2** K. Brinkmann  
FernUniversität Hagen, Germany  
A. Brinkmann  
University of Duisburg, Germany  
**Wind Energy in Secondary Mathematics  
Classrooms**

**VD3.3** T. Wizelius  
Gotland University, Visby, Sweden  
**Windpower Education by Distance Learning**

**VD3.4** J. Aristizábal  
Empresas Públicas de Medellín, Columbia  
**Wind Power Project in La Guajira, Colombia**

**VD3.5** W. Kiwitt  
artefact, Glücksburg, Germany  
**Publicity Work and Basic Training: the  
Preconditions for Sustainable Growth of the  
Wind Market**

**VD3.6** H. Wang  
Zeiss, Königsbronn, Germany  
**Experiment Kit for Demonstrating the Power  
of the Wind by Blowing**

- VD3.7** T. Sidki Uyar  
Marmara University, Istanbul, Turkey  
**Role of Black Sea NGO Network in Promoting Wind Energy Utilization**
- VD3.8** P. Taylor  
Econnect, Hexham, United Kingdom  
**Self Tuning Intelligent Load Control for the Stable and Efficient Integration of Wind into Stand-Alone Electrical Power Systems**
- VD3.9** M. Baratashvili & L. Lekvinadze  
Alternative Energy & Georgia, Kutaisi, Georgia  
**Georgia and Alternative Energy System Market**
- VD3.10** A. Ekhlat & O.M. Abdallah  
General Electric Company of Libya, Tripoli, Libya  
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Plenum Energy, Husum, Germany  
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S. Heier  
Gesamthochschule Universität Kassel, Germany  
M. Hoppe-Kilpper  
Institut for Solar Energy Technology, Kassel, Germany  
**Wind Energy in Libya - a New Market?**
- VD3.11** I. Ushiyama, Y. Nakajo, A. Suzuki & Y. Nemoto  
Ashikaga Institute of Technology, Japan  
**Demonstration Project of Renewable Energies at Ashikaga Institute of Technology**