

Assist. Prof. Dr. H. Ufuk Gökçe

RESEARCHER fusing hands-on R&D expertise to drive service and performance; excels in operations leadership, product/technology development, multicultural team building with experience spanning Europe and North America.

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National University of Ireland-U.C.C. / Ireland, Ph. D.

Department of Civil and Environmental Engineering, (2007-2011)

Graduate of Dresden International University / Germany, MBA

Technische Universitaet Dresden Institute of Advanced Studies (TUDIAS), (2005-2007)

Graduate of ISIK University / Istanbul, Turkey, Bsc.

Faculty of Economics and Administrative Sciences, Business Administration Department.(1999-2004),

Graduate of ISIK University / Istanbul, Turkey, Bsc. Double Minor

Faculty of Science and Technology, Information Technologies Department (1999-2004),

EEE Proficient in English Good in German (TestDaF Certificate)

ΞΞΞ

Engagements: Member – Energy Efficient Building European Initiative (E2BA) Member – World Society of Sustainable Energy Technologies.

> Reviewer and Author, Journal of Sustainable Cities and Society Reviewer and Author, ASCE Journal of Computing in Civil Engineering Reviewer and Author, Int. Journal of Low Carbon Technologies Reviewer and Author, Int. Journal of Turkish Studies- Information Technologies and Applied Sciences

PROFESSIONAL PROGRESSION

Assistant Professor | ISTINYE UNIVERSITY, Management Information Systems Dept., Istanbul 2021 – Cont.

- □ **Responsible for Research and Development;** management of Smart Buildings/Cities and energy optimization related projects at the Management Information Systems Department.
 - Projects supported by The Scientific and Technological Research Council of Turkey, (Tubitak).
 * "Hybrid Renewable Energy Generation System for Efficient Buildings"
- **Responsible for the establishment of lecturing background** for undergraduate and graduate Students.
 - Lecturing Management Information Systems Department. (Please see page 9 for more information)
 - Database Management Systems, Web Based Programming, Data Structures and Algorithms, Mobile Systems Programming, Object-oriented Programming and Structural Programming.

Honorar Dozent | FRESENIUS UNIVERSITY of APPLIED SCIENCES, Engineering Program, Germany. 2021 – 2021

Responsible for the establishment of lecturing background for Master's Program Students.

- Lecturing Master's Program, Industrial Engineering and International Management
 - Quality Management

Assistant Professor | ISTANBUL BEYKENT UNIVERSITY, Management Information Systems Dept. 2016 – 2021

- □ **Responsible for Research and Development;** management of renewable energy projects at the Management Information Systems Department.
- **Responsible for the establishment of lecturing background** for Graduate Students.
 - Lecturing Management Information Systems Department. (Please see page 9 for more information)
 - Management and Organisation, Introduction to MIS, Introduction to Management, Data Mining, Database Management Systems, Internet and Web Programming, Use of Information Technologies, System Analysis and Design and C Structural Programming.

R&D Director | EOS Sustainable Energy Solutions GmbH, Germany

2013- Cont'd

- EOS is an academic spin-off company consisting of two research labs (hardware/software development) and full scale facilities located in *EnergieEffizienzZentrum Bochum* (HQ) and *Istanbul Technical University Technology Park* (Branch). Established with the support of German and Turkish States.
- Responsible for the Research and Development operations of EOS; contribute to the implementation of research policies.
 - Responsible for R&D activities and management of Software and Hardware Development Teams. His
 operations management work involves providing research vision to the research group. In addition
 he actively involves in the research achievements.
- **Initiate exclusive partnerships** with well-known Academic Institutions and Universities.
 - University of Alberta, Civil and Environmental Engineering & School of Mining and Petroleum Engineering, Canada.
 - Dresden University of Technology, Institute of Construction Informatics, Germany.
 - Fraunhofer-Institut für Windenergie und Energiesystemtechnik (IWES).
 - HZDR, Institute of Ion Beam Physics and Materials Research.
 - Serenergy A/S, Fuel-Cell Technology.
 - ECOMOVE A/S, Electric Vehicle Technology.
- □ **R&D projects;** Raised research grants of approx. 4 Million Euros from European Union and national funding institutions. List of current R&D projects are provided below.
 - 1. HEGOSEB-Hvbrid Enerav Generation and Optimization System-The R&D project is granted to EOS by the "Projektträger Jülich (PtJ)" under the "Progres.nrw-Innovation" program. "Projektträger Jülich (PtJ)" is a project management organization acting on behalf of the German Federal Ministry for Science and Education (BMBF), the Federal Ministry for Economy and Labour (BMWA), the Federal Ministry for the Environment (BMU) and Ministries of several Federal States and supporting these ministries in the preparation and implementation of programs providing financial support for research. This research and development project targets the development and prototyping of an integrated building system concept which operates on energyefficient basis while capturing retrofit opportunities that scale from a single building to multiple buildings at district level. The proposed concept will be developed based on two research areas; (1) Building energy supply-side (microgrid) management and (2) Building energy demand-side management complementing with the integrated energy production from renewable energy sources, building energy diagnostics, predictive control, ubiquitous wireless sensing technologies, microgrid power electronics and power control to exploit the potential for reduction of building energy consumption, thus addressing the deficit of insufficient tool support.
 - Duration: 2021-2023
 - Budget: ~ € 660.000
 - Funding Agency: Projektträger Jülich (PtJ)
 - 2. EOS Factory Project targeting the production of EOS Energy Management System The EOS factory project is granted to EOS by the state of North Rhine-Westphalia – Germany under the Regional Economic Development Program (RWP) to establish a production facility at the Energy Efficient Center of Bochum – NRW to produce EOS Energy Management Systems.
 - Duration: 2018-2021
 - Initial Budget: 375.000 Euro
 - Total Planned Investment Budget: € 2.000.000 (Inc. Know-How transfer and R&D).

- Funding Agency: The state of North Rhine-Westphalia Germany, Regional Economic Development Program (RWP)
- **3. Indigenous Hardware Development for Energy Generation and Optimization in Buildings:** The R&D project is granted to the EOS by the National Scientific and Technological Research Council. The project covers the development of 12 different wireless embedded system components targeting sensors and control units for energy generation from renewable energy generation systems.
 - Project Duration: 2016-2018
 - Project Budget: ~ 450.000 €
 - Funding Agency: The National Scientific and Technological Research Council

4. Intelligentes Gebäudeenergie Management System (Intelligent Building Energy Management System):

This R&D (Research and Development) project is granted to EOS Sustainable Energy Solutions GmbH by the State of Lower Saxony Innovation Support Program (Niedersächsischen Innovationsförderprogramms) which is funded by Ministry for Economic Affairs, Labour and Transport of State of Lower Saxony-Germany (Niedersächsisches Ministerium für Wirtschaft, Arbeit und Verkehr), Ministry for Environment, Energy and Climate Protection of State of Lower Saxony-Germany (Niedersächsisches Ministerium, Investment and Support Bank of State of Lower Saxony Nbank (Investitions- und Förderbank Niedersachsen – NBank) and European Union. The project covers the development of an intelligent software for optimization of building energy consumption.

- Project Duration: 2014-2016
- Project Budget: ~ 400.000 €
- Funding Agency: State of Lower Saxony, Germany.

5. Integrated Energy Generation and Management System for Building Energy Use:

The R&D project is granted to EOS by the Enterprise Europe Network which is a European Union institution providing support for the European SMEs. The research project involves the development of an integrated system infrastructure integrating sensors and actuators developed within the company and integrated renewable energy generation systems such as solar PV panels, wind turbines, batteries and methanol based fuel-cells in order to develop a Zero Plus Building.

- Duration: 2014-2016
- Budget: ~ 350.000 €
- Funding Agency: Enterprise Europe Network.

6. Indigenous Hardware Development for Energy Efficient Building Operations:

The R&D project is granted to the EOS by the National Scientific and Technological Research Council. The project covers the development of 15 different wireless embedded system components targeting sensors and control units for energy optimized building operations. Moreover developing a new type of indigenous wireless communication protocol is targeted with this project.

- Project Duration: 2014-2016
- Project Budget: ~ 800.000 €
- Funding Agency: The National Scientific and Technological Research Council.

7. Hybrid System Architecture for Energy-Plus Buildings:

The R&D project is granted to the EOS by the Enterprise Europe Network which is a European Union institution providing support for the European SMEs. The research project involves the development of a hybrid system infrastructure combining the different renewable energy generation systems such as solar PV panels, wind turbines, geothermal heat pumps and PEM fuel cell systems in order to develop an Energy-Plus Building.

- Project Duration: 2014-2016
- Project Budget: ~ 450.000 €
- Funding Agency: The National Scientific and Technological Research Council.

8. Intelligent Services for Energy Efficient Smart Cities:

The R&D project is granted to the EOS by the National Scientific and Technological Research Council. The research project aims to develop a software and hardware solution to monitor and analyse real time energy performance of multiple building units.

- Project Duration: 2013-2015
- Project Budget: ~ 300.000 €
- Funding Agency: The National Scientific and Technological Research Council.

9. Artificial Intelligence for Energy Efficient Smart Buildings and Cities:

The R&D project is granted to the EOS by the Enterprise Europe Network which is a European Union institution providing support for the European SMEs. In this research project it is aimed to develop self-learning artificial intelligence algorithms to optimise energy consumption of single and multiple building units.

- Project Duration: 2013-2015
- Project Budget: ~ 300.000 €
- Funding Agency: Enterprise Europe Network.
- **10.** Technological Strategy Development and Feasibility Analysis for the Development of a Polymer Exchange Membrane Fuel Cell (PEMFC) based Electric Vehicle Platform:

This project is carried out by the EOS R&D Department in order to create a road-map for designing and developing a Polymer Exchange Membrane Fuel Cell (PEMFC) based Electric Vehicle Platform. The project consists of vehicle chassis development using ultra-light composite materials such as 3D Reinforced Composite Sandwich Panels, development of PMAC (Permanent Magnet Alternating Current) electric motors, electric vehicle drive train systems, PEM Fuel-Cell based range extender modules, energy storage systems, battery management system (BMS) and vehicle management systems.

- Project Duration: 2014-2016
- Project Budget: ~ 100.000 €
- Technology Partners: ECOMOVE, SERENERGY.

Assist. Professor (Visiting) | University of Alberta, Engineering Department, Canada 2012-2013

- Responsible for Research and Development; management of Energy Efficiency Projects at the Civil & Environmental Engineering Department.
 - Projects supported by the Canada Strategic Research Grand (SRC)

 \ast "Integrated Construction and Energy Management System for Affordable Housing in Fort McMurray"

Supervision; Postgraduate and PhD. students.

Assist. Professor (Visiting) | TU DRESDEN, Institute of Construction Informatics, Germany 2011-2012

- □ **Responsible for Research and Development;** management of Energy Efficiency Projects at the Civil Engineering Department, Institute for Construction Informatics.
 - Projects supported by EU FP7 Program
 - * "ISES Intelligent Services for Energy-Efficient Design and Life Cycle Simulation"
 - * "HESMOS Virtual Energy Lab"
- **Initiate exclusive partnerships** with well-known Academic Institutions and Universities.
 - Kompetenzzentrum für Energieeffizienz e.V.
 - Fraunhofer-Institut für Windenergie und Energiesystemtechnik (IWES)

Assistant Professor | ISTANBUL OKAN UNIVERSITY Energy Systems Engineering Dept.

- □ **Responsible for Research and Development;** management of Energy Efficiency Projects at the Engineering Faculty, Energy Systems Engineering Department.
 - Projects supported by The Scientific and Technological Research Council of Turkey, (Tubitak).
 * "Dynamic System Structure for Energy Efficient Buildings"
- □ **Responsible for the establishment of lecturing background** for Graduate Students.
 - Lecturing Engineering Faculty, Energy Systems Engineering Department.
 * IT for Energy in Buildings.

2011-2012

Ph. D. Researcher | National University of Ireland, Ireland

- Developed a new methodology and a prototype in the area of energy efficiency.
 - PhD. Thesis:

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- * "Multi-Dimensional Analysis of Building Performance Data for Energy Efficient Building Operation"
- Managed research project; oversees R&D and planning activities.
 - 1. BUILDWISE: Wireless Sensor Networks for Energy and Environment Management in Buildings.
- Participated in the research projects;
 - 2. **ITOBO:** Information Technologies for Optimised Building Operations.
 - 3. intUBE: Intelligent use of Building's Energy Information.
 - 4. **REEB:** European Roadmap to ICT enabled Energy-Efficiency in Buildings.
- Developed new lecturing materials and new methods for Graduate and Post Graduate Students.
 - Lecturing Dept. of Civil and Environmental Engineering:
 - * CE1006 Introduction to IT in AEC
 - Lecturing European Master in Construction and Information Technology:
 - * CE6022 IT for eBusiness in AEC

Research Assistant | TU DRESDEN, Institute of Construction Informatics, Germany

- Developed a new methodology in the area of facilities management.
 Master Thesis:

 "Process Modelling for Computer Aided Facilities Management"
- Participated in the research project.
 - $_{\odot}$ "Mobile Information and Communication System to Support Construction Activities"

Analyst | Advanced Micro Devices (AMD), Dresden, Germany 2005-2006

European Division Fab30-36 Manufacturing Department

 Responsible for the cost and efficiency analysis of the Fab30 and Fab36 semiconductor production divisions in the department of European Finance.

Internship | Continental AG, Istanbul, Turkey

2003-2004

2006-2007

 Information Technologies Department
 Member of the E.R.P. implementation team which was formed for implementing the SAP Enterprise Resource Planning module to the organization.

THESIS

- Gökçe, H. U. (2010). "Multi-Dimensional Analysis of Building Performance Data for Energy Efficient Building Operation." PhD Thesis, Department of Civil Engineering, National University of Ireland-University College Cork (NUI-UCC), Cork, Ireland.
- Gökçe, H. U. (2007). "Process Modeling for Computer Aided Facilities Management", Master Thesis. DIU-TU Dresden Fakultät Wirtschaftswissenschaften Lehrstuhl für Wirtschaftsinformatik, insbesondere Systementwicklung, Dresden, Germany.

BOOK CHAPTERS

- Gökçe H. U., Gökçe K. U. (2014). "Chapter 19: Integrated System Concept for Energy Efficient Smart Buildings and Cities", Book: Progress in Sustainable Energy Technologies Vol II". Springer International Publishing Switzerland. ISBN: 978-3-319-07976-9.
- Gökçe H. U., Gökçe K. U. (2014). "Chapter 20: Interoperable ICT Platform for Energy Efficient Smart Buildings", Book: Progress in Sustainable Energy Technologies Vol II". Springer International Publishing Switzerland. ISBN: 978-3-319-07976-9.

- Gökçe K. U., Gökçe H. U. (2014). "Chapter 21: Software Interoperability for Energy Efficient Building Operations Based on the IFC Data Model Standard", Book: Progress in Sustainable Energy Technologies Vol II". Springer International Publishing Switzerland. ISBN: 978-3-319-07976-9.
- Gökçe K. U., Gökçe H. U. (2014). "Chapter 22: Virtual Energy Platform for Low Energy Building Operations", Book: Progress in Sustainable Energy Technologies Vol II". Springer International Publishing Switzerland. ISBN: 978-3-319-07976-9.

PEER REVIEWED JOURNAL PUBLICATIONS -

- 7) Gökçe, K. U., Gökçe, H. U., Katranuschkov, P. (2013). "IFC based Product Catalogue Formalization for Software Interoperability.", Journal of Computing in Civil Engineering, 27(1):36-50. DOI:10.1061/(ASCE)CP.1943-5487.0000194. SCI A.
- 8) Gökçe, H.U. and Gökçe, K. U. (2013). "Integrated System Platform for Energy Efficient Building Operations." Journal of Computing in Civil Engineering, 10.1061/(ASCE)CP.1943-5487.0000288 (Jan. 5, 2013). SCI A.
- 9) Gökçe, H. U., Gökçe, K. U. (2013). "Holistic System Architecture for Energy Efficient Building Operations." Journal of Sustainable Cities and Society, 6 (2013) 77–84. Elsevier Press.
- 10) Gökçe, H. U., Gökçe, K. U. (2014). "Multi Dimensional Energy Monitoring, Analysis and Optimization System for Energy Efficient Building Operations" Journal of Sustainable Cities and Society, 10 (2014) 161–73. Elsevier Press.
- Gökçe, H. U., Gökçe, K. U. (2020). "Techno-Economic Analysis of the Indigenous Sensor Development for Energy Efficient Buildings Research Project." Turkish Studies – Information Technologies and Applied Sciences, 15(3), 325-344. https://dx.doi.org/10.47844/TurkishStudies.44680.
- 12) Gökçe, K. U., Gökçe, K. U. (2020). "Research, Development and Validation of a System Consisting of a Wireless Sensor Network, Multi-Dimensional Data Warehouse, Decision Support Software and Wireless Network Embedded Hardware for Improving Energy Efficiency in Buildings." Turkish Studies – Information Technologies and Applied Sciences, 15(3), 345-360. https://dx.doi.org/10.47844/TurkishStudies.43963.
- Gökçe, K. U., Gökçe, H. U. (2021). "Economic, Social and Environmental Impact Analysis of an Indigenously Developed Energy Optimization System for German Office and Residential Building Types" International Journal of Low-Carbon Technologies 2021, 00, 1-14, DOI:10.1093/ijlct/ctab002.
- 14) Gökçe, K. U., Gökçe, H. U. (2021). "Intelligent Energy Optimization System Development and Validation for German Building Types" International Journal of Low-Carbon Technologies, under review. SCI-Expanded. Impact Factor: 1,622. Online Access: <u>https://academic.oup.com/ijlct</u>
- 15) Gökçe, K. U., Gökçe, H. U. (2021). "On-Grid Energy Plus Building Concept Integrated with Photovoltaic Solar Panels and Wind Turbine and Hydrogen Fuel Cell Systems", International Journal of Low-Carbon Technologies, under review. SCI-Expanded. Impact Factor: 1,622. Online Access: <u>https://academic.oup.com/ijlct</u>
- 16) Gökçe, H. U., Gökçe, K. U. (2021). "Research, Development and Verification of an Integrated System Architecture for Energy Generation from Buildings and Smart Energy Management." Turkish Studies – Information Technologies and Applied Sciences, under review. ULAKBİM TR-Dizin (TÜBİTAK). Online Access: https://turkishstudies.net/turkishstudies?mod=sayfabilgi&sayfa_alias=Dizinlenme%20Bilgileri
- 17) Gökçe, H. U., Gökçe K. U. (2021). Economic, Social and Environmental Impact Analysis of an Indigenously Developed On--Grid Energy Plus Building Concept Integrated with Photovoltaic Solar Panels, Wind Turbine and Hydrogen Fuel Cell Systems, under preparation. SCI-Expanded. Impact Factor: 5,268. Online Access: https://www.journals.elsevier.com/sustainable-cities-and-society.
- 18) Keller, M., O'Donnell, J., Menzel, K., Keane, M., Gökçe, H.U. (2008): Integrating the Specification, Acquisition and Processing of Building Performance Information, Proceedings of the Tsinghua Science and Technology ISSN 1007-0214 01/17 pp1-6 Volume 13, Number 1, October 2008.

PEER REVIEWED INTERNATIONAL CONFERENCE PUBLICATIONS

- 19) Gökçe, H. U., Browne, D., Gökçe, K. U., Menzel, K. (2009). "Improving Energy Efficient Operation of Buildings with Wireless IT Systems." Proceedings of 18th International Conference on the Application of Computer Science and Mathematics in Architecture and Civil Engineering, K. Gürlebeck and C. Könke (eds.), Weimar, Germany, 07–09 July 2009, ISSN: 1611-4086, Pages: 187-193.
- 20) Gökçe, H. U., Wang, Y., Gökçe, K. U., Menzel, K. (2009). "A Data-Warehouse Architecture supporting Energy Management of Buildings." Proceedings of Dikbas A., Ergen E. & Giritli H. (eds.): "Sustainability", Proceedings of 26th W78 Conference on Information Technology in Construction, ISBN 978-0-415-56744-2 (hbk), ISBN 978-0-203-85978-0 (eBook) pp.611 – 619, ITU, Istanbul, Turkey, 1-3 October 2009. Pages: 287-292.
- 21) Gökçe, H. U., Gökçe, K. U., Browne, D., Menzel, K. (2009). "Dynamic System Architecture for Energy Efficient Building Operation: A Case Study of Kiptas Residential Building." Proceedings of Dikbas A., Ergen E. & Giritli H. (eds.): "Sustainability", Proceedings of 26th W78 Conference on Information Technology in Construction, ISBN 978-0-415-56744-2 (hbk), ISBN 978-0-203-85978-0 (eBook) pp.611 – 619, ITU, Istanbul, Turkey, 1-3 October 2009. Pages: 101-110.
- 22) Gökçe, H. U., Stack, P., Gökçe, K. U., Menzel K. (2009). "Maintenance Scheduling based on the Analysis of Building Performance Data." Proceedings of Dikbas A., Ergen E. & Giritli H. (eds.): "Sustainability", Proceedings of 26th W78 Conference on Information Technology in Construction, ISBN 978-0-415-56744-2 (hbk), ISBN 978-0-203-85978-0 (eBook) pp.611 – 619, ITU, Istanbul, Turkey, 1-3 October 2009. Pages: 507-516.
- 23) Gökçe, K. U., Gökçe, H. U., Scherer R. J. (2011). "IFC Based Integrated Construction Management Processes." Proceedings of the CIB W078-W102 2011 Joint Conference, Sophia Antipolis, France, 26-28 October. The CIB W078 – W102 Conference: Computer, Knowledge, Building. ISBN 978-90-6363-068-3.
- 24) Gökçe, K. U., Gökçe, H. U., Scherer R. J. (2011). "The Construction Management Phases for Software Interoperability." Proceedings of the CIB W078-W102 2011 Joint Conference, Sophia Antipolis, France, 26-28 October. The CIB W078 – W102 Conference: Computer, Knowledge, Building. ISBN 978-90-6363-068-3.
- 25) Gökçe, H. U., Gökçe, K. U., Katranuschkov, P. (2011). A Model-Driven Building Information Management System for Low Energy Building Operation." Proceedings of the CIB W078-W102 2011 Joint Conference, Sophia Antipolis, France, 26-28 October. The CIB W078 – W102 Conference: Computer, Knowledge, Building. ISBN 978-90-6363-068-3.
- 26) Gökçe, K. U., Gökçe, H. U. (2011). "Multi Dimensional Information Management Platform for Wireless Embedded Monitoring of Building Performance Data." Proceedings of the 11th International Conference on Construction Applications of Virtual Reality, Weimar, Germany, November 3-4. Heft 21: Hans-Joachim Bargstädt, Karin Ailland (Eds.), ISBN: 978-3-86068-458-0.
- 27) Gökçe, H. U., Gökçe, K. U., Scherer R. J. (2011). "Holistic System Architecture for Low Energy Building Operations." Proceedings of the 10th International Conference in Sustainable Energy Technologies, Istanbul, Turkey, 4-7 September. ISBN: 978-605-88549-1-8.
- 28) Gökçe, K. U., Gökçe, H. U., Scherer R. J. (2011). "Holistic System Architecture for Energy Efficient Public Spaces." Proceedings of the 10th International Conference in Sustainable Energy Technologies, Istanbul, Turkey, 4-7 September. ISBN: 978-605-88549-1-8.
- 29) Gökçe, K. U., Gökçe, H. U., Scherer, R. J. (2012). "eeBIM for Energy Efficient Building Operations." Proceedings of the 14th International Conference on Computing in Civil and Building Engineering, 27 - 29 June 2012, Moscow, Russia: Moscow State University of Civil Engineering. ISBN 978-5-93093-881-4.
- 30) Gökçe, H. U., Gökçe, K. U. (2012). "Dynamic System Platform for Energy Efficient Buildings." Proceedings of the 14th International Conference on Computing in Civil and Building Engineering, 27 - 29 June 2012, Moscow, Russia: Moscow State University of Civil Engineering. ISBN 978-5-93093-881-4.
- 31) Gökçe, H. U., Gökçe, K. U. (2012). "Multi Dimensional Information Management System for Energy Efficient Building Operations." Proceedings of the 14th International Conference on Computing in Civil and Building Engineering, 27 - 29 June 2012, Moscow, Russia: Moscow State University of Civil Engineering. ISBN 978-5-93093-881-4.

- 32) Gökçe, H. U., Gökçe, K. U. (2012). "Integrated Energy Management Platform for Energy Optimized Public Spaces." Proceedings of the 14th International Conference on Computing in Civil and Building Engineering, 27 - 29 June 2012, Moscow, Russia: Moscow State University of Civil Engineering. ISBN 978-5-93093-881-4.
- 33) Gökçe, K. U., Gökçe, H. U. Scherer, R. J. (2012). "A Methodology to Define Generic IFC Views in the Construction Management Domain", Proceedings of the 9th European Conference of Product and Process Modeling, July 25 -27, 20 Reykjavik, Iceland, eWork and eBusiness in Architecture, Engineering and Construction – Gudnason & Scherer (Eds) © 2012 Taylor & Francis Group, London, ISBN 978-0-415-62128-1.
- 34) Gökçe, K. U., Gökçe, H. U. Scherer, R. J. (2012). "A Methodology to Integrate Construction Management Phases and Processes", Proceedings of the 9th European Conference of Product and Process Modeling, July 25 - 27, Reykjavik, Iceland, eWork and eBusiness in Architecture, Engineering and Construction – Gudnason & Scherer (Eds) © 2012 Taylor & Francis Group, London, ISBN 978-0-415-62128-1.
- 35) Gökçe, H. U., Gökçe, K. U. (2012). "Integrated System Architecture for Optimized Building Operations." Proceedings of the 9th European Conference of Product and Process Modeling, July 25 - 27, Reykjavik, Iceland, eWork and eBusiness in Architecture, Engineering and Construction – Gudnason & Scherer (Eds) © 2012 Taylor & Francis Group, London, ISBN 978-0-415-62128-1.
- 36) Gökçe, H. U., Gökçe, K. U. (2012). "Multi Dimensional Energy monitoring and Optimization System for Energy Efficient Building Operations." Proceedings of the 9th European Conference of Product and Process Modeling, July 25 27, Reykjavik, Iceland, eWork and eBusiness in Architecture, Engineering and Construction Gudnason & Scherer (Eds) © 2012 Taylor & Francis Group, London, ISBN 978-0-415-62128-1.
- 37) Gökçe, K. U., Gökçe, H. U. (2012). "Intelligent Services for Energy Efficient Smart Cities", Proceedings of 11th International Conference on Sustainable Energy Technologies, September 2 - 5, Vancouver, Canada, ISBN: 0-9781236-1-2.
- 38) Gökçe, K. U., Gökçe, H. U. (2012). "Virtual Energy Platform for Low Energy Building Operations", Proceedings of 11th International Conference on Sustainable Energy Technologies, September 2 - 5, Vancouver, Canada, ISBN: 0-9781236-1-2.
- 39) Gökçe, H. U., Gökçe, K. U. (2012). "Integrated Systems Concept for Energy Efficient Building Operation", Proceedings of 11th International Conference on Sustainable Energy Technologies, September 2 - 5, Vancouver, Canada, ISBN: 0-9781236-1-2.
- 40) Gökçe, H. U., Gökçe, K. U. (2012). "Interoperable ICT Platform for Energy Efficient Smart Buildings", Proceedings of 11th International Conference on Sustainable Energy Technologies, September 2 - 5, Vancouver, Canada, ISBN: 0-9781236-1-2.
- 41) Tanzia Sharmin, Xinming Li, Gul M., Gökçe H.U., Al-Hussein M. (2012). "Monitoring Building Energy Performance Under Occupancy", Proceedings of 11th International Conference on Sustainable Energy Technologies, September 2 - 5, Vancouver, Canada, ISBN: 0-9781236-1-2.
- 42) Xinming Li, Tanzia Sharmin, Gökçe H.U*.,Gul M., Al-Hussein M. (2012). "Integrated Monitoring Framework for Geothermal Heating System", Proceedings of 11th International Conference on Sustainable Energy Technologies, September 2 - 5, Vancouver, Canada, ISBN: 0-9781236-1-2.
- Gökçe, K. U., Gökçe, K. U. (2012). "Integrated ICT Architecture for Energy Efficient Buildings." Proceedings of Construction Research Congress (CRC) 2012, Purdue University West Lafayette, IN, USA, May 21 – 23. Volume 1 of 3. ISBN: 978-1-62276-155-5.
- 44) Gökçe, H. U., Gökçe, K. U. (2012). "Integrated ICT Platform for Energy Efficient Smart Cities." Proceedings of Construction Research Congress (CRC) 2012, Purdue University West Lafayette, IN, USA, May 21 – 23. Volume 1 of 3. ISBN: 978-1-62276-155-5.
- 45) Gökçe H.U., Gökçe K. U. (2013). "Multi-Dimensional Energy Optimization System as an Intelligent Agent for Build Environments", Proceedings of 12th International Conference on Sustainable Energy Technologies, 26-29 August 2013, Hong-Kong, China. ISBN 978-988-15439-4-3.
- 46) Gökçe H.U., Gökçe K. U. (2013). "Integrated Energy Management Platform for Energy Optimised Office Spaces", Proceedings of 12th International Conference on Sustainable Energy Technologies, 26-29 August 2013, Hong-Kong, China. ISBN 978-988-15439-4-3.
- 47) Gökçe K.U., Gökçe H. U. (2013). "eeBIM for Energy Optimised Building Operations", Proceedings of 12th International Conference on Sustainable Energy Technologies, 26-29 August 2013, Hong-Kong, China. ISBN 978-988-15439-4-3.

- 48) Gökçe H.U., Gökçe K. U. (2013). "Energy Plus Building Concept Integrated with Methanol Based Hydrogen Fuel Cell Systems", Proceedings of 12th International Conference on Sustainable Energy Technologies, 26-29 August 2013, Hong-Kong, China. ISBN 978-988-15439-4-3.
- 49) Gökçe H.U., Gökçe K. U. (2013). "Hybrid Building Concept Integrated with Off-the-Grid Energy Generation Systems and Smart City Grids", Proceedings of 12th International Conference on Sustainable Energy Technologies, 26-29 August 2013, Hong-Kong, China. ISBN 978-988-15439-4-3.
- 50) Gökçe H.U., Gökçe K. U. (2013). "A Hybrid Energy Generation and Management Platform for Energy Efficient Smart Buildings", Proceedings of the 30th CIB W78 International Conference October 9-12, 2013, Beijing, China.
- 51) Gökçe K.U., Gökçe H. U. (2013). "Ifc Based Model View Definition for Hybrid Energy Systems", Proceedings of the 30th CIB W78 International Conference October 9-12, 2013, Beijing, China.
- 52) Gökçe H.U., Gökçe K. U. (2013). "Interoperable Energy Management System Concept for Energy Efficient Smart Buildings", Proceedings of the 30th CIB W78 International Conference - October 9-12, 2013, Beijing, China.
- 53) Gökçe K.U., Gökçe H. U. (2013). "Ifc View for Bill of Quantities for Software Interoperability", Proceedings of the 30th CIB W78 International Conference October 9-12, 2013, Beijing, China.
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THE TECHNICAL REPORTS

Associated with the R&D projects involved in Germany, Ireland, Canada and Turkey, I have written/contributed to more than 50 Scientific Reports and Project Deliverables.

COURSES TAUGHT -

I have taught a variety of undergraduate and graduate courses at National University of Ireland (NUI-UCC), Istanbul Beykent University, Istinye University and Fresenius University of Applied Sciences. I have created various courses from scratch and have created online versions of many courses that have been traditionally taught face-to-face. Below please see the taught courses for the last four years.

Academic Year	Term	Course Name	Language	Hours in a week	
				Theory	Application
2016-2017	Fall	Use of Information Technologies	English	2	1
2016-2017	Fall	Management and Organization	English	3	
2016-2017	Fall	Data Mining	English	3	1
2016-2017	Fall	Introduction to Management	Turkish	1	
2016-2017	Spring	Database Management Systems	English	2	1
2016-2017	Spring	Internet and Web Programming I	English	2	1
2016-2017	Spring	Data Mining	Turkish	2	1
2017-2018	Fall	Internet and Web Programming II	English	2	1
2017-2018	Fall	Use of Information Technologies	English	2	1
2017-2018	Fall	Internet and Web Programming II	English	1	
2017-2018	Spring	Database Management Systems	English	2	1
2017-2018	Spring	Internet and Web Programming I	English	2	1
2017-2018	Spring	Use of Information Technologies	English	1	
2018-2019	Fall	Internet and Web Programming II	English	2	1
2018-2019	Fall	System Analysis and Design	English	2	1
2018-2019	Spring	Database Management Systems	English	2	1
2018-2019	Spring	Internet and Web Programming I	English	2	1
2018-2019	Spring	Use of Information Technologies	English	1	
2019-2020	Fall	Internet and Web Programming II	English	2	1
2019-2020	Fall	System Analysis and Design	English	2	1
2019-2020	Spring	Database Management Systems	English	2	1
2019-2020	Spring	Internet and Web Programming I	English	2	1
2019-2020	Spring	Use of Information Technologies	Turkish	1	
2020-2021	Fall	Internet and Web Programming II	English	2	1
2020-2021	Fall	System Analysis and Design	English	2	1
2020-2021	Spring	Database Management Systems	English	2	1
2020-2021	Spring	Internet and Web Programming I	English	2	1
2020-2021	Spring	Use of Information Technologies	English	2	1
2020-2021	Spring	Introduction to MIS	English	3	
2020-2021	Spring	C Structural Programming	English	2	3
2020-2021	Spring	Quality Management	English	3	1
2021-2022	Fall	Object Oriented Programming	English	2	3
2021-2022	Fall	Database Management Systems	English	2	3
2021-2022	Fall	Web Based Programming	English	2	3