# Prof. MURAT GÖL

### **Personal Information**

Office Phone: <u>+90 312 210 4539</u> Email: mgol@metu.edu.tr Web: https://avesis.metu.edu.tr/mgol

International Researcher IDs ScholarID: iTfkN4oAAAAJ ORCID: 0000-0002-2523-1169 Publons / Web Of Science ResearcherID: V-4742-2019 ScopusID: 25930021900 Yoksis Researcher ID: 214776

### **Education Information**

Doctorate, Northeastern University, Electrical And Computer Engineering, United States Of America 2010 - 2014 Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Elektrik Ve Elektronik Mühendisliği (Yl) (Tezli), Turkey 2007 - 2009 Undergraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 2003 - 2007

### Dissertations

Doctorate, Incorporation of pmus in power system state estimation, Northeastern University, Electrical And Computer Engineering, 2014

Postgraduate, A new field-data based EAF (electric arc furnace) model applied to power quality studies, Middle East Technical University, Graduate School of Natural and Applied Sciences, Elektrik Ve Elektronik Mühendisliği (Yl) (Tezli), 2009

### **Research Areas**

Electrical and Electronics Engineering, Energy, Power System Analysis, Electric Power Transmission, Distribution and Protection, Renewable energy, Engineering and Technology

# Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2019 - Continues

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2018 - 2019

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2014 - 2018

# Academic and Administrative Experience

Deputy Head of Department, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2019 - 2022

# **Advising Theses**

Göl M., ASSESTMENT OF COOPERATION OF PHOTOVOLTAICS AND ELECTRIFIED MICRO MOBILITY IN THE CONCEPT OF NET ZERO ENERGY CITIES, Postgraduate, N.AYDINALP(Student), 2024

Göl M., A distributed control strategy for network of microgrids, Doctorate, M.ERDEM(Student), 2024

GÖL M., Multi-objective charging scheduling utilizing electric vehicle load models, Postgraduate, İ.GÜZEL(Student), 2022

GÖL M., A parameter error identification method for power plant dynamic models, Postgraduate, E.AÇILAN(Student), 2022

GÖL M., MODIFIED FORWARD BACKWARD SWEEP POWER FLOW SOLUTION FOR NAVAL PLATFORMS WITH MULTIPLE GENERATORS, Postgraduate, A.TALAT(Student), 2022

GÖL M., An improved energy requirement prediction for queueing applications of electric vehicles based on parameter estimation, Postgraduate, B.SAĞLAM(Student), 2022

GÖL M., Performance improvement for situational awareness and restoration of distribution systems, Postgraduate, U.CAN(Student), 2021

GÖL M., Sparse matrix library for power system state estimation based on full knuth's method, Postgraduate, T.YILDIZ(Student), 2021

GÖL M., Design of a centralized microgrid controller in compliance with IEEE 2030.7 standard, Postgraduate, S.POURALTAFI(Student), 2021

Göl M., A novel methodology for medium and long-term electricity market modeling, Doctorate, E.İLSEVEN(Student), 2020

Göl M., Substation level state estimation and topology error processing, Postgraduate, E.SARUHAN(Student), 2020 Göl M., Utilization of realistic pumped hydroelectric storage system model for various optimal short term control strategies, Postgraduate, O.ÜSTÜNDAĞ(Student), 2019

Göl M., Predicting actual load demand in distribution systems with high pv penetration, Postgraduate, U.YILDIZ(Student), 2019

GÖL M., Very short term load forecasting aided hybrid state estimator with optimally placed pseudo-measurements, Postgraduate, B.ÖZSOY(Student), 2018

GÖL M., A generalized mathematical model of DC catenary lines, Postgraduate, M.ERDEM(Student), 2018

GÖL M., Incorporation of DSSC in real time congestion management, Postgraduate, R.GÜNAY(Student), 2018

GÖL M., Optimal maintenance scheduling for transmission lines, Postgraduate, E.BERK(Student), 2018

GÖL M., Evaluation of photovoltaic systems for voltage quality, Postgraduate, D.ŞENGÜL(Student), 2018

GÖL M., Two new indices for the assessment of regional transmission connection capacities, Postgraduate, A.HAYDAR(Student), 2017

GÖL M., Optimal phasor measurement unit (PMU) placement for the power systems with existing SCADA measurements, Postgraduate, B.ERTÜRK(Student), 2017

GÖL M., State estimation based fault location using pmu measurements, Postgraduate, A.ÖNER(Student), 2016

GÖL M., A Local parameter estimator based on robust LAV estimation, Postgraduate, V.Özdemir(Student), 2015

GÖL M., A local parameter estimator based on robust lav estimation, Postgraduate, V.ÖZDEMİR(Student), 2015

# Published journal articles indexed by SCI, SSCI, and AHCI

I. WLAV state estimation based topology error detection and identification in distribution networks with limited number of measurements PARLAKTUNA K., Dursun E., GÖL M.

Electric Power Systems Research, vol.232, 2024 (SCI-Expanded)

II. A Novel Parameter Error Identification Method for Power Plant Dynamic Models

Acilan E., GÖL M.

IEEE Transactions on Power Systems, vol.39, no.1, pp.957-966, 2024 (SCI-Expanded)

- III. PMU-Based Dynamic Model Calibration of Type 4 Wind Turbine Generators Erden F., Acilan E., Ustundag O., Bozkurt E., GÖL M. Electronics (Switzerland), vol.12, no.9, 2023 (SCI-Expanded)
- IV. MDP based real time restoration for earthquake damaged active distribution systems Arpali O. Y., Yilmaz U. C., GÜLDÜR ERKAL B., AYDIN GÖL E., GÖL M. Electric Power Systems Research, vol.218, 2023 (SCI-Expanded)
- V. Plug-in electric vehicle load modeling for charging scheduling strategies in microgrids GÜZEL İ., GÖL M.

SUSTAINABLE ENERGY GRIDS & NETWORKS, vol.32, 2022 (SCI-Expanded)

- VI. A Computationally Efficient Topology Identifiability Analysis of Distribution Systems Eser F., Yılmaz U. C., Dursun E., Cinalioglu M. C., Göl M.
   Electric Power Systems Research, vol.208, 2022 (SCI-Expanded)
- VII. Identifiability Analysis for Power Plant Parameter Calibration in the Presence of Collinear Parameters AÇILAN E., GÖL M.

IEEE Transactions on Power Systems, vol.37, no.4, pp.2988-2997, 2022 (SCI-Expanded)

VIII. A partitioning strategy for improved state estimation performance in ill-conditioned power systems with hybrid measurement set

Yildiz T., AÇILAN E., GÖL M. ELECTRIC POWER SYSTEMS RESEARCH, vol.201, 2021 (SCI-Expanded)

IX. Centralized Microgrid Control System in Compliance with IEEE 2030.7 Standard Based on an Advanced Field Unit

Pouraltafi-kheljan S., Ugur M., Bozulu E., Caliskan B. C., KEYSAN O., GÖL M.

ENERGIES, vol.14, no.21, 2021 (SCI-Expanded)

# X. Incorporation of generator maintenance scheduling with long-term power sector forecasting and planning studies

Ilseven E., Göl M.

IET GENERATION TRANSMISSION & DISTRIBUTION, vol.14, pp.2581-2591, 2020 (SCI-Expanded)

# XI. Harmony Search Algorithm Based Management of Distributed Energy Resources and Storage Systems in Microgrids

Ceylan O., SEZGİN M. E., GÖL M., Verga M., Lazzari R., Kwaye M. P., Sandroni C. APPLIED SCIENCES-BASEL, vol.10, no.9, 2020 (SCI-Expanded)

- XII. A Model Predictive Control for Microgrids Considering Battery Aging Yilmaz U. C., SEZGİN M. E., GÖL M. JOURNAL OF MODERN POWER SYSTEMS AND CLEAN ENERGY, vol.8, no.2, pp.296-304, 2020 (SCI-Expanded)
   YIII Assessment of regional transmission connection connective based on two neural indices
- XIII. Assessment of regional transmission connection capacity based on two novel indices GUVERCİNCİ A. H., GÖL M.

IET GENERATION TRANSMISSION & DISTRIBUTION, vol.12, no.14, pp.3470-3476, 2018 (SCI-Expanded)

# XIV. Hydro-Optimization-Based Medium-Term Price Forecasting Considering Demand and Supply Uncertainty İLSEVEN E., GÖL M.

IEEE TRANSACTIONS ON POWER SYSTEMS, vol.33, no.4, pp.4074-4083, 2018 (SCI-Expanded)

XV. A Decentralization Method for Hybrid State Estimators GÖL M.

IEEE TRANSACTIONS ON POWER SYSTEMS, vol.33, no.2, pp.2070-2077, 2018 (SCI-Expanded)

# XVI. Determination of harmonic current contributions based on robust state estimation Sezgin E., GÖL M., Salor O.

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.26, no.1, pp.307-318, 2018 (SCI-Expanded)

XVII.	Robust local parameter estimator based on least absolute value estimator ÖZDEMİR V., GÖL M.
	Turkish Journal Of Electrical Engineering And Computer Sciences, vol.25, pp.3143-3151, 2017 (SCI-Expanded)
XVIII.	State-Estimation-Based Determination of Harmonic Current Contributions of Iron and Steel Plants
	Supplied from PCC
	Sezgin E., GÖL M., Salor O.
	IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.52, no.3, pp.2654-2663, 2016 (SCI-Expanded)
XIX.	A Fast Decoupled State Estimator for Systems Measured by PMUs
	Goel M., Abur A.
	IEEE TRANSACTIONS ON POWER SYSTEMS, vol.30, no.5, pp.2766-2771, 2015 (SCI-Expanded)
XX.	A Hybrid State Estimator For Systems With Limited Number of PMUs
	Goel M., Abur A.
	IEEE TRANSACTIONS ON POWER SYSTEMS, vol.30, no.3, pp.1511-1517, 2015 (SCI-Expanded)
XXI.	A Robust PMU Based Three-Phase State Estimator Using Modal Decoupling
	Goel M., Abur A.
	IEEE TRANSACTIONS ON POWER SYSTEMS, vol.29, no.5, pp.2292-2299, 2014 (SCI-Expanded)
XXII.	LAV Based Robust State Estimation for Systems Measured by PMUs
	Goel M., Abur A.
	IEEE TRANSACTIONS ON SMART GRID, vol.5, no.4, pp.1808-1814, 2014 (SCI-Expanded)
XXIII.	Observability and Criticality Analyses for Power Systems Measured by Phasor Measurements
	Goel M., Abur A.
	IEEE TRANSACTIONS ON POWER SYSTEMS, vol.28, no.3, pp.3319-3326, 2013 (SCI-Expanded)
XXIV.	Metrics for Success Performance Metrics for Power System State Estimators and Measurement
	Designs
	Goel M., Abur A., Galvan F.
	IEEE POWER & ENERGY MAGAZINE, vol.10, no.5, pp.50-57, 2012 (SCI-Expanded)
XXV.	A New Field-Data-Based EAF Model for Power Quality Studies
	Gol M., Salor O., ALBOYACI B., Mutluer B., ÇADIRCI I., ERMİŞ M.
	IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.46, no.3, pp.1230-1242, 2010 (SCI-Expanded)

# **Articles Published in Other Journals**

I. Enerji Depolama Sistemlerinin Farklı Kullanım Zamanlarının Elektrik Sistemine Olan Etkisi SEZGİN M. E., GÜDELEK M. U., ARIN E., ÇIRAK C. R., GÖL M. Fırat Üniversitesi Mühendislik Bilimleri Dergisi, vol.30, pp.7-14, 2018 (Peer-Reviewed Journal)

# **Books & Book Chapters**

I. METU Smart Campus Project (iEAST)
 ERTEKİN BOLELLİ Ş., KEYSAN O., GÖL M., Bayazit H., Yildiz T., Marr A., Ganji M., Teimourzadeh S., Tör O. B., Özkavaf
 S.

in: New Technologies, Development and Application II, Isak Karabegović, Editor, Springer, pp.287-297, 2019

# **Refereed Congress / Symposium Publications in Proceedings**

I. Solar Energy Production Estimation in Distribution Networks with Limited Number of Measurements Sınırlı Sayıda Ölçüm İle Dağıtım Şebekelerinde Güneş Enerjisi Üretim Kestirimi Küçükaslan Ö. A., GÖL M. 32nd IEEE Conference on Signal Processing and Communications Applications, SIU 2024, Mersin, Turkey, 15 - 18 May 2024

- II. Monitoring Voltage Distortions Caused by Supraharmonics in Active Distribution Networks
   Küçükaslan Ö. A., Erkan A. N. Ö., Kaya K., Özen C., Büyükbaş B., Özcan N., Cinalioğlu P., Göl M., Bayatmakoo A.
   14th International Conference on Electrical and Electronics Engineering, ELECO 2023, Virtual, Bursa, Turkey, 30
   November 02 December 2023
- III. Topological Error Localization in Power Distribution Networks Based on WLAV State Estimation Parlaktuna K., Dursun E., Özcan M., Göl M.
   2023 IEEE PES Innovative Smart Grid Technologies Europe, ISGT EUROPE 2023, Grenoble, France, 23 - 26 October 2023

### IV. Assesment of Supraharmonic Injections in Turkish Distribution Systems

Küçükaslan Ö. A., Erkan A. N. Ö., Kaya K., Özen C., Büyükbaş B., Özcan N., Avşar T., Cinalioğlu P., Göl M., Bayatmakoo A.

2023 IEEE PES Innovative Smart Grid Technologies Europe, ISGT EUROPE 2023, Grenoble, France, 23 - 26 October 2023

### V. Lightweight Photovoltaic Forecasting Method for Agricultural Microgrids Brown P. D., Göl M.

14th International Conference on Electrical and Electronics Engineering, ELECO 2023, Virtual, Bursa, Turkey, 30 November - 02 December 2023

- VI. PMU based Dynamic Model Calibration of Type-4 Wind Turbine Generators
  AÇILAN E., Erden F., Ustundag O., Bozkurt E., GÖL M.
  57th International Universities Power Engineering Conference: Big Data and Smart Grids, UPEC 2022, İstanbul,
  Turkey, 30 August 02 September 2022
- VII. Operational Optimization of an Agricultural Microgrid
   Brown P. D., GÖL M.
   57th International Universities Power Engineering Conference: Big Data and Smart Grids, UPEC 2022, İstanbul,
- Turkey, 30 August 02 September 2022VIII.Improved Situational Awareness for Power Distribution Systems Based on WLAV Estimator and

# Direct Load Flow Solution

PARLAKTUNA K., Dursun E., Cinalioglu M. C., GÖL M.

57th International Universities Power Engineering Conference: Big Data and Smart Grids, UPEC 2022, İstanbul, Turkey, 30 August - 02 September 2022

# IX. Stochastic Model Predictive Control for Microgrids Based on Monte Carlo Simulations Sezgin M. E., Pouraltafi-Kheljan S., Beyarslan M., GÖL M.

57th International Universities Power Engineering Conference: Big Data and Smart Grids, UPEC 2022, İstanbul, Turkey, 30 August - 02 September 2022

# X. Parameter Estimation of Electric Vehicles for Improved Range Prediction Saglam B., BOSTANCI E., GÖL M. 11th IEEE PES Innovative Smart Grid Technologies Europe, ISGT Europe 2021, Espoo,

11th IEEE PES Innovative Smart Grid Technologies Europe, ISGT Europe 2021, Espoo, Finland, 18 - 21 October 2021

# XI. **Optimal Placement of Different Types of Measurements for Active Distribution Systems** Pouraltafi-Kheljan S., GÖL M.

11th IEEE PES Innovative Smart Grid Technologies Europe, ISGT Europe 2021, Espoo, Finland, 18 - 21 October 2021

# XII. Plug-in Electric Vehicle Load Modeling for Smart Charging Strategies in Microgrids GÜZEL İ., GÖL M.

4th International Conference on Smart Energy Systems and Technologies (SEST), ELECTR NETWORK, 6 - 08 September 2021

XIII. MDP based Decision Support for Earthquake Damaged Distribution System Restoration ARPALI O. Y., YILMAZ U. C., AYDIN GÖL E., GÜLDÜR ERKAL B., GÖL M. IEEE-PES General Meeting, 2 - 06 August 2020

- XIV. Three-phase state estimation based on symmetrical components GÖL M. 10th IEEE PES Innovative Smart Grid Technologies Europe, ISGT-Europe 2020, Delft, Netherlands, 26 - 28 October 2020, vol.2020-October, pp.186-190 XV. Power generation nowcasting of the behind-the-meter photovoltaic systems Pouraltafikheljan s., GÖL M. 10th IEEE PES Innovative Smart Grid Technologies Europe, ISGT-Europe 2020, Delft, Netherlands, 26 - 28 October 2020, vol.2020-October, pp.384-388 XVI. Solar power generation prediction for distribution systems with high PV penetration YILDIZ U., GÖL M. 10th IEEE PES Innovative Smart Grid Technologies Europe, ISGT-Europe 2020, Delft, Netherlands, 26 - 28 October 2020, vol.2020-October, pp.389-393 XVII. Solar power generation analysis and forecasting real-world data using LSTM and autoregressive CNN tosun n., sert e., AYAZ E., YILMAZ e., GÖL M. 3rd International Conference on Smart Energy Systems and Technologies, SEST 2020, Virtual, Istanbul, Turkey, 7 -09 September 2020
- XVIII. Detection of Unauthorized Photo-Voltaic System Connection for Low Voltage Grids Pouraltafi-Kheljan S., GÖL M.

28th Signal Processing and Communications Applications Conference (SIU), ELECTR NETWORK, 5 - 07 October 2020

#### XIX. METU Smart Campus Project (iEAST)

ERTEKİN BOLELLİ Ş., KEYSAN O., GÖL M., beyazıt h., YILDIZ T., Marr A., Ganji M., Teimourzadeh S., Tör O. B., Özkavaf S.

International Conference on New Technologies, Development and Application, Sarajevo, Bosnia And Herzegovina, 27 - 29 June 2019, vol.76, pp.287-297

# XX. MDP based Decision Support for Earthquake Damaged Distribution System Restoration Arpali O. Y., Yilmaz U. C., Gol E. A., Erkal B. G., GÖL M.

IEEE-Power-and-Energy-Society General Meeting (PESGM), ELECTR NETWORK, 3 - 06 August 2020

#### XXI. A Malfunction Detection Method For PV Systems

Yildiz T., GÖL M.

IEEE Milan PowerTech Conference, Milan, Italy, 23 - 27 June 2019

### XXII. A Comparative Study on Feature Selection based Improvement of Medium-Term Demand Forecast Accuracy

Ilseven E., GÖL M.

IEEE Milan PowerTech Conference, Milan, Italy, 23 - 27 June 2019

# XXIII. A Novel MDP Based Decision Support Framework to Restore Earthquake Damaged Distribution Systems

AYDIN GÖL E., GÜLDÜR ERKAL B., GÖL M.

IEEE PES Innovative Smart Grid Technologies Europe (IEEE ISGT-Europe), Bucharest, Romania, 29 September - 02 October 2019

# XXIV. Evaluation of Photovoltaic Systems For Reactive Power Compensation In Low Voltage Power Systems

Uğur M., Duymaz E., Göl M., Keysan O.

ISGT Europe 2018, Sarajevo, Bosnia And Herzegovina, 21 - 25 October 2018

# XXV. A Hybrid State Estimation Strategy With Optimal Use of Pseudo-Measurement ÖZSOY b., GÖL M. ISGT-Europe 2018, 21 - 25 October 2018

# XXVI. Load and PV Generation Forecast Based Cost Optimization for Nanogrids with PV and Battery Gudelek M. U., Cirak C. R., ARIN E., SEZGİN M. E., Ozbayoglu A. M., Gol M. 53rd International Universities Power Engineering Conference, UPEC 2018, Glasgow, United Kingdom, 4 - 07

	September 2018
XXVII.	A New Index for Voltage Quality Assessment at Distribution Systems
	KARACELEBİ m., ERCİN ö., GÖL M.
	UPEC 2018, 4 - 07 September 2018
XXVIII.	A Strategy to Evaluate Solar Power Generation Capability Based on Historical Data
	ŞENGÜL d., GÖL M.
	UPEC 2018, 4 - 07 September 2018
XXIX.	DC Catenary Line Modeling of Subway Systems
	SEZGİN M. E., GÖL M.
	IEEE-Power-and-Energy-Society General Meeting (PESGM), Oregon, United States Of America, 5 - 10 August 2018
XXX.	Enerji Depolama Sistemlerinin Farklı Kullanım Zamanlarının Elektrik Sistemine Olan Etkisi
	SEZGİN M. E., GÜDELEK M. U., ARIN E., ÇIRAK C. R., GÖL M.
	1. Ulusal Elektrik Enerjisi Dönüşüm Kongresi (EL-EN), Elazığ, Turkey, 21 - 22 September 2017, pp.53-59
XXXI.	Medium-Term Electricity Demand Forecasting Based on MARS
	İLSEVEN e., GÖL M.
	IEEE International Conference on Innovative Smart Grid Technologies IEEE ISGT Europe 2017, 26 - 29 September
	2017
XXXII.	Voltage variation model for DC catenary line of a subway system
	SEZGİN M. E., GÖL M.
	2017 IEEE Manchester PowerTech, Powertech 2017, Manchester, United Kingdom, 18 - 22 June 2017
XXXIII.	Identification of bad solar power generation data Hatali Güneş Enerjisi Üretim Ölçümlerinin Tespit
	Edilmesi
	ŞENGÜL D., DUYMAZ E., GÖL M.
	25th Signal Processing and Communications Applications Conference, SIU 2017, Antalya, Turkey, 15 - 18 May 2017
XXXIV.	Binary integer programming based PMU placement in the presence of conventional measurements
	Ertürk B., Göl M.
	PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe), 2016 IEEE, Ljubljana, Slovenia, 9 - 12
X7X7X7X7	October 2016
XXXV.	Evaluation of the effects of photovoltaic systems on voltage quality
	Şengül D., Göl M. 48th North American Power Symposium, NAPS 2016, Colorado, United States Of America, 18 - 20 September 2016
XXXVI.	Fault location based on state estimation in PMU observable systems
ллл V I.	ÖNER A., GÖL M.
	2016 IEEE Power and Energy Society Innovative Smart Grid Technologies Conference, ISGT 2016, Minnesota,
	United States Of America, 6 - 09 September 2016
XXXVII.	State estimation based determination of harmonic current contributions of iron and steel plants
7001 V III	supplied from PCC
	Sezgin E., GÖL M., Salor Ö.
	51st Annual Meeting on IEEE Industry Application Society, IAS 2015, Texas, United States Of America, 11 - 22
	October 2015
XXXVIII.	A Robust Parameter Estimation Method Based onLAV Estimator
	ÖZDEMİR V., GÖL M.
	modern electric power systems 2015, Wroclaw, Poland, 6 - 09 July 2015
XXXIX.	A Robust Parameter Estimation Method Based on LAV Estimator
	Ozdemir V., GÖL M.
	INTERNATIONAL CONFERENCE, 15 MEPS MODERN ELECTRIC POWER SYSTEMS, Wroclaw, Poland, 6 - 09 July 2015
XL.	A modified Chi-Squares test for improved bad data detection
	GÖL M., ABUR A.
	IEEE Eindhoven PowerTech, PowerTech 2015, Eindhoven, Netherlands, 29 June - 02 July 2015
XLI.	Determination of Harmonic Current Contributions of Plants Supplied from PCC Based on State
	Estimation

	Sezgin E., GÖL M., Salor O.
	23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015,
	pp.2062-2065
XLII.	Effective measurement design for cyber security
	GÖL M., abur a.
	Power Systems Computation Conference (PSCC), 2014, 18 - 22 August 2014
XLIII.	Optimal PMU placement for state estimation robustness
	GÖL M., Abur A.
	IEEE PES Innovative Smart Grid Technologies, Europe, Istanbul, Turkey, 12 - 15 October 2014
XLIV.	Identifying vulnerabilities of state estimators against cyber-attacks
	GÖL M., abur a.
	PowerTech (POWERTECH), 2013 IEEE Grenoble, 16 - 20 June 2013
XLV.	PMU placement for robust state estimation
	GÖL M., Abur A.
	2013 North American Power Symposium (NAPS), Manhattan, KS, USA, 22 - 24 September 2013
XLVI.	Synchro-phasor based three phase state estimation using modal components
	GÖL M., abur a.
	Innovative Smart Grid Technologies (ISGT Europe), 2012 3rd IEEE PES International Conference and Exhibition
	on, 14 - 17 October 2012
XLVII.	Observability analysis of systems containing phasor measurements
	GÖL M., abur a.
	Power and Energy Society General Meeting, 2012 IEEE, 22 - 26 July 2012
XLVIII.	Rapid tracking of bus voltages using synchro phasor assisted state estimator
	GÖL M., Abur A., Floyd G.
	IEEE PES ISGT Europe 2013, Lyngby, Denmark, 6 - 09 October 2013
XLIX.	PMU based robust state estimation using scaling
	Göl M., ABUR A.
	2012 North American Power Symposium, NAPS 2012, Champaign, IL, United States Of America, 9 - 11 September
	2012
L.	Pseudo-Measurement Placement for Reliable State Estimation
	GÖL M., abur a.
	International Conference on Probabilistic Methods Applied to Power Systems, 10 - 14 June 2012
LI.	Observability analysis and critical measurement detection for power systems measured by PMUs
	GÖL M., abur a.
	Innovative Smart Grid Technologies (ISGT), 2012 IEEE PES, 16 - 20 January 2012

# **Supported Projects**

Gürsel Dino I., Turan R., Akgül Ç., Göl M., Kalkan S., Taylan O., H2020 Project, LEGOFIT: Adaptable technological solutions based on early design actions for the construction and renovation of Energy Positive Homes, 2023 - 2027 Gürsel Dino İ., Kalkan S., Akgül Ç., Göl M., H2020 Project, UP2030: Urban Planning and design ready for 2030, 2023 -2026

Keysan O., Göl M., TÜBİTAK International Bilateral Joint Cooperation Program Project, Community-based off-grid ultraefficient microgrid to revive water-food security in agriculture (COMSA), 2020 - 2022

Göl M., Company, Durum Kestirimi Algoritması Geliştirme, 2020 - 2021

Göl M., Keysan O., Technopark, Research of electricity networks management methods and development of microgrid control and communication device, 2019 - 2021

Göl M., Technopark, OG ŞEBEKELERİNDE SYNCROPHASOR KULLANARAK ŞEBEKE DAYANIKLILIĞININ ARTIRIMI TEKNİK ANALİZİ ARGE PROJESİ , 2019 - 2021

Keysan O., Göl M., Tüydeş Yaman H., Project Supported by Public Organizations in Other Countries, METU - Smart Campus

Feasibility Project, 2017 - 2021

GÖL M., TUBITAK Project, Depremde Zarar Görmüş Orta Gerilim Elektrik Dağıtım Şebekelerinde Ayağa Kaldırma Için Karar Destek Yöntemlerinin Geliştirilmesi, 2018 - 2020 GÖL M., YILDIZ U., Project Supported by Higher Education Institutions, ALÇAK GERİLİM GÜNEŞ ENERJİSİ SİSTEMLERİNİN VARLIĞINDA YÜK TALEP TAHMİNİ YÖNTEMİ, 2018 - 2019 GÖL M., TUBITAK Project, Mevcut Güç Akışı Ölçüm Cihazlarını Hesaba Katarak Belirlenmiş Artıklık Endeksine Göre Optimum Fazör Ölçüm Ünitesi Yerleştirme Metodu Geliştirilmesi, 2015 - 2017 GÖL M., ŞENGÜL D., Project Supported by Higher Education Institutions, MİLGES Projesi Kapsamında Kurulacak Olan Güneş Enerjisi Santralinin Türkiye Elektrik Sistemine Etkilerinin İncelenmesi, 2016 - 2016

# **Activities in Scientific Journals**

IEEE Transactions on Smart Grid, Committee Member, 2019 - Continues Turkish Journal Of Electrical Engineering And Computer Sciences, Committee Member, 2018 - Continues JOURNAL OF MODERN POWER SYSTEMS AND CLEAN ENERGY, Editor, 2018 - 2018

# **Metrics**

Publication: 79 Citation (WoS): 551 Citation (Scopus): 692 H-Index (WoS): 10 H-Index (Scopus): 12

# **Non Academic Experience**

TÜBİTAK