# Curriculum Vitae Hakan Gultekin, PhD

# **1. PERSONAL INFORMATION**

| CITIZENSHIP:      | Turkish  |
|-------------------|--|
| MARITAL STATUS:   | Married  |
| PERMANENT ADRESS: | Yavuz Selim Mahallesi 552 Sokak Serenkoy Sitesi No 5 Eryaman<br>Ankara Turkiye   |
| CURRENT ADRESS:   | Department of Mechanical and Industrial Engineering<br>College of Engineering, Sultan Qaboos University<br>PC 123, Al-Khoud, Sultanate of Oman<br>Telephone: (968) 72276509 (mobile), (968) 24143757 (office)<br>E-mail: <u>hgultekin@squ.edu.om; hakan.gultekin@gmail.com</u> |

# **2. EDUCATION AND EMPLOYMENT INFORMATION**

# 2.1 EDUCATION

| Year      | Major Field of Study       | Degree                                       | Institution                               |
|-----------|----------------------------|--|---|
| 2002-2007 | Industrial Engineering     | Ph.D.  | Bilkent University, Turkiye               |
|           | Cumulative GPA: 3.96/4.00. |  | Cumulative GPA: 3.96/4.00.                |
|           |                            | Ph.D. Dissertation Title: Scheduling in Flex |   |
|           |                            | Robotic Manufacturing Cells, Supervisor: Pr  |   |
|           |                            |  | M. Selim Akturk                           |
| 2000-2002 | Industrial Engineering     | M.Sc.  | Bilkent University, Turkiye               |
|           |                            |  | Cumulative GPA: 3.92/4.00.                |
|           |                            |  | Thesis title:Robotic Cell Scheduling with |
|           |                            |  | Operational Flexibility                   |
|           |                            |  | Supervisor: Prof. M. Selim Akturk         |
| 1996-200  | Industrial Engineering     | B.Sc.  | Bilkent University, Turkiye               |
|           |                            |  | Cumulative GPA: 3.52/4.00                 |

# 2.2 CAREER HISTORY

# 2.2.1 Academic Positions Held

| Period       | Institution                                      | Position            |
|--------------|--|---------------------|
| 2018-present | Department of Mechanical and Industrial          | Associate Professor |
|              | Engineering, Sultan Qaboos University, Oman      |                     |
|              | Department of Industrial Engineering, TOBB       |                     |
| 2014-2018    | University of Economics and Technology, Turkiye. | Associate Professor |
| 2007-2014    | Department of Industrial Engineering, TOBB       | Assistant Professor |
|              | University of Economics and Technology, Turkiye. |                     |

#### **2.2.2 Administrative Positions Held**

| Period                   | Institution   | Position  |
|--------------------------|---|---|
| 2019-2024                | Sultan Qaboos University, Oman                        | Department Postgraduate Studies<br>and Research (DPGSR) Committee<br>Chair, IE PGR Coordinator,<br>College Research Committee<br>member |
| 2014-2018 &<br>2008-2009 | TOBB University of Economics and Technology, Turkiye. | Board Member, Engineering Faculty,  |
| 2011-2013                | TOBB University of Economics and Technology, Turkiye. | Assistant Dean, Engineering<br>Faculty  |
| 2010-2011                | TOBB University of Economics and Technology, Turkiye. | Assistant Director, Institute of<br>Engineering and Sciences  |

# **3. TEACHING AND LEARNING**

# 3.1 COURSES TAUGHT AT SULTAN QABOOS UNIVERSITY

| No | Course Code and Name   | Semester    | Number<br>of<br>Students | Teaching<br>Evaluation<br>(out of 4.0) |
|----|--|-------------|--------------------------|--|
| 1  | MEIE6216 Logistics and Supply Chain<br>Engineering (MSc)           | Spring 2023 | 4                        | N/A<br>(<5 students)                   |
| 2* | MEIE6206 Applied Optimization (MSc)                                | Spring 2020 | 7                        | N/A<br>(pandemic)                      |
| 3* | MEIE6211 Special Topics in IE - Sequencing<br>and Scheduling (MSc) | Fall 2020   | 6                        | N/A<br>(pandemic)                      |
| 4  | MEIE5262 Industrial Systems Design                                 | Fall 2023   | 14                       | 3.88                                   |
|    |  | Fall 2022   | 23                       | 3.55                                   |
|    |  | Fall 2021   | 18                       | 3.61                                   |
|    |  | Fall 2020   | 11                       | N/A<br>(Pandemic)                      |
|    |  | Fall 2019   | 17                       | 3.65                                   |
|    |  | Fall 2018   | 19                       | 3.35                                   |
| 5  | MEIE4255 Facilities Design and Logistics                           | Spring 2024 | 21                       | 3.62                                   |
|    | Former (MEIE4275)  | Spring 2023 | 15                       | 3.91                                   |
|    |  | Spring 2022 | 26                       | 3.33                                   |
|    |  | Spring 2020 | 12                       | N/A                                    |

#### \* Denotes the courses that are designed by me

|    |  |             |    | (Pandemic)               |
|----|--|-------------|----|--------------------------|
| 6  | MEIE3279 Theory of Modeling and            | Spring 2024 | 11 | 3.67                     |
|    | Optimization                               | Spring 2023 | 8  | 3.70                     |
|    | (Former MEIE3269 Mathematics of Linear     | Fall 2021   | 21 | 3.63                     |
|    | Programming)                               | Fall 2020   | 26 | N/A (due to<br>Pandemic) |
|    |  | Fall 2019   | 20 | 3.68                     |
| 7  | MEIE3271 Methods of Operations Research    | Spring 2022 | 19 | 3.69                     |
|    |  | Spring 2021 | 22 | 3.51                     |
|    |  | Spring 2020 | 17 | N/A (due to<br>Pandemic) |
| 8  | MEIE3292 Work System Analysis and Design   | Fall 2023   | 27 | 3.81                     |
|    |  | Fall 2022   | 23 | 3.60                     |
| 9  | MEIE5265 Computer Integrated Manufacturing | Fall 2018   | 8  | 3.34                     |
| 10 | MEIE4285 Engineering Economics             | Spring 2021 | 32 | 3.09                     |
|    |  | Spring 2019 | 46 | 3.44                     |

# 3.2 COURSES TAUGHT AT OTHER UNIVERSITIES

|    |  |             | Number<br>of | Teaching<br>Evaluation |
|----|--|-------------|--------------|------------------------|
| No | Course Code and Name   | Semester    | Students     | (out of 5.0)           |
| 1  | END 520 Advanced Production Systems and<br>Inventory Control (MSc) | Spring 2013 | 14           | 4.80                   |
| 2* | END 524 Sequencing and Scheduling (MSc)                            | Fall 2017   | 11           | 5.00                   |
|    |  | Fall 2015   | 10           | 5.00                   |
|    |  | Fall 2013   | 9            | 4.88                   |
|    |  | Spring 2012 | 22           | 4.97                   |
| 3* | END 527 Facility Location and Layout Models (MSc)                  | Fall 2016   | 11           | 5.00                   |
| 4* | END 429 Energy Systems Planning                                    | Spring 2017 | 15           | N/A                    |
| 5* | END 424 Quantitative Decision Making                               | Summer 2016 | 33           | N/A                    |
|    | Methods  | Summer 2014 | 38           | 4.26                   |
| 6  | END 294 Operations Research I                                      | Fall 2012   | 39           | 4.62                   |
|    |  | Summer 2008 | 22           | 4.57                   |
| 7  | END 395 Operations Research II                                     | Spring 2018 | 99           | 4.30                   |
|    |  | Spring 2017 | 90           | 4.62                   |
|    |  | Spring 2016 | 93           | N/A                    |
|    |  | Spring 2015 | 80           | 4.44                   |
|    |  | Spring 2014 | 88           | 4.73                   |
|    |  | Summer 2011 | 54           | 4.71                   |
|    |  | Spring 2011 | 81           | 4.75                   |
|    |  | Fall 2008   | 48           | 4.82                   |

|    |  | Spring 2008 | 7   | 4.83 |
|----|--|-------------|-----|------|
| 8  | END 308 Facilities Design and Planning               | Fall 2017   | 51  | N/A  |
|    |  | Fall 2014   | 63  | 4.40 |
|    |  | Summer 2010 | 64  | 4.68 |
| 9  | END 320 Engineering Economy                          | Spring 2013 | 132 | 4.07 |
|    |  | Spring 2012 | 111 | 3.68 |
|    |  | Spring 2009 | 37  | 4.00 |
|    |  | Fall 2008   | 103 | 4.34 |
| 10 | Production Planning II (Turkish Military<br>Academy) | Spring 2016 | 28  | N/A  |

# 3.3 SUPERVISION OF STUDENTS

#### **SUMMARY**

| Research Students Supervised/Trained               |                    |
|--|--------------------|
| Level  | Number of Students |
| PhD Students                                       | 4                  |
| Master Students                                    | 20                 |
| Undergraduate Students (FYP and Research Projects) | >80                |

# Participation in Thesis and Oral Examination Committees

| Level           | Number of Examinations |
|-----------------|------------------------|
| PhD Students    | 7                      |
| Master Students | > 20                   |

# 3.3.1 Ph.D. Students

| # | Thesis H  | Role    | Outcome<br>J: Journal<br>JS Journal Submitted<br>C: Conference Paper<br>A: Abstract |
|---|---|---------|---|
| 1 | Ali Al-Kalbani, Sultan Qaboos University, Department of Sup     | ervisor |   |
|   | Mechanical and Industrial Engineering, Ph.D. Thesis, "Hydrogen  |         |   |
|   | Supply Chain Network Design and Optimization", (December        |         |   |
|   | 2025, expected).  |         |   |
| 2 | Khalid Al-Fahdi, Sultan Qaboos University, Department of Sup    | ervisor | J1  |
|   | Mechanical and Industrial Engineering, Ph.D. Thesis,            |         | C2, C3, C9  |
|   | "Developing a Reliability Data Framework for Real-time Plant    |         |   |
|   | Healthiness Index Estimation, Prediction and Failure Prevention |         |   |
|   | Using Deep Learning Approach with an Application in Oman Oil    |         |   |
|   | & Gas Industry", (June 2025, expected).                         |         |   |
| 3 | Cihan Emre Kement, TOBB University of Economics and             | Co-     | J5, J9, J10, J16  |
|   | Technology, Department of Electrical and Electronics sup        | ervisor |   |
|   | Engineering, PhD Thesis, "Load Shaping Based Privacy            |         |   |
|   | Preservation Strategies in Smart Grids", (December 2020).       |         |   |

| 4 Cihan Tugrul Cicek, TOBB University of Economics and Supervisor | J6, J12, J13, |
|---|---------------|
| Technology, Department of Industrial Engineering, Ph.D. Thesis,   | C11,          |
| "Drone base station location problems and solution strategies",   | A4, A10, A17  |
| (November 2019).  |               |

#### 3.3.2 M.Sc. Students

| # | Thesis   | Role          | Outcome<br>J: Journal<br>C: Conference Paper<br>A: Abstract<br>B: Book |
|---|--|---------------|--|
| 1 | Aisha Al-Abri, Sultan Qaboos University, Department of<br>Mechanical and Industrial Engineering, M.S. Thesis,<br>"Identifying KPIs used to evaluate the performance of industrial<br>estates using the balanced scorecard in Sultanate of Oman",<br>(February 2023).         | Co-supervisor |  |
| 2 | Aza Al-Riyami, Sultan Qaboos University, Department of<br>Mechanical and Industrial Engineering, M.S. Thesis, "Integrated<br>Team Planning and Maintenance Scheduling for Geographically<br>Distributed Assets", (January 2023).   | Co-supervisor | A2   |
| 3 | Nasser Al-Hassani, Sultan Qaboos University, Department of<br>Mechanical and Industrial Engineering, M.S. Thesis,<br>"Emergency Shelter Location and Relief Supplies Management:<br>A Case Study for the Sultanate of Oman", (September 2022)                                | Supervisor    | A5   |
| 4 | Awadh Al Sheheimi, Sultan Qaboos University, Department of<br>Mechanical and Industrial Engineering, M.S. Thesis, "Defining<br>Artificial Neural Network Hyperparameters for Forecasting<br>Spare Parts: Case Study in the Oil and Gas Industry in Oman",<br>(January 2021). | Co-supervisor | C7   |
| 5 | Ahmed Faruk Uslu, Central Bank of Turkiye, "Multi criteria decision support model for optimal site selection of central bank branches", (January 2019).  | Supervisor    |  |
| 6 | Nurdan Tatar, TOBB University of Economics and Technology,<br>Department of Industrial Engineering, M.S. Thesis, "Energy-<br>aware scheduling of dual gripper robotic cells", (August 2019).   | Supervisor    | J4<br>C12<br>A16, A22  |
| 7 | Zeynep Bulbul, TOBB University of Economics and<br>Technology, Department of Industrial Engineering, M.S. Thesis,<br>"A logic-based Benders decomposition algorithm for machine<br>scheduling with overtime and sequence dependent setup times",<br>(August 2017).           | Supervisor    | A23, A27   |
| 8 | Fatih Mehmet Kaya, Ministry of Energy and Natural Resources<br>of Turkiye, "The Importance of Natural Gas Storage in Ensuring<br>Supply Security and Determining the Storage Capacity to be<br>Established in Turkiye", February 2017.                                       | Supervisor    |  |
| 9 | Vahid Eghbal Akhlaghi, Middle East Technical University,<br>Department of Industrial Engineering, M.S. Thesis, "Green<br>robotic cell scheduling", (December 2016).  | Co-supervisor | J14, J15<br>C13  |

|    |  |                          | A14, A18, A25,<br>A28, A29, A31,<br>A33, A35, A37,<br>A38, A39 |
|----|--|--------------------------|--|
| 10 | Betul Coban, TOBB University of Economics and Technology,<br>Department of Industrial Engineering, M.S. Thesis, "Cyclic<br>scheduling in robotic cells producing multiple part types", (June<br>2016).   | Supervisor               | J15<br>C13<br>A29, A31, A33,<br>A35, A37                       |
| 11 | Cansu Agrali, TOBB University of Economics and Technology,<br>Department of Industrial Engineering, M.S. Thesis,<br>"Optimization of energy storage decisions in power networks<br>with renewable generation", (August 2016).  | Supervisor               | J11<br>A32, A34  |
| 12 | Elif Busra Ataseven, TOBB University of Economics and<br>Technology, Department of Industrial Engineering, M.S. Thesis,<br>"Bicriteria Line Balancing in Robotic Cells", (December 2014).  | Supervisor               | C14  |
| 13 | Ugur Yildiz, TOBB University of Economics and Technology,<br>Department of Industrial Engineering, M.S. Thesis,<br>"Maximizing Lifetime and Security in Wireless Sensor<br>Networks", (August 2014).   | Co-supervisor            | A47  |
| 14 | Ozden Onur Dalgic, TOBB University of Economics and<br>Technology, Department of Industrial Engineering, M.S. Thesis,<br>"Pure cycles in dual gripper robotic cells", (August 2013).   | Supervisor               | J17<br>A42, A45  |
| 15 | Emine Gundogdu, TOBB University of Economics and<br>Technology, Department of Industrial Engineering, M.S. Thesis,<br>"Scheduling in robotic cells with self-buffered robots", (August<br>2013).   | Supervisor               | J19<br>A36, A43, A51   |
| 16 | Seda Sucu, TOBB University of Economics and Technology,  | Supervisor               | A46, A48   |
|    | Department of Industrial Engineering, M.S. Thesis, "Throughput maximization in flowshops with multiple parts and flexible operations", (August 2013).  |                          |  |
| 17 |  | Supervisor               | A44, A49   |
| 17 | <ul><li>maximization in flowshops with multiple parts and flexible operations", (August 2013).</li><li>Fatma Isler, TOBB University of Economics and Technology, Department of Industrial Engineering, M.S. Thesis, "Operation</li></ul>   | Supervisor<br>Supervisor | A44, A49<br>A54  |
|    | <ul> <li>maximization in flowshops with multiple parts and flexible operations", (August 2013).</li> <li>Fatma Isler, TOBB University of Economics and Technology, Department of Industrial Engineering, M.S. Thesis, "Operation allocation in 3-machine flowshops", (August 2013).</li> <li>Sumru Ustunol, TOBB University of Economics and Technology, Department of Industrial Engineering, M.S. Thesis,</li> </ul> |                          |  |

# **3.3.3 Final Year Projects (FYPs)**

| #       | Project Details   | Student Names                                       | Awards/Achievements  |
|---------|---|---|--|
| <u></u> | Design and Optimization of Hydrogen Supply Chain  | Student Manes                                       | Second Place, 11th   |
|         | Network: A Case Study of Oman   | Hawraa Al Balushi                                   | Undergraduate Research &   |
|         | ·   | Abdulrahman Al Mansoori                             | Innovation Competition - Abu   |
|         |   | Ali Al Rawahi                                       | Dhabi University   |
| 2       | Feasibility Analysis of Residential Renewable Generators  | Rayyan Khalid Al Kharusi                            | Best project award,  |
|         | in Oman and Developing a Smart Home Energy  | Aisha Qais Al Khalili                               | Department FYP competition   |
|         | Management System, Department of Mechanical and   | Shahad Khalid Al Shariyani                          |  |
|         | Industrial Engineering, Sultan Qaboos University, 11 May  | Al Rayyan Saleh Al Rashdi                           |  |
|         | 2023.   |   |  |
| 3       | Drilling Rigs Planning and Scheduling, Department of  | Ahmed Mohamed Al-Mazroey<br>Husam Hamdan Al-Nasseri | • Upgrade Program, Ministry  |
|         | Mechanical and Industrial Engineering, Sultan Qaboos  | Mazin Matar Al-Rubkhi                               | of Higher Education, Oman  |
|         | University, 16 May 2022.  | Mazin Matar Al-Kuokin                               | • Best project award,  |
|         |   |   | Department FYP   |
|         |   |   | competition  |
|         |   |   | Second place, Senior Design     Design |
|         |   |   | Project Competition, IEOM<br>Society, The 12th Annual  |
|         |   |   | International Conference, 7-   |
|         |   |   | 10 May 2022.   |
| 4       | Developing a forecasting model and simulator for a  | Jaffar Malallah AL Bahrani                          | 101111 2022  |
|         | pandemic, Department of Mechanical and Industrial   | Ibrahim Ahmed AL Toubi                              |  |
|         | Engineering, Sultan Qaboos University, 2021.  |   |  |
| 5       | Design and Development of University Course and Exam  | Aseel Sami Al-Zadjali                               |  |
|         | Timetabling Problem, Department of Mechanical and   | Razan Hamed Al-Fazari                               |  |
|         | Industrial Engineering, Sultan Qaboos University, 2020.   | Zahra Hamed Al-Ishaqi                               |  |
| 6       | Developing an Automated Crew Scheduling System for  | Shaima Salam Al-Toobi                               |  |
|         | Salam Air, Department of Mechanical and Industrial  | Nahla Mahmoud Al-Lamki                              |  |
|         | Engineering, Sultan Qaboos University, 2019. (Co-   | Sheikha Saleh Al-Senaidi                            |  |
|         | Supervisor)   |   |  |
| 7       | Chemcial Storage Inventory Planning and Decision Support  | Kerem Berk AK                                       |  |
|         | System Design for FNSS, Department of Industrial<br>Engineering, TOBB University of Economics and   | Gözde BENLİ<br>Dilara CERAN                         |  |
|         | Technology, 2018.   | Müjdat OKAN   |  |
|         | reemology, 2018.  | Merve ÖZDEN   |  |
| 8       | Order Pick-up Process Optimization for Borusan ArGe,  | Elif İrem TÜRKMEN                                   | • Best project award,  |
| U       | Department of Industrial Engineering, TOBB University of  | Hasan PEHLİVAN                                      | Department FYP   |
|         | Economics and Technology, 2018.   | Mustafa Oğuzhan KOLSUZ                              | competition  |
|         |   | Osman Baturhan                                      | 1  |
|         |   | BAYRAKTAR   |  |
|         |   | Sude KOCAÇİFTÇİ                                     |  |
| 9       | Painted Parts AS/RS Systems Efficiency Improvement,   | Pınar AĞAN  |  |
|         | Inventory Control, and Optimization for ARCELIK Fridge  | Ahmet Koray AKOĞLU                                  |  |
|         | Factory, Department of Industrial Engineering, TOBB   | Melisa Cansu BOSTANCI                               |  |
|         | University of Economics and Technology, 2017.   | Özgür DOLUKAN                                       |  |
| 10      |   | Eda TOKGÖZ  |  |
| 10      | ANADOLUJET Airport Transfer Dynamic Pricing System  | Ali Can ARSLAN                                      |  |
|         | Design, Department of Industrial Engineering, TOBB<br>University of Economics and Technology, 2016. | Gizem GÜLEŞ<br>Nilay İLASLAN                        |  |
|         | Onversity of Economics and Technology, 2010.  | İbrahim Berat TORNACI                               |  |
|         |   | Ziya Ulaş UĞURLUOĞLU                                |  |
|         |   |   |  |

| 11 | Line Balancing and Workplace Layour for the Hydrolic Lift<br>Subgroup for TURK TRACTOR, Department of Industrial<br>Engineering, TOBB University of Economics and<br>Technology, 2015.                  | İsmet Emre<br>DEĞİRMENCİOĞLU<br>Mustafa Kaan GÖRGÜN<br>Mustafa KAHRAMAN<br>Kemal KAYA<br>Kadriye Ece KAYNAK<br>Ziya YAŞAT |  |
|----|---|---|--|
| 12 | Demand Forecasting and Production Planning Decision<br>Support System for the Telecom Group for KAREL,<br>Department of Industrial Engineering, TOBB University of<br>Economics and Technology, 2015.   | Zeynep BÜLBÜL<br>Merve KARAOĞLU<br>Elif SAMİM<br>Meltem TAŞLIK<br>Selay YETKİN  |  |
| 13 | Dishwasher Production Line Design and Balancing<br>Decision Support System for ARCELIK, Department of<br>Industrial Engineering, TOBB University of Economics and<br>Technology, 2015.                  | Onur Ahmet GÜNGÖR<br>Emre Anıl KAKİLLİOĞLU<br>Ayşe Elif KAYNAK<br>Tuğçe TUNÇ<br>Emre Berk ÜNSAL                           | • Third place, Department FYP competition.   |
| 14 | Assembly Line Process Improvement and Production<br>Planning Decision Support System for TERMIKEL,<br>Department of Industrial Engineering, TOBB University of<br>Economics and Technology, 2014.       | Özge ÇETİN<br>Özge ELCAN<br>Şelale ERDOĞDU<br>Özge UZUN<br>Özge ÜSTÜN   | • Finalist, YAEM Conference project competition  |
| 15 | Electric Meter Operations Design and Optimization for<br>ENERJISA, Department of Industrial Engineering, TOBB<br>University of Economics and Technology, 2014.  | Sinem DUMAN<br>Haluk Göksu İPEKTEN<br>Taşkın KARAKOÇ<br>Muhammed Osman KOÇ<br>Seher Deniz TEMİZ                           | • Second place, Department FYP competition.  |
| 16 | Locomotive and Machinist Planning Decision Support<br>System for TCDD, Department of Industrial Engineering,<br>TOBB University of Economics and Technology, 2014                                       | Cansu AĞRALI<br>Elif AKKAYA<br>Betül ÇOBAN<br>Göksu GÜLMEZ<br>Seda YÜNSEL   | <ul> <li>Third place, Department<br/>FYP competition.</li> <li>Finalist, YAEM Conference<br/>project competition</li> </ul>  |
| 17 | Decision Support System for Flight Parking Space<br>Assignment at Ankara Esenboga International Airport,<br>Department of Industrial Engineering, TOBB University of<br>Economics and Technology, 2013. | Gamze GEDİK<br>Gülin Begüm ÜNAL<br>Mehmet Serkan TOKGÖZ<br>Seda Nur KAYA<br>Tuğçe KABADAYI                                | <ul> <li>Best project award,<br/>Department FYP<br/>competition</li> <li>Journal Article, J20</li> <li>Third place, YAEM<br/>Conference project<br/>competition</li> </ul> |
| 18 | Production Line and Inventory Optimization for Yigit Aku,<br>Department of Industrial Engineering, TOBB University of<br>Economics and Technology, 2013.  | Pelin DUBA<br>İsmail Hakan MERT<br>Mert SEZEN<br>Ruşena ŞAHİN<br>Dilara TAMER   | • Second place, Department<br>FYP competition.   |
| 19 | Decision Support System for Assembly Line Balancing at<br>Erkunt Traktor, Department of Industrial Engineering,<br>TOBB University of Economics and Technology, 2012.                                   | Melike AYDOĞAN<br>Merve DURAK<br>Merve ÖZYILMAZ<br>Görkem SAKARYA<br>Burak Serkan SERTBARUT<br>Yusuf Kürşad UĞUR          | <ul> <li>Second place, Department<br/>FYP competition.</li> <li>Journal Article, J22</li> <li>Third place, YAEM<br/>Conference project<br/>competition</li> </ul>          |
| 20 | Design of Course and Exam Scheduling System for TOBB<br>ETU, Department of Industrial Engineering, TOBB<br>University of Economics and Technology, 2012.  | Hakan ATAR<br>Utku Can BİRCAN<br>Ömer Faruk ERDEM<br>Yiğitalp ÖZMEN<br>Onur ŞİMŞEK<br>Ebru TAŞTAN                         | <ul> <li>Third place, Department<br/>FYP competition.</li> <li>Finalist, YAEM Conference<br/>project competition</li> </ul>  |

| 21 | Developing an IT System for Production Monitoring and<br>Productivity Analysis, AYGERSAN, Department of<br>Industrial Engineering, TOBB University of Economics and<br>Technology, 2011.    | İrem Altunoluk<br>Rezzan Göksu<br>Mehmet İnce<br>Kürşad Rıza Emre<br>Mustafa Özdemir    |  |
|----|---|---|--|
| 22 | Decision Support System for Check-in Contour Assignment<br>at Ataturk International Airport, Department of Industrial<br>Engineering, TOBB University of Economics and<br>Technology, 2011. | Abdullah TAŞKINCAN<br>Erkin BAYRAKÇI<br>Onur BABAT<br>Özden Onur DALGIÇ<br>Selim YÜKSEL | <ul> <li>YAEM Conference best<br/>project award</li> <li>Journal Article, J24</li> <li>Best project award,<br/>Department FYP<br/>competition</li> </ul> |
| 23 | Car Battery Recycling Facility Design for MNC AKU,<br>Department of Industrial Engineering, TOBB University of<br>Economics and Technology, 2011.   | İrfan BATUR<br>Edasun ERGÜN<br>Ece HACIOSMANOĞLU<br>Pelin İPER<br>Uğur YILDIZ           | Second place, Department<br>FYP competition.   |

# 3.3.4 B.Sc. Students (Course Project)

| # | Project Details   | Student<br>Names               | Awards/Achievements<br>J: Journal<br>C: Conference Paper<br>A: Abstract<br>B: Book            |
|---|---|--------------------------------|---|
| 1 | MEIE 5295: Seminar, Drilling Rigs Planning and Scheduling,<br>Sultan Qaboos University, 2022  | Husam<br>Hamdan Al-<br>Nasseri |   |
| 2 | END498 Undergraduate Independent Research, Energy Aware<br>Scheduling of a Material Handling Robot in an m-Machine<br>Robotic Cell, Department of Mechanical and Industrial<br>Engineering, TOBB University of Economics and Technology,<br>2017                | Rabia Taspinar                 | The Undergraduate<br>Operations Research<br>Prize Competition,<br>finalist, INFORMS,<br>2019. |
| 3 | END498 Undergraduate Independent Research, Line Balancing<br>in Robotic Flowshops, Department of Mechanical and Industrial<br>Engineering, TOBB University of Economics and Technology,<br>2013   | Burak Can<br>Yildiz            | A39, A40  |
| 4 | END498 Undergraduate Independent Research, Preventive<br>Measures and optimization for security in wireless sensor<br>networks, Department of Mechanical and Industrial Engineering,<br>TOBB University of Economics and Technology, 2011                       | Ugur Yildiz                    | A46   |
| 5 | END498 Undergraduate Independent Research, Assessing the<br>effect of flexibility on makespan in 2-machine flowshops<br>producing identical parts, Department of Mechanical and<br>Industrial Engineering, TOBB University of Economics and<br>Technology, 2010 | Hilal Dag                      | A58   |
| 6 | END498 Undergraduate Independent Research, Throughput<br>Optimization in Flowshops with 2-nonidentical Machines and<br>Flexible Operations, Department of Mechanical and Industrial<br>Engineering, TOBB University of Economics and Technology,<br>2010        | Ozden Onur<br>Dalgic           | A57, A58  |

#### 3.4 EXTERNAL EXAMINAR FOR M.SC. STUDENTS (SULTAN QABOOS UNIVERSITY)

| # | Name                            | Year | Title  |
|---|---------------------------------|------|--|
| 1 | Raya Al Abri                    | 2024 | Analysis of Construction Waste Management System<br>in Oman: A Circular Economy Approach   |
| 2 | Khalid Hamed<br>HamoodAl Thuhli | 2024 | Optimization of production performance of multiple<br>naturally fractured carbonate reservoirs using material<br>balance application |
| 3 | Wafa Murad Al<br>Balushi        | 2023 | Redesigning the Material Handling System for a Medical Warehouse   |
| 4 | Safa Ahmed<br>Mohammed Al-Hinai | 2023 | Multi Objective Optimization of Refrigeration<br>Process for Biomethane Liquefaction   |
| 5 | Sheikha Al Oufi                 | 2022 | Design and Analysis of a Smart Home Energy<br>Management System Employing Smart<br>Functionalities                                   |
| 6 | Ali Issa Fares                  | 2020 | Owners' Budget-Constrained Multi-Project<br>Scheduling Problems Using Genetic Algorithms   |

#### 3.5 INTERNAL EXAMINER FOR M.SC. STUDENTS (SULTAN QABOOS UNIVERSITY)

| # | Name                 | Year | Title  |
|---|----------------------|------|--|
| 1 | Mohammed Al<br>Hinai | 2022 | Application of a data driven methodology to monitor the operational status of surveillance radars. |

# 3.6 CHAIR OF THESIS EXAMINATION COMMITTEE (SULTAN QABOOS UNIVERSITY)

| # | Name                       | Year | Title   |
|---|----------------------------|------|---|
| 1 | Noor Al Huda Al<br>Jahwari | 2023 | Investigating the Chemical and Physical Effects of<br>Green Hydrogen on Wellbore Cement                 |
| 2 | Abir Al Shidi              | 2023 | Simulating the Desalination Performance of a Three-<br>Chamber Microbial Desalination Cell Using MATLAB |
| 3 | Mohammed Al-<br>Aghbari    | 2022 | Development and Applications of Multi-objective<br>Optimization in Waterflood Management                |
| 4 | Magd Gehad Saleh<br>Ahmed  | 2022 | Plantwide Control of the Gas Sweetening Process   |
| 5 | Said Al Saidi              | 2022 | Medical wastewater treatment using microchannel technology  |
| 6 | Bushra Al Qassabi          | 2021 | Heterogenous Carbon-Based Catalyst Modified by Cao<br>for Biodiesel Production Using Moringa Oil        |

#### 3.7 <u>CURRICULUM DEVELOPMENT AND TEACHING MANAGEMENT</u>

- 1. Active member of the Department Academic Programs Modernization Committee since September 2022.
- 2. Active member of the Department Continuous Assessment and Evaluation Committee for the Industrial Engineering Program from September 2019.
- 3. Co-chair the Department Self Study Report Committee since 2022.
- 4. Contributed to the preparation and the review of the Self-Study Report while preparing for ABET accreditation that was awarded in 2020.
- 5. Heavily involved in the Industrial Engineering Program ABET accreditation cycle that was awarded in 2020.
- 6. Participated in updating the Industrial Engineering MSc degree plan for the cohorts 2023 and onward.
- 7. Developed course curriculum (at Sultan Qaboos University) for:
  - MEIE6206 Applied Optimization (MSc)
  - MEIE6211 Special Topics in IE Sequencing and Scheduling (MSc)
- 8. Improved course curriculum (at Sultan Qaboos University) for:
  - MEIE5262 Industrial Systems Design
  - MEIE3269 Mathematics of Linear Programming
  - MEIE3271 Methods of Operations Research
- 9. Extensive use of Moodle (course development tool) in all my courses:
  - MEIE6216 Logistics and Supply Chain Engineering (MSc)
    - MEIE6206 Applied Optimization (MSc)
    - MEIE6211 Special Topics in IE Sequencing and Scheduling (MSc)
    - MEIE5262 Industrial Systems Design
    - MEIE5244 Logistics and Supply Chain Management
    - MEIE4275 Facilities Design and Logistics
    - MEIE3269 Mathematics of Linear Programming
    - MEIE3271 Methods of Operations Research
    - MEIE3292 Work System Analysis and Design
    - MEIE5265 Computer Integrated Manufacturing
    - MEIE4285 Engineering Economics
- 10. Developed VBA-based software to facilitate scheduling midterm exams. Final version submitted to the assistant dean and will be tested in Fall 2023.
- 11. Developed VBA-based software that helps record the students' attendance after a google meet session during the online teaching period and shared with faculty members.
- 12. Developed a personalized exam/quiz generator software and presented at the 6th Sohar University Teaching and Learning Conference 2 March 2023
- 13. Recorded video lectures and uploaded them onto the YouTube Channel which has 1890 subscribers. <u>https://www.youtube.com/channel/UCxUWR1TfRgTxCof0DIT9YDw</u>
- 14. Prepared video tutorials for IBM ILOG CPLEX optimization software, which was used in MEIE3269, MEIE3271, MEIE4275, MEIE6216, MEIE6206. Video tutorial on YouTube channel have been viewed for more than 40,000 times:

https://www.youtube.com/playlist?list=PLyY17uOd5sPNgeqy2CguqyW0IENeEW4kS

- 15. Arranged an industrial visit to Muscat Pharmacy Medical Supplies Warehose for the course MEIE 4255 Facilities Design and Planning, 26 February 2024.
- 16. Arranged an industrial visit to Areej Vegetable Oils & Derivatives Company for the course MEIE 4275 Facilities Planning and Logistics, 7 March 2023.
- 17. Arranged an industrial visit to Oman Cables Company for the course MEIE 5262

Industrial Systems Design, 21 November 2022

- 18. Volunteered for peer reviewing in MEIE4285 Engineering Economics course that I offered in Spring 2019. Dr. Khalid AlZebdeh and Dr. Sujan Piya were the reviewers.
- 19. Served as the peer reviewer for Dr. Khalid AlZebdeh for the MEIE4285 Engineering Economy course in Fall 2022.

# 3.8 ACADEMIC ADVISING

- Default academic advisor of all IE program postgraduate students (on average 10 students per year) as the IE program PSR coordinator, Sultan Qaboos University.
- Academic Advisor of IE undergraduate students (on average 15 students per year), Sultan Qaboos University.
- Assistant dean of the Engineering Faculty responsible from the undergraduate students from May 2011 to November 2013 at TOBB University of Economics and Technology.
- Academic Advisor of IE undergraduate students (on average 50 students per year), TOBB University of Economics and Technology.

# 3.9 ACTIVITIES OUTSIDE THE CLASSROOM

- 1. Organized 5 days Course on Supply Chain Management, Community Services and Continuing Education Center, Sultan Qaboos University (with Dr. Nasr Al Hinai and Dr. Mahmood Al Kindi), September 2024.
- 2. Organized 5 days Course on Supply Chain Management, Community Services and Continuing Education Center, Sultan Qaboos University (with Dr. Nasr Al Hinai and Dr. Mahmood Al Kindi), May 2024.
- 3. Organized 5 days Course on Supply Chain Management, Community Services and Continuing Education Center, Sultan Qaboos University (with Dr. Nasr Al Hinai and Dr. Mahmood Al Kindi), December 2023.
- 4. Seminar for postgraduate students on postgraduate studies and thesis requirements as PSR Committee Chair, Each Semester, Sultan Qaboos University.
- 5. "Scientific Writing with Latex", Sultan Qaboos University, Deanship of Postgraduate Studies, 2 November 2022.
- 6. "How to Prepare Research Project Proposals in Engineering Fields, Scientific and Technological Research Council of Turkiye, TUBITAK, Directorate of Science Fellowships and Grant Programs (BIDEB) 2237, Three Days Education", Antalya, Turkiye, 22-24 February 2018.
- 7. Seminar on "Systems Design" for FYP students, TOBB University of Economics and Technology, 10 January 2017
- 8. "An Introduction to Latex", TOBB University of Economics and Technology, 25 March 2015.
- 9. "Best Practices in Education", TOBB University of Economics and Technology, 26 November 2010.

# 3.10 PERSONAL DEVELOPMENT IN TEACHING

1. Attended workshop on "Designing with Canva Website", Sultan Qaboos University, Center for Educational Technology, June 13, 2023.

- 2. Attended workshop on "Designing Interactive Instructional Content Using H5P Tool", Center for Educational Technology, Sultan Qaboos University, June 12, 2023.
- 3. Attended workshop on "Milanote", Sultan Qaboos University, Center for Educational Technology, June 11, 2023.
- 4. Certificate of Completion "Assessments and Rubric Design/Selection" as part of the Certificate in Higher Education Teaching and Learning (CHETL), Sultan Qaboos University, February 2, 2023- March 30, 2023.
- 5. Certificate of Completion, "Course Design (alignment, syllabus design, instructional strategies)" as part of the Certificate in Higher Education Teaching and Learning (CHETL), Sultan Qaboos University, February 2, 2023- March 30, 2023.
- 6. Certificate of Completion, "Introduction to CHETL and Educational Philosophy" as part of the Certificate in Higher Education Teaching and Learning (CHETL), Sultan Qaboos University, October 3- November 17, 2022.
- 7. Certificate of Completion, "Outcome Based Learning Objectives" as part of the Certificate in Higher Education Teaching and Learning (CHETL), Sultan Qaboos University, October 3- November 17, 2022.
- Certificate of Completion, "Teaching Critical Thinking" as part of the Certificate in Higher Education Teaching and Learning (CHETL), Sultan Qaboos University, October 3- November 17, 2022.
- 9. Attended panel on "Generative AI and ChatGPT: Transforming how we learn and teach", Department of Information Systems, at the College of Economics and Political Science, Sultan Qaboos University, 31 May 2023.
- 10. Attended seminar on "E-Portfolios for professional development", Center for Excellence in Teaching Learning (CETL) at SQU, 4 May 2023
- 11. Attended two days training program on "Astorlabe: Enhancing better communication skills teamwork and adaptability to change skills", Center for Excellence in Teaching and Learning at SQU and Oman Sail, 16-17 December 2022.
- 12. Attended seminar on "Innovations in Delivering Computer Science & Engineering Courses: Maximize Student Learning & Instructor Time in-person/online", Wiley, 7 September 2022.
- 13. Attended seminar on "Essentials of Academic Advising", Sultan Qaboos University, 11 November 2021.

### 3.11 <u>RECOGNITION IN TEACHING</u>

- 1. Best Teacher Award, 23rd University Day, Sultan Qaboos University, 1 May 2023.
- 2. Final year project under my supervision earned the 2<sup>nd</sup> place 11th Undergraduate Research & Innovation Competition Abu Dhabi University (Title: Design and Optimization of Hydrogen Supply Chain Network: A Case Study of Oman), 2024.
- 3. Final year project under my supervision best project award in MIE FYP design competition, SQU, (Title: Feasibility Analysis of Residential Renewable Generators in Oman and Developing a Smart Home Energy Management System), 2023.
- 4. Final year project under my supervision earned the 2<sup>nd</sup> place in paper competition award at 12th IEOM Annual Conference, Istanbul (Title: Drilling Rigs Planning and Scheduling), 2022.
- 5. Final year project under my supervision has been accepted for the UPGRADE program Ministry of Higher Education, Oman (Title: Drilling Rigs Planning and Scheduling), 2022.

- 6. Final year project under my supervision best project award in MIE FYP design competition, SQU, (Title: Drilling Rigs Planning and Scheduling), 2022.
- 7. Final year project under my supervision best project award in IE FYP design competition, TOBB ETU, (Title: Order Pick-up Process Optimization for Borusan ArGe), 2018.
- 8. Final year project under my supervision best project award in IE FYP design competition, TOBB ETU, (Title: Decision Support System for Flight Parking Space Assignment at Ankara Esenboga International Airport), 2013.
- 9. Final year project under my supervision best project award in National Final Year Project Competition, National Operations Research Conference of Turkiye (Title: Decision Support System for Check-in Contour Assignment at Ataturk International Airport), 2011.
- 10. Final year project under my supervision best project award in IE FYP design competition, TOBB ETU, (Title: Decision Support System for Check-in Contour Assignment at Ataturk International Airport), 2011.
- Two of the final year projects under my supervision received the third place in National Final Year Project Competition, National Operations Research Conference of Turkiye (See Section 3.3.3)
- 12. Four of the final year projects under my supervision received the second place in IE FYP design competition, TOBB ETU, (See Section 3.3.3).
- 13. Three of the final year projects under my supervision received the third place in IE FYP design competition, TOBB ETU, (See Section 3.3.3).
- 14. Selected as the representer of the Engineering Faculty based on teaching evaluation scores to give a talk on "Best Practices in Education", TOBB University of Economics and Technology, 26 November 2010.
- 15. EU Erasmus exchange grant to give a seminar and lectures at the Liege University, Belgium, December 2005

#### 3.12 MEMBERSHIP OF TEACHING RELATED PROFESSIONAL BODIES

• EURO working group on Automated Timetabling (PATAT)

# **4. SCHOLARLY ACHIEVEMENTS**

#### **SUMMARY**

#### **Publications/Citations Data:**

| Type of Publication   | <u>1</u>            | Number         | of Publications |
|---|---------------------|----------------|-----------------|
| Articles in Internation<br>Conference Papers<br>Conference Abstract |                     | 35<br>21<br>68 |                 |
| Books   |                     |                | 1               |
| Citation Source   | Number of Citations | <u>h-index</u> |                 |
| Scopus  | 717                 | 17             |                 |
| Web of Science  | 566                 | 16             |                 |
| ResearchGate  | 910                 | 19             |                 |
| Google Scholar  | 1151                | 21             |                 |

#### 4.1 <u>SCHOLASTIC INTERNATIONAL LISTINGS</u>

#### Scopus

| Documents:  | 36  |
|-------------|-----|
| Citations:  | 717 |
| h-index:    | 17  |
| Co-authors: | 36  |

Scopus Author Details:

https://www.scopus.com/authid/detail.uri?authorId=8107426400

#### **Google Scholar**

| Citations:  | 1151 |
|-------------|------|
| h-index:    | 21   |
| i-10 index: | 27   |

Google Scholar Author Details: https://scholar.google.com/citations?user=p6XHyuIAAAAJ&hl=en

#### ResearchGate

| Citations:              | 910    |
|-------------------------|--------|
| Research items:         | 62     |
| Reads:                  | 14,497 |
| Research Interest Score | 564.5  |
| h-index:                | 19     |

ResearchGate Author Details: <u>https://www.researchgate.net/profile/Hakan-Gultekin</u>

## 4.2 <u>REFEREED JOURNAL PAPERS</u>

The following tables summarize my published journal papers distribution according to the order of authorship and the quartile of journal:

Order:

| Single Author | 1 <sup>st</sup> Author | 2 <sup>nd</sup> Author | 3 <sup>rd</sup> Author or higher | Corresponding Author |
|---------------|------------------------|------------------------|----------------------------------|----------------------|
| 1             | 10                     | 15                     | 9                                | 11                   |

Journal Rank\*:

| Q1                           | Q2 | Q3 | Q4 | NA |  |
|------------------------------|----|----|----|----|--|
| 29                           | 3  | 0  | 0  | 3  |  |
| * Pasad on October 2024 data |    |    |    |    |  |

\* Based on October 2024 data

In the following list:

- "\*" Indicates corresponding author.
- BSc., MSc. and Ph.D. students are highlighted in blue color.
- Khalid Alfahdi, Hakan Gultekin, Emad Summad. "A Novel Prognostics and Health Management Framework to Extract System Health Requirements in the Oil and Gas Industry." International Journal of Prognostics and Health Management 15.2, 2024. (SJR: Q2, H-index: 29, JCR-IF: 1.4 – Scopus CiteScore 2024: 2.9)

Outcome of student's Ph.D. thesis (supervisor), Methodology, Formal analysis, Writing- Original draft preparation, Writing-Reviewing and Editing, Validation, Supervision.

 C. T. Cicek, Ç. Koç, H. Gultekin and G. Erdoğan, "Communication-Aware Drone Delivery Problem," in IEEE Transactions on Intelligent Transportation Systems, vol. 25, no. 8, pp. 9168-9180, 2024, (SJR: Q1, H-index: 166, JCR-IF: 7.9 – Scopus CiteScore 2024: 13.7)

<u>Candidate Role: Methodology, Formal analysis, Writing-Reviewing and Editing,</u> <u>Validation.</u>

 MC Kocer, A Onen, J Jung, H. Gultekin, S Albayrak, Optimal Location and Sizing of Electric Bus Battery Swapping Station in Microgrid Systems by Considering Revenue Maximization *IEEE Access*, 11, 41084-41095, 2023. (SJR: Q1, H-index: 204, JCR-IF: 3.9 – Scopus CiteScore 2022: 9.0)

<u>Candidate Role: Methodology, Formal analysis, Writing-Reviewing and Editing.</u> <u>Validation.</u>

 S. Gürel, H. Gultekin\*, N. Emiroglu (Tatar), Scheduling a dual gripper material handling robot with energy considerations, *Journal of Manufacturing Systems*, 67:265-280, 2023. (SJR: Q1, H-index: 92, JCR-IF: 12.1 – Scopus CiteScore 2022: 16)

Candidate Role: Outcome of student's MSc thesis (main supervisor), Outcome of funded project, (TUBITAK 215M845, Principal Investigator).Corresponding author, Conceptualization, project management, Methodology, Software, Formal analysis, Writing- Original draft preparation, Writing-Reviewing and Editing, Validation, Supervision, Funding acquisition.

5. C.E. Kement, M. Ilic, H. Gultekin, C. T. Cicek, B. Tavli, Privacy protection via joint real and reactive load shaping in smart grids, *Sustainable Energy, Grids and Networks*, 32, 100794, 2022. (SJR: Q1, H-index: 41, JCR-IF: 5.4 – Scopus CiteScore 2022: 7.1)

<u>Candidate Role: Outcome of student's Ph.D. thesis (co-supervisor),</u> <u>Methodology, Formal analysis, Writing- Original draft preparation, Writing-</u> <u>Reviewing and Editing, Validation, Supervision.</u>

 C.T. Cicek, Z.J.M. Shen, H. Gultekin, B. Tavli, 3-D Dynamic UAV Base Station Location Problem, *INFORMS Journal on Computing*, 33(3), 839-860, 2021. (SJR: Q1, H-index: 85, JCR-IF: 2.1 – Scopus CiteScore 2022: 3.4) <u>Candidate Role: Outcome of student's Ph.D. thesis (main supervisor),</u> <u>Conceptualization, Methodology, Formal analysis, Writing- Original draft</u> <u>preparation, Writing-Reviewing and Editing, Validation, Supervision.</u>

N. Oner, H. Gultekin, C. Koc, The airport shuttle bus scheduling problem, *International Journal of Production Research*, 59:24, 7400-7422, 2021. (SJR: Q1, H-index: 170, JCR-IF: 9.2 – Scopus CiteScore 2022: 18.1)

Candidate Role: Conceptualization, Methodology, Software, Formal analysis, Writing- Original draft preparation, Writing-Reviewing and Editing, Validation

 H. Gultekin\*, S. Gürel, Rabia Taspinar, Bicriteria scheduling of a material handling robot in an m-machine cell to minimize the energy consumption of the robot and the cycle time, *Robotics and Computer-Integrated Manufacturing*, 72:102207, 2021. (SJR: Q1, H-index: 111, JCR-IF: 10.4 – Scopus CiteScore 2022: 20.1)

Candidate Role: Corresponding and main author (main supervisor), Outcome of funded project, (TUBITAK 215M845, Principal Investigator). Project management, Conceptualization, Methodology, Software, Formal analysis, Writing- Original draft preparation, Writing-Reviewing and Editing, Validation, Supervision, Funding acquisition.

 C. E. Kement, B. Tavli, H. Gultekin and H. Yanikomeroglu, Holistic Privacy for Electricity, Water, and Natural Gas Metering in Next Generation Smart Homes, *IEEE Communications Magazine*, 59(3):24-29, 2021. (SJR: Q1, H-index: 272, JCR-IF: 11.2 – Scopus CiteScore 2022: 21.1)

<u>Candidate Role: Outcome of student's Ph.D. thesis (co-supervisor),</u> <u>Methodology, Formal analysis, Writing- Original draft preparation, Writing-</u> <u>Reviewing and Editing, Validation, Supervision.</u>

 C. E. Kement, H. Gultekin, B. Tavli, A Holistic Analysis of Privacy-Aware Smart Grid Demand Response, *IEEE Transactions on Industrial Electronics*, 68(8):7631-7641, 2021. (SJR: Q1, H-index: 323, JCR-IF: 7.7 – Scopus CiteScore 2022: 17.1)

<u>Candidate Role: Outcome of student's Ph.D. thesis (co-supervisor),</u> <u>Methodology, Formal analysis, Writing- Original draft preparation, Writing-</u> <u>Reviewing and Editing, Validation, Supervision.</u>

 C. Agrali, H. Gultekin, S. Tekin, N. Oner, Measuring the value of energy storage systems in a power network, *International Journal of Electrical Power & Energy Systems*, 120: 106022, 2020. (SJR: Q1, H-index: 155, JCR-IF: 5.2 – Scopus CiteScore 2022: 10.8)

<u>Candidate Role: Outcome of student's MSc Thesis (main supervisor),</u> <u>Conceptualization, Methodology, Formal analysis, data analysis and results</u> <u>discussion, Writing-Reviewing and Editing, Validation, Supervision.</u>

12. C. T. Cicek, H. Gultekin, B. Tavli, H. Yanikomeroglu, Backhaul-Aware Optimization of UAV Base Station Location and Bandwidth Allocation for Profit Maximization, *IEEE* 

*Access*, 8: 154573-154588, 2020. (SJR: Q1, H-index: 204, JCR-IF: 3.9 – Scopus CiteScore 2022: 9.0)

<u>Candidate Role: Outcome of student's Ph.D. thesis (main supervisor),</u> <u>Conceptualization, Methodology, Formal analysis, Writing- Original draft</u> <u>preparation, Writing-Reviewing and Editing, Validation, Supervision.</u>

 C. T. Cicek, H. Gultekin, B. Tavli, The location-allocation problem of drone base stations, *Computers & Operations Research*, 111:155-176, 2019. (SJR: Q1, H-index: 170, JCR-IF: 4.6 – Scopus CiteScore 2022: 8.3)

<u>Candidate Role: Outcome of student's Ph.D. thesis (main supervisor),</u> <u>Conceptualization, Methodology, Formal analysis, Writing- Original draft</u> <u>preparation, Writing-Reviewing and Editing, Validation, Supervision.</u>

14. S. Gürel, H. Gultekin, V. Eghbal Akhlaghi, Energy conscious scheduling of a material handling robot in a manufacturing cell, *Robotics and Computer-Integrated Manufacturing*, 58:97-108, 2019. (SJR: Q1, H-index: 111, JCR-IF: 10.4 – Scopus CiteScore 2022: 20.1)

<u>Candidate Role: Outcome of student's MSc Thesis (co-supervisor), Outcome of</u> <u>funded project, (TUBITAK 215M845, Principal Investigator).</u> <u>Conceptualization, project management, Methodology, Formal analysis,</u> <u>Writing- Original draft preparation, Writing-Reviewing and Editing,</u> <u>Validation, Supervision, Funding acquisition.</u>

 H. Gultekin\*, B. Coban, V. Eghbal Akhlaghi, Cyclic Scheduling of Parts and Robot Moves in m-machine Robotic Cells, *Computers & Operations Research*, 90:161-172, 2018. (SJR: Q1, H-index: 170, JCR-IF: 4.6 – Scopus CiteScore 2022: 8.3)

Candidate Role: Outcome of student's MSc Thesis (main supervisor), Outcome of funded project, (TUBITAK 213M435, Principal Investigator). Corresponding and main author, project management, Conceptualization, Methodology, Software, Formal analysis, Writing- Original draft preparation, Writing-Reviewing and Editing, Validation, Supervision, Funding acquisition.

16. C.E. Kement, H. Gultekin, B. Tavli, T. Girici, S. Uludag, Comparative Analysis of Load Shaping Based Privacy Preservation Strategies in Smart Grid, *IEEE Transactions on Industrial Informatics*, 13 (6): 3226-3235, 2017. (SJR: Q1, H-index: 170, JCR-IF: 12.3 – Scopus CiteScore 2022: 22.4)

<u>Candidate Role: Outcome of student's Ph.D. thesis (co-supervisor),</u> <u>Methodology, Formal analysis, Writing- Original draft preparation, Writing-</u> <u>Reviewing and Editing, Validation, Supervision.</u>

 H. Gultekin\*, OO. Dalgic, M.S. Akturk, Pure Cycles in Dual Gripper Robotic Cells, *Robotics and Computer-Integrated Manufacturing*, 48:121-131, 2017. . (SJR: Q1, H-index: 111, JCR-IF: 10.4 – Scopus CiteScore 2022: 20.1)

Candidate Role: Outcome of student's MSc Thesis (main supervisor), Corresponding and main author, Conceptualization, Methodology, Formal analysis, Writing- Original draft preparation, Writing-Reviewing and Editing. Validation, Supervision.

 H. Gultekin\*, A. Tula, M.S. Akturk, Automated robotic assembly line design with unavailability periods and tool changes, *European Journal of Industrial Engineering*, 10 (4):499-526, 2016. (SJR: Q2, H-index: 30, JCR-IF: 1 – Scopus CiteScore 2022: 2.5)

<u>Candidate Role: Outcome of student's MSc Thesis (co-supervisor),</u> <u>Corresponding and main author, Conceptualization, Methodology, Formal</u> <u>analysis, Writing- Original draft preparation, Writing-Reviewing and Editing,</u> <u>Validation, Supervision, Funding acquisition.</u>

19. E. Gundogdu, H. Gultekin\*, Scheduling in 2-machine robotic cells with a self-buffered robot, *IIE Transactions*, 48(2):170-191, 2016. (SJR: Q1, H-index: 104, JCR-IF: 2.6 – Scopus CiteScore 2022: 6.5)

Candidate Role: Outcome of student's MSc Thesis (main supervisor), Corresponding author, Conceptualization, Methodology, Software, Formal analysis, Writing- Original draft preparation, Writing-Reviewing and Editing, Validation, Supervision.

 H.U. Yildiz, K. Bicakci, B. Tavli, H. Gultekin, D. Incebacak, Maximizing Wireless Sensor Network lifetime by communication/computation energy optimization of non-repudiation security service: node level versus network level strategies, *Ad Hoc Networks*, 37(2):301-323, 2016. (SJR: Q1, H-index: 104, JCR-IF: 4.8 – Scopus CiteScore 2022: 12.1)

<u>Candidate Role: Methodology, Formal analysis, Writing-Reviewing and Editing,</u> <u>Validation.</u>

Z. Uruk, H. Gultekin\* and M.S. Akturk Two-machine flowshop scheduling with flexible operations and controllable processing times, *Computers & Operations Research*, 40(2):639-653, 2013. (SJR: Q1, H-index: 170, JCR-IF: 4.6 – Scopus CiteScore 2022: 8.3)

Candidate Role: Outcome of student's MSc thesis (co-supervisor), Outcome of funded project, (TUBITAK 110M489, Principal Investigator). Project management Corresponding author, Project management, Conceptualization, Methodology, Formal analysis, Writing- Original draft preparation, Writing-Reviewing and Editing, Validation, Supervision.

22. G. Gedik, G.B. Ünal, M.S. Tokgöz, S.N. Kaya, T. Kabadayi, G. Kuyzu, H. Gultekin\*, Design of a Decision Support System for Gate Assignment at Ankara Esenboga Airport (in Turkish), *Endüstri Mühendisliği*, 24:3, 29-40, 2013. (Indexed by TRDizin https://search.trdizin.gov.tr/en/journal/detail/268/endustri-muhendisligi)

<u>Candidate Role: Outcome of FYP studies, Corresponding author, methodology,</u> <u>supervision, data analysis and results discussion, and manuscript</u> <u>preparation/editing and proofreading.</u>

23. H. Gultekin\*, Scheduling in Flowshops with Flexible Operations: Throughput Optimization and Benefits of Flexibility, *International Journal of Production Economics*,

140(2):900-911, 2012. (SJR: Q1, H-index: 214, JCR-IF: 12 – Scopus CiteScore 2022: 19.3)

Candidate Role: Outcome of funded project, (TUBITAK 110M489, Principal Investigator). Responsible for all tasks.

24. M. Aydoğan, M. Durak, M. Özyilmaz, G. Sakarya, B. S. Sertbarut, Y. K. Uğur, H. Gultekin\*, A. Altin, Design of a Decision Support System for The After Paint Assembly Line for The Main Lines (in Turkish), *Endüstri Mühendisliği*, 23:3, 59-79, 2012. (Indexed by TRDizin https://search.trdizin.gov.tr/en/journal/detail/268/endustri-muhendisligi)

<u>Candidate Role: Outcome of FYP studies, Corresponding author, methodology,</u> <u>supervision, data analysis and results discussion, and manuscript</u> <u>preparation/editing and proofreading.</u>

25. K. Bicakci, **H. Gultekin**, B. Tavli and I.E. Bagci, Maximizing lifetime of eventunobservable wireless sensor networks, *Computer Standards & Interfaces*, 33:401–410, 2011. (SJR: Q1, H-index: 71, JCR-IF: 5 – Scopus CiteScore 2022: 10.5)

<u>Candidate Role: Methodology, Software, Formal analysis, Writing- Original</u> <u>draft preparation, Writing-Reviewing and Editing, Validation.</u>

26. A. Taşkıncan, E. Bayrakçı, O. Babat, S. Yüksel, Ö. O. Dalgıç, A. A. Kayhan, H. Gultekin, Design of a decision support system for counter assignment in the international flights terminal of Istanbul Ataturk Airport, (in Turkish), *Endüstri Mühendisliği*, 22:3, 2-21, 2011. (Indexed by TRDizin: https://search.trdizin.gov.tr/en/journal/detail/268/endustri-muhendisligi)

Candidate Role: Outcome of FYP studies, methodology, supervision, data analysis

and results discussion, and manuscript preparation/editing and proofreading.

Y. Crama, H. Gultekin\*, Throughput optimization in two-machine flowshops with flexible operations, *Journal of Scheduling*, 13(3):227-243, 2010. (SJR: Q1, H-index: 64, JCR-IF: 2.0 – Scopus CiteScore 2022: 3.7)

<u>Candidate Role: Outcome of postdoc studies, Corresponding author,</u> <u>Conceptualization, Methodology, Software, Formal analysis, Writing- Original</u> <u>draft preparation, Writing-Reviewing and Editing, Validation.</u>

 H. Gultekin, M.S. Akturk, and O.E. Karasan, Bicriteria robotic operation allocation in a flexible manufacturing cell, *Computers & Operations Research*, 37(4):779–789, 2010(SJR: Q1, H-index: 170, JCR-IF: 4.6 – Scopus CiteScore 2022: 8.3)

<u>Candidate Role: Outcome of own Ph.D. thesis, Main author, Conceptualization,</u> <u>Methodology, Software, Formal analysis, Writing- Original draft preparation.</u> <u>Writing-Reviewing and Editing, Validation.</u>

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<u>Candidate Role: Outcome of own Ph.D. thesis, Main author, Conceptualization,</u> <u>Methodology, Software, Formal analysis, Writing- Original draft preparation,</u> <u>Writing-Reviewing and Editing, Validation.</u>

H. Gultekin, M.S. Akturk, and O.E. Karasan, Bicriteria robotic cell scheduling, *Journal of Scheduling*, 11(6):457–473, 2008. (SJR: Q1, H-index: 64, JCR-IF: 2.0 – Scopus CiteScore 2022: 3.7)

<u>Candidate Role: Outcome of own Ph.D. thesis, Main author, Conceptualization,</u> <u>Methodology, Software, Formal analysis, Writing- Original draft preparation,</u> <u>Writing-Reviewing and Editing, Validation.</u>

 H. Gultekin, M.S. Akturk, and O.E. Karasan, Scheduling in robotic cells: process flexibility and cell layout. *International Journal of Production Research*, 46(8):2105–2121, 2008. (SJR: Q1, H-index: 170, JCR-IF: 9.2 – Scopus CiteScore 2022: 18.1)

<u>Candidate Role: Outcome of own Ph.D. thesis, Main author, Conceptualization,</u> <u>Methodology, Software, Formal analysis, Writing- Original draft preparation,</u> <u>Writing-Reviewing and Editing, Validation.</u>

33. H. Gultekin, M.S. Akturk, and O.E. Karasan, Scheduling in a three-machine robotic flexible manufacturing cell. *Computers & Operations Research*, 34:2463-2477, 2007. (SJR: Q1, H-index: 170, JCR-IF: 4.6 – Scopus CiteScore 2022: 8.3)

<u>Candidate Role: Outcome of own Ph.D. thesis, Main author, Conceptualization,</u> <u>Methodology, Software, Formal analysis, Writing- Original draft preparation.</u> <u>Writing-Reviewing and Editing, Validation.</u>

34. H. Gultekin, M.S. Akturk, and O.E. Karasan, Cyclic scheduling of a robotic cell with tooling constraints. *European Journal Operational Research*, 174:777–796, 2006. (SJR: Q1, H-index: 288, JCR-IF: 6.4 – Scopus CiteScore 2022: 11.2)

<u>Candidate Role: Outcome of own MSc thesis, Main author, Conceptualization,</u> <u>Methodology, Software, Formal analysis, Writing- Original draft preparation.</u> <u>Writing-Reviewing and Editing, Validation.</u>

35. M.S. Akturk, H. Gultekin, and O.E. Karasan, Robotic cell scheduling with operational flexibility. *Discrete Applied Mathematics*, 145(3):334–348, 2005. (SJR: Q2, H-index: 92, JCR-IF: 1.1 – Scopus CiteScore 2022: 2.3) <u>Candidate Role: Outcome of own MSc thesis, Conceptualization, Methodology,</u> <u>Software, Formal analysis, Writing- Original draft preparation, Writing-</u> <u>Reviewing and Editing, Validation.</u>

## 4.3 <u>SUBMITTED JOURNAL PAPERS</u>

1. B. Güzel, S. Gürel, and H. Gultekin, Energy-efficient robotic cell scheduling with controllable machine processing times and robot speeds, *OR Spectrum*, 2024, (Under review: ORSP-D-23-00173). (SJR(2021): Q1, H-index: 76, JCR-IF: 2.7– Scopus CiteScore 2022: 4.1)

<u>Candidate Role: Methodology, Formal analysis, Writing-Reviewing and Editing,</u> <u>Validation.</u>

# 4.4 <u>BOOKS</u>

1. **H. Gultekin**, *Scheduling in Flexible Robotic Manufacturing Cells: Throughput Optimization and Cell Design*, VDM Verlag Dr. Muller, ISBN:9783639266542, 2010.

# 4.5 <u>CONFERENCE PAPERS (IN PROCEEDING)</u>

- 1. **Hakan Gultekin**, Rayyan Al Kharusi, Aisha Al Khalili, and Shahad Al Shariyani. "When Is It Economical to Install Residential Renewable Energy Generators? Assessing the Value of Storage and Developing a Smart Home Energy Management System." In International Conference on Energy and Sustainability (ICES) 2024. 2024.
- Khalid Al Fahdi, Hakan Gultekin, and Emad Summad. "Human Reliability Role in Manufacturing Reliability Management: A Case Study from the Oil and Gas Industry in Oman." In Proceedings of the International Conference on Sustainability: Developments and Innovations, pp. 212-219. Singapore: Springer Nature Singapore, 2024.
- 3. Khalid Al Fahdi, Hakan Gultekin, and Emad Summad. "Monitoring Manufacturing Plant Emissions based on Equipment Health Index: A Case Study from Oman Oil and Gas Industry." In The 2nd International Conference on Sustainability: Developments and Innovations. 2024.
- 4. **Hakan Gultekin**, Riadh Zaier, and Amur Al-Yahmedi. "Scheduling Parallel Machine Robotic Cells with Energy Consumption Objective." In Proceedings of the International Conference on Sustainability: Developments and Innovations, pp. 198-206. Singapore: Springer Nature Singapore, 2024.
- 5. Hakan Gultekin, Zahid Qamar, and Hassan Al-Lawati. "A Practical Algorithm for Midterm Exam Scheduling in Higher Education Institutions." In 14th International Conference on Industrial Engineering and Operations Management. 2024.
- 6. H. Gultekin, N. Al-Hinai, "Unrelated Parallel Machine Scheduling with Sequence and Machine Dependent Setup Times and Resource Constraints", *Proc. International Conference on Mechanical, Automotive and Mechatronics Engineering (ICMAME 2023), Dubai, UAE* 29-30 April 2023.
- 7. A. Al-Sheheimi, N. Al-Hinai, M.M.M. Alsaf, H. Gultekin, "Defining Artificial Neural Network Hyperparameters for Forecasting Nonstationary Demand of Spare Parts", *Proc. International Conference on Mechanical, Automotive and Mechatronics Engineering (ICMAME 2023), Dubai, UAE* 29-30 April 2023.

- 8. **H. Gultekin**, Zaier, R., Al-Yahmedi, A. 2022. "Parallel Machine Robotic Cell Scheduling with Energy Consumption Objective", *International Conference on Business and Economics*, Muscat, Oman, December 12-13, 2022
- K. Alfahdi, H. Gultekin, E. Summad, "Enhancing Unplanned Maintenance Priorities Using Artificial Neural Networks: Case Study from Oman Oil & Gas Industry", Proceedings of the International Conference on Industrial Engineering and Operations Management Istanbul, Turkiye, 1141-1151, March 7-10, 2022.
- 10. H. Gultekin, "Robotic Cell Design Through Operation Assignment Integrated with Sequencing of Robot Moves", *Proceedings of the International Conference on Industrial Engineering and Operations Management Istanbul, Turkiye*, 726-736, March 7-10, 2022.
- C.T. Cicek, H. Gultekin, B. Tavli, H. Yanikomeroglu, "UAV Base Station Location Optimization for Next Generation Wireless Networks: Overview and Future Research Directions", *1st International Conference on Unmanned Vehicle Systems-Oman (UVS)*, 1-6, 5-7 February, 2019.
- N. Tatar, H. Gultekin, S. Gurel. Energy Conscious Scheduling of Robot Moves in Dual-Gripper Robotic Cells, *Proceedings of the PMS 2018 16th International Conference on Project Management and Scheduling*, pp. 237–241, Rome, Italy, 17-20 April 2018.
- 13. V. Eghbal Akhlaghi, H. Gultekin, B. Coban "Shortest k-unit cycle in a multiple part-type robotic cell" MISTA 2015 Proceedings of the 7th Multidisciplinary International Conference on Scheduling: Theory and Applications 876-878 August 2015.
- E.B. Ataseven, H. Gultekin, "Assembly line balancing in robotic cells" (in Turkish), 14th Symposium on National Production Research, 163-172, Bahcesehir University, Istanbul, Turkiye, 3-5 September 2014.
- 15. **H. Gultekin**, "Benefits of flexible operations in 2-machine flowshops", *Proceedings of the PMS 2012, 13th International Workshop on Project Management and Scheduling*, 164-167, Katholieke Universiteit Leuven, Belgium, 1-4 April 2012.
- 16. H.H. Demirtas, H. Gultekin, "Minimizing the Makespan in Flowshops with Flexible Operations", *Proceedings of the 14th IFAC Symposium on Information Control Problems in Manufacturing*, Volume 14, Part 1, 366-1370, University Politechnica of Bucharest, Romania, 23-25 May 2012.
- 17. M.S. Akturk, A. Tula, and H. Gultekin "Design of a fully automated robotic spot-welding line", *Proceedings of the 8th International Conference on Informatics in Control, Automation and Robotics*, Noordwijkerhout, The Netherlands, 387–392, 28-31 July 2011.
- H. Gultekin, Y. Crama. Scheduling assembly lines with flexible operations to minimize the makespan, *Proceedings of the PMS 2008 11th International Workshop on Project Management and Scheduling*, pp. 108–111, Bogazici University, Istanbul, Turkiye, 28-30 April 2008.
- H. Gultekin, M.S. Akturk, and O.E. Karasan. Scheduling in a three-machine robotic cell, INCOM'2006: 12th IFAC/IFIP/IFORS/IEEE/IMS Symposium on Information Control Problems in Manufacturing, pp. 3:101–106, St. Etienne, France, 17-19 May 2006.
- 20. H. Gultekin, Y. Crama "Scheduling in assembly lines with flexible operations" (in Turkish), *7th Symposium on National Production Research*, Gazi University, Ankara, Turkiye, 15-17 November 2007.
- 21. H. Gultekin, O.E. Karasan, M.S. Akturk, "Robotic cell scheduling", 2nd International Conference on Responsive Manufacturing, pp.532-534, Gaziantep, Turkiye, 26-28 June 2002.

#### 4.6 CONFERENCE (INVITED PRESENTATION)

- 1. **H. Gultekin**, C. Koc, Next-Generation Logistics and Supply Chain Management: Leveraging Unmanned Vehicle Systems, The 2nd International Conference on Unmanned Vehicle Systems, Oman, February 12 – 14, 2024. (Workshop)
- 2. H. Gultekin, Energy-Efficient Scheduling in Robotic Manufacturing Cells, International conference on Science, Engineering Management and Information Technology (SEMIT 2022-Sep) Ankara, Turkiye, September 8-9, 2022. (Keynote Speaker)
- **3.** S. Uludag, T. Girici, B. Tavli, **H. Gultekin**, "Optimization of Smart Grid Design, Operations, and Management", IEEE/IFIP Network Operations and Management Symposium, Istanbul, Turkiye, 5-29 April 2016. (**Tutorial**)
- 4. **H. Gultekin**, "Mathematical Methods for Industrial Problems (Optimization)" (in Turkish), 10th Mathematics Symposium, Isik University, Istanbul, Turkiye, 21-23 September 2012. (**Panel Speaker**).

#### 4.7 CONFERENCE (IN ABSTARCT)

- 1. **H. Gultekin**, "A Spreadsheet Based Tool to Generate Personalized Exam Papers with Random Questions", *6th Sohar University Teaching and Learning Conference*, 2 March 2023, Oman.
- 2. A. Al Riyami, H. Gultekin, E. Summad, "Integrated Team Planning and Maintenance Scheduling for Geographically Distributed Assets", *13th Annual International Conference on Industrial Engineering and Operations Management*, Manila, Philippines, 6-9 March 2023.
- 3. R. Al Kharusi, S. Al Shariyani, A.R. Al Rashdi, A. Al Khalili, H. Gultekin, "Developing a Smart Home Energy Management System and Economic Feasibility Analysis of Residential Renewable Generators in Oman", 13th Annual International Conference on Industrial Engineering and Operations Management, Manila, Philippines, 6-9 March 2023.
- 4. C.T. Cicek, C. Koc, H. Gultekin, G. Erdogan, "Communication-aware Drone Delivery Problem", *OR64 The Operational Research Society's Annual Conference*, Warwick, UK, 13-15 September 2022.
- 5. N. Al-Hassani, H. Gultekin, "Review of Shelter location and relief supply optimization models and reflection to Sultanate of Oman", 23rd Gulf Engineering Forum, Muscat, Oman, 20-22 March 2022.
- 6. B.N. Guzel, S. Gurel, H. Gultekin, "Energy-Efficient Scheduling in Robotic Cells with Robot and Machine Speed Control" (in Turkish), 40th National Operations Research and Industrial Engineering Conference, Bogazici University Istanbul, Turkiye, 4-7 July 2021.
- 7. C. Koc, N. Oner, H. Gultekin, "The Airport Shuttle Service Scheduling Problem", *INFORMS Annual Meeting 2019*, Seattle, USA, 20-23 October 2019.
- 8. R. Taspinar, H. Gultekin, S. Gurel, "Energy Aware Scheduling of a Material Handling Robot in an m-Machine Robotic Cell", *INFORMS Annual Meeting 2019*, Seattle, USA, 20-23 October 2019.
- 9. R. Taspinar, H. Gultekin, S. Gürel, "Energy Aware Scheduling of a Material Handling Robot in an m-Machine Robotic Cell", *EURO 2019*, Dublin, Ireland, 23-26 June 2019.
- C.T. Cicek, H. Gultekin, B. Tavli, "3D Location-Allocation Problem of Drone Base Stations in Next Generation Wireless Networks", *EURO 2019*, Dublin, Ireland, 23-26 June 2019.
- 11. N. Oner, H. Gultekin, C. Koc, "Routing Airline Transfer Shuttles with the Objective of

Profit Maximization" (in Turkish), 39th National Operations Research and Industrial Engineering Conference, Ankara, Turkiye, 12-14 June 2019.

- 12. H. Gultekin, "Scheduling and Line Balancing in Production Cells with Material Handling Robots" (in Turkish), *38th National Operations Research and Industrial Engineering Conference*, Eskisehir, Turkiye, 26-29 June 2018.
- 13. R. Taspinar, H. Gultekin, S. Gurel, "A Conic Programming Formulation and a Heuristic Algorithm to Determine the Optimal Robot Move Sequence and Move Speeds in M-Machine Robotic Cells" (in Turkish), 38th National Operations Research and Industrial Engineering Conference, Eskisehir, Turkiye, 26-29 June 2018.
- 14. S. Gurel, H. Gultekin, V. Eghbal Akhlaghi, "Energy Efficient Scheduling of the Robot in Two-Machine Robotic Cells" (in Turkish), *38th National Operations Research and Industrial Engineering Conference*, Eskisehir, Turkiye, 26-29 June 2018.
- 15. T. Yucel, H. Gultekin, S. Gurel, "The Cyle Time-Energy Consumption Tradeoff in Single Gripper Robotic Cells Producing Identical Parts" (in Turkish), *38th National Operations Research and Industrial Engineering Conference*, Eskisehir, Turkiye, 26-29 June 2018.
- 16. N. Tatar, S. Gurel, H. Gultekin, "Energy Aware Scheduling in Robotic Cells with Dual-Gripper Material Handling Robots" (in Turkish), 38th National Operations Research and Industrial Engineering Conference, Eskischir, Turkiye, 26-29 June 2018.
- 17. C. T. Cicek, T. Kutlu, H. Gultekin, B. Tavli, "3D Location of Unmanned Aerial Base Stations in 5G+ Cellular Networks" (in Turkish), *38th National Operations Research and Industrial Engineering Conference*, Eskischir, Turkiye, 26-29 June 2018.
- H. Gultekin, S. Gurel, V. Eghbal Akhlaghi, "Robotic Cell Scheduling Considering Energy Consumption of Robot Moves", *Multidisciplinary International Conference on Scheduling: Theory and Applications (MISTA 2017)*, Kuala Lumnpur, Malaysia, 5-8 December 2017.
- 19. H. Gultekin, "Robotic Manufacturing Cell Design Through Operation Allocation and Robot Move Sequencing", *The International Advanced Technologies Symposium (IATS17)*, Elazig, Turkiye, 19-21 October 2017.
- 20. H. Gultekin, S. Gurel, R. Taspinar, "Energy Aware Scheduling of the Material Handling Robot in M-Machine Robotic Cells", *The International Advanced Technologies Symposium* (*IATS17*), Elazig, Turkiye, 19-21 October 2017.
- 21. R. Taspinar, H. Gultekin, S. Gurel, "Energy consumption throughput rate tradeoff in single gripper robotic cells" (in Turkish), *37th National Operations Research and Industrial Engineering Conference*, Istanbul, Turkiye, 5-7 July 2017.
- 22. N. Tatar, S. Gurel, H. Gultekin, "Determination of the optimal robot move sequence and move speeds in double gripper robotic cells" (in Turkish), *37th National Operations Research and Industrial Engineering Conference*, Istanbul, Turkiye, 5-7 July 2017.
- H. Gultekin, Z. Bulbul, "A Benders decomposition algorithm for single machine scheduling problem with sequence dependent setup times and overtime" (in Turkish), 37th National Operations Research and Industrial Engineering Conference, Istanbul, Turkiye, 5-7 July 2017.
- 24. H.H. Kirac, H. Gultekin, O. Abul, "Vehicle routing formulations for the airport transfer service" (in Turkish), *37th National Operations Research and Industrial Engineering Conference*, Istanbul, Turkiye, 5-7 July 2017.
- 25. V. Eghbal Akhlaghi, H. Gultekin, S. Gurel, "Energy Conscious Robot Scheduling in Robotic Cell Manufacturing", *INFORMS Annual Meeting 2016*, Nashville, USA, 13-16 November 2016.
- 26. E.R. Karadeniz, H. Gultekin, "Scheduling of home appliances by the energy service provider in smart grids" (in Turkish), *36th National Operations Research and Industrial Engineering Conference*, Izmir, Turkiye, 13-15 July 2016.

- Z. Bulbul, E. A. Kakillioglu, H. Gultekin, "Machine scheduling with overtime and sequence dependent setup times" (in Turkish), 36th National Operations Research and Industrial Engineering Conference, Izmir, Turkiye, 13-15 Juy 2016.
- V. Eghbal Akhlaghi, H. Gultekin, S. Gurel, "Green Scheduling in a Two-Machine Robotic Cell", 36th National Operations Research and Industrial Engineering Conference, Izmir, Turkiye, 13-15 Juy 2016.
- 29. H. Gultekin, V. Eghbal Akhlaghi, B Coban, "Joint scheduling of parts and robot moves in robotic flowshops" (in Turkish), *36th National Operations Research and Industrial Engineering Conference*, Izmir, Turkiye, 13-15 Juy 2016.
- A. C. Ozcan, B. Yetis Kara, O. Cavus, T. Dizdarer, O. Altintas, H. Gultekin, "Optimization for a Semi-Automated Warehouse", *EURO 2016*, Poznan, Poland, 3-6 July 2016.
- 31. V. Eghbal Akhlaghi, H. Gultekin, B. Coban, "Comparison of CRM and k-Unit Cycles in Robotic Cells with Multiple Parts", *EURO 2016*, Poznan, Poland, 3-6 July 2016.
- 32. C. Agrali, H. Gultekin, S. Tekin, "Optimization of Energy Storage Decisions in Power Networks with Renewable Generation", *The 29th Conference of the European Chapter on Combinatorial Optimization*, Budapest, Hungary 26 - 28 May 2016.
- 33. **H. Gultekin**, V. Eghbal Akhlaghi, B. Coban, "Balancing Dual Gripper Robotic Cells", INFORMS Annual Meeting 2015, Philadelphia, USA, 1-4 November 2015.
- 34. C. Agrali, H. Gultekin, S. Tekin, F. Tanrisever, K. Derinkuyu, "Optimization of the energy storage and distribution in electricity distribution networks with renewable resorces" (in Turkish), 35th National Operations Research and Industrial Engineering Conference, Ankara, Turkiye, 9-11 September 2015.
- 35. V. Eghbal Akhlaghi, H. Gultekin, B. Coban, 'Line Balancing in Single Gripper Robotic Cells', *35th National Operations Research and Industrial Engineering Conference*, Ankara, Turkiye, 9-11 September 2015.
- 36. E. Gundogdu, H. Gultekin, A. Altin Kayhan, "A decomposition algorithm for the line balancing problem with skill-based operator teams" (in Turkish), 35th National Operations Research and Industrial Engineering Conference, Ankara, Turkiye, 9-11 September 2015.
- 37. B. Coban, H. Gultekin, V. Eghbal Akhlaghi, "Line balancing and scheduling in robotic flowshops producing multiple parts" (in Turkish), 35th National Operations Research and Industrial Engineering Conference, Ankara, Turkiye, 9-11 September 2015.
- A. E. Varol, M. Tezcan, V. Eghbal Akhlaghi, H. Gultekin, "Bicriteria Scheduling in a Multiple Part-Type Robotic Cell", 23rd International Conference on Multiple Criteria Decision Making, Hamburg, Germany, 2-7 August 2015.
- H. Akbaripour, V. Eghbal Akhlaghi, H. Gultekin, "Robust Parameter Tuning in Genetic Algorithm for a Robotic Cell Scheduling Problem", 23rd International Conference on Multiple Criteria Decision Making, Hamburg, Germany, 2-7 August 2015.
- 40. **H. Gultekin, B.C.** Yildiz, "Balancing Assembly Lines with Material Handling Robots", *INFORMS Annual Meeting 2014*, San Francisco, USA, 9-12 November 2014.
- H. Gultekin, B.C. Yildiz, "Robot Move Sequencing and Line Balancing in Robotic Cells", *Joint International Symposium on CIE44 and IMSS'14*, Istanbul, Turkiye, 14-16 September 2014.
- 42. H. Gultekin, O.O. Dalgic, M.S. Akturk, "Maximizing the throughput in dual gripper robotic cells: Pure cycles" (in Turkish), *34th National Operations Research and Industrial Engineering Conference*, Istanbul, Turkiye, 25-28 June 2014.
- 43. **H. Gultekin, E. Gundogdu**, "Scheduling in Robotic Cells with a Self-Buffered Robot", *EURO INFORMS 2013- 26th European Conference on Operational Research*, Rome, Italy, 1-4 July 2013.
- 44. F. Isler, H. Gultekin, "A Dynamic Programming Algorithm for Scheduling Flexible

Operations in a Three Machine Flowshop", EURO INFORMS 2013- 26th European Conference on Operational Research, Rome, Italy, 1-4 July 2013.

- 45. O.O. Dalgic, H. Gultekin, M.S. Akturk, "Pure Cycles in Dual Gripper Robotic Cells", *EURO INFORMS 2013- 26th European Conference on Operational Research*, Rome, Italy, 1-4 July 2013.
- 46. S. Sucu, H. Gultekin, "Scheduling in 3-machine Flowshops with Flexible Operations", EURO INFORMS 2013- 26<sup>th</sup> European Conference on Operational Research, Rome, Italy, 1-4 July 2013.
- 47. U. Yildiz, H. Gultekin, B. Tavli and K. Bicakci, "Maximizing Lifetime with Minimum Required Bandwidth in Wireless Sensor Networks", *EURO INFORMS 2013- 26th European Conference on Operational Research*, Rome, Italy, 1-4 July 2013.
- 48. S. Sucu, H. Gultekin, "Operation Allocation in a Flowshop with Three Non-identical Machines", *The International IIE Conference*, Istanbul, Turkiye, 26-28 June 2013.
- 49. F. Isler, H. Gultekin, "Throughput Optimization in a Flowshop with Three Flexible Machines", *The International IIE Conference*, Istanbul, Turkiye, 26-28 June 2013.
- 50. H.H. Demirtas, H. Gultekin, "Minimizing the Makespan in Flowshops with Flexible Operations", *International IIE Conference*, Istanbul, Turkiye, 26-28 June 2013.
- 51. E. Gundogdu, H. Gultekin, "Scheduling in robotic cells with a self buffered robot" (in Turkish), *33th National Operations Research and Industrial Engineering Conference*, Istanbul, Turkiye, 26-28 June 2013.
- 52. U. Yildiz, I. Batur, H. Gultekin, S. A. Alumur, A bi-criteria machine location problem with pick-up and drop-off points, 20th EURO Working Group on Locational Analysis Meeting (EWGLA 2013), April 17–19, 2013, Ankara, TURKIYE.
- 53. **H. Gultekin**, "Flowshop Scheduling with Flexible Operations: Throughput Optimization", *25th European Conference on Operational Research (EURO)*, Vilnius, Lithuania, 8-11 July 2012.
- 54. **H. Gultekin**, S. Ustunol, "Cycle time minimization in robotic assembly lines" (in Turkish), *32th National Operations Research and Industrial Engineering Conference*, Dogus University, Istanbul, Turkiye, 20-22 June 2012.
- 55. H. Gultekin, H.H. Demirtas, "Flowshop Scheduling with Flexible Operations on 2 Adjacent Machines", *The 25th Conference of the European Chapter on Combinatorial Optimization (ECCO)*, Antalya, Turkiye, 26 28 April 2012.
- 56. Z. Uruk, H. Gultekin, M.S. Akturk, "Two-Machine Flowshop Scheduling with Flexible Operations and Controllable Processing Times", 31st National Operations Research and Industrial Engineering Conference, Sakarya University, Sakarya, Turkiye, 5-7 July 2011.
- 57. H.H. Demirtas, **H. Gultekin**, "Scheduling in m-machine flowshops with flexible operations" (in Turkish), *31st National Operations Research and Industrial Engineering Conference*, Sakarya University, Sakarya, Turkiye, 5-7 July 2011.
- 58. H. Gultekin, O.O. Dalgic, "Maximizing throughput rate in Flowshops with two nonidentical machines and flexible operations", *31st National Operations Research and Industrial Engineering Conference*, Sakarya University, Sakarya, Turkiye, 5-7 July 2011.
- 59. H. Gultekin, H. Dag, O.O. Dalgic, "Throughput Optimization in Flow shops with 2nonidentical Machines and Flexible Operations", *The 24th Conference of the European Chapter on Combinatorial Optimization (ECCO)*, University of Amsterdam and VU University Amsterdam, Amsterdam, Netherlands, 30 May - 1 June 2011.
- 60. **H. Gultekin,** Line Balancing and Production Planning in Flowshop Type Systems, *R&D Project Market,* Eskisehir Industry Chamber, Eskisehir, Turkiye 10-11 May 2011.
- 61. H. Gultekin, "Scheduling 2-Machine Flowshops with Multiple Parts and Flexible Operations" (in Turkish), National Operations Research and Industrial Engineering

Conference XXX, Sabanci University, Istanbul, Turkiye, 30 June-02 July 2010.

- 62. Y. Crama, **H. Gultekin**, "Throughput Optimization in two-machine flowshopws with flexible operations", Euorpean Conference on Operational Research EURO, Bonn, Germany, 5-8 July, 2009.
- 63. **H. Gultekin**, M.S. Akturk, O.E. Karasan, "Bicriteria Robotic Operation Allocation in a Flexible Manufacturing Cell" (in Turkish), *National Operations Research and Industrial Engineering Conference XXVIII*, Galatasaray University, Istanbul, Turkiye, 30 June-02 July 2008.
- 64. **H. Gultekin**, Y. Crama, "Scheduling flowshops with flexible machines to maximize the throughput rate" *GO VI Graphics and Optimization*, Cademario, Lugano, Switzerland, 19-23 August 2007.
- 65. **H. Gultekin**, M.S. Akturk, O.E. Karasan, "Robotic cell scheduling" (in Turkish), *National Operations Research and Industrial Engineering Conference XXV*, Koc University, Istanbul, Turkiye, 4-6 July 2005.
- 66. **H. Gultekin**, M.S. Akturk, O.E. Karasan, "Scheduling in robotic cells", *35th International Conference of Computers & Industrial Engineering*, Istanbul Technical University, Istanbul, Turkiye, 19-22 June 2005.
- 67. **H. Gultekin**, M.S. Akturk, O.E. Karasan, "Determination of the robot move sequence and the allocation of operations in robotic cells" (in Turkish), *National Operations Research and Industrial Engineering Conference XXIV*, Cukurova University, Adana, Turkiye,16-18 June 2004.
- 68. **H. Gultekin**, M.S. Akturk, O.E. Karasan, "Robotic cell scheduling with tooling constraints", *EURO/INFORMS Joint International Meeting*, Bogazici University, Istanbul, Turkiye, 06-10 July 2003.

#### 4.8 <u>SEMINARS</u>

- 1. "Disaster Operations Management with Insights from Türkiye's 6 February Earthquake", Research Leave Seminar, Sultan Qaboos University, Department of Mechanical and Industrial Engineering, Muscat, Oman, December 6, 2023.
- 2. "Energy Efficient Scheduling of Material Handling Robots in Manufacturing Cells", Research Leave Seminar, Sultan Qaboos University, Department of Mechanical and Industrial Engineering, Muscat, Oman, December 16, 2021.
- 3. "Privacy in Smart Grids and Load Shaping Based Privacy Prevention Strategies", Sultan Qaboos University, Department of Mechanical and Industrial Engineering, Muscat, Oman, April 09, 2019.
- 4. "Logic based benders decomposition algorithm for single machine scheduling problem with sequence dependent setup times and overtime", Bilkent University, Department of Industrial Engineering, Ankara, Turkey, November 24, 2017.
- 5. "Real life applications of optimization techniques", Baskent University, Department of Industrial Engineering, Ankara, Turkey, November, 26, 2014.
- 6. "Throughput optimization in flowshops with flexible operations", Liege University, School of Management, Liege, Belgium, March, 29 2012.
- 7. "Flowshop Scheduling with Flexible Operations", Liege University, School of Management, Liege, Belgium, October, 7, 2010.
- 8. "Throughput optimization in flowshops with flexible operations", Bilkent University, Department of Industrial Engineering, Ankara, Turkey, April 25, 2008.
- 9. "Scheduling in flexible robotic manufacturing cells", Laboratoire G-SCOP, Grenoble,

France, October 18, 2007.

- 10. "Scheduling in flexible robotic manufacturing cells", TOBB University of Economics and Technology, Department of Industrial Engineering, Ankara, Turkey, June 29, 2007.
- 11. "Scheduling in flexible robotic manufacturing cells", Middle East Technical University, Department of Industrial Engineering, Ankara, Turkey, November 3, 2006.
- 12. "Scheduling in flexible robotic manufacturing cells", University of Liege, School of Management, Liege, Belgium, December 13, 2005.
- 13. "Robotic cell scheduling with operational and process flexibility", Bilkent University, Department of Industrial Engineering, Ankara, Turkey, March 18, 2005

#### 4.9 <u>TECHNICAL REPORTS</u>

- 1. **H. Gultekin**, Chefi Triki, Energy Efficient Scheduling in Manufacturing: Energy-Time Trade-off in Parallel Machine Environments, *Final Report, Internal Research Grant*, Sultan Qaboos University Integral Grant, December 2022, SQU. (Code: IG/ENG/MIED/20/02).
- 2. **H. Gultekin**, Chefi Triki, Energy Efficient Scheduling in Manufacturing: Energy-Time Trade-off in Parallel Machine Environments, *Progress Report, Internal Research Grant*, Sultan Qaboos University Integral Grant, December 2021, SQU. (Code: IG/ENG/MIED/20/02).
- 3. **H. Gultekin,** Chefi Triki, Energy Efficient Scheduling in Manufacturing: Energy-Time Trade-off in Parallel Machine Environments, *Progress Report, Internal Research Grant,* Sultan Qaboos University Integral Grant, December 2020, SQU. (Code: IG/ENG/MIED/20/02).
- 4. **H. Gultekin**, Research Leave Report, submitted to the Department of Mechanical and Industrial Engineering, Sultan Qaboos University, October 2021.
- 5. H. Gultekin, S. Gurel, Green Robotic Cell Scheduling, *Final Report, June 2018, TUBITAK-1001* (Code:215M845).
- 6. H. Gultekin, S. Gurel, Green Robotic Cell Scheduling, *Progress Report, October 2017, TUBITAK-1001* (Code:215M845).
- 7. H. Gultekin, S. Gurel, Green Robotic Cell Scheduling, *Progress Report, April 2017, TUBITAK-1001* (Code:215M845).
- 8. H. Gultekin, Integrated Business Management in Packaging Production: Design of Production and Management Processes, Data Collection, Analysis, Reporting and Decision Support Systems Design and Development, *Final Report, September 2018*, Eminis Ambalaj, TUBITAK-TEYDEB (Industrial Project). (Code: 3160006).
- H. Gultekin, Integrated Business Management in Packaging Production: Design of Production and Management Processes, Data Collection, Analysis, Reporting and Decision Support Systems Design and Development, *Progress Report, December 2017*, Eminis Ambalaj, TUBITAK-TEYDEB (Industrial Project). (Code: 3160006).
- H. Gultekin, Integrated Business Management in Packaging Production: Design of Production and Management Processes, Data Collection, Analysis, Reporting and Decision Support Systems Design and Development, *Progress Report, March 2017*, Eminis Ambalaj, TUBITAK-TEYDEB (Industrial Project). (Code: 3160006).
- 11. H. Gultekin, B. Tavli, Turkish Day-Ahead Energy Market Project Analysis Report, EPIAS, August 2016.
- 12. H. Gultekin, Line Balancing in Flowshops with Single and Dual Gripper Material Handling Robots, *Final Report, May 2016, TUBITAK-1001* (Code: 213M435).
- 13. H. Gultekin, Line Balancing in Flowshops with Single and Dual Gripper Material

Handling Robots, Progress Report, September 2015, TUBITAK-1001 (Code: 213M435).

- 14. H. Gultekin, Line Balancing in Flowshops with Single and Dual Gripper Material Handling Robots, *Progress Report, March 2015, TUBITAK-1001* (Code: 213M435).
- 15. **H. Gultekin**, Throughput Maximization in Flowshops with Flexible Operations: Benefits of Flexibility, Mathematical Models and Solution Procedures, *Final Report, June 2013*, *TUBITAK-1001* (Code: 110M489).
- 16. **H. Gultekin**, Throughput Maximization in Flowshops with Flexible Operations: Benefits of Flexibility, Mathematical Models and Solution Procedures, *Progress Report, October 2012, TUBITAK-1001* (Code: 110M489).
- 17. H. Gultekin, Throughput Maximization in Flowshops with Flexible Operations: Benefits of Flexibility, Mathematical Models and Solution Procedures, *Progress Report, April 2012, TUBITAK-1001* (Code: 110M489).
- 18. **H. Gultekin**, Throughput Maximization in Flowshops with Flexible Operations: Benefits of Flexibility, Mathematical Models and Solution Procedures, *Progress Report, November 2011, TUBITAK-1001* (Code: 110M489).
- 19. M.S. Akturk, **H. Gultekin**, Maximization of the throughput rate of the Fiancate robotic assembly line, TOFAS Automobile Factories *Final Report, December 2008, Platform A.S. (Industrial Project)* (Code: 2008/152-P).

#### 4.10 FUNDED RESEARCH PROJECTS AND CONSULTANCIES

|    |                                       |           | Role                | Funding           | Amount |
|----|---------------------------------------|-----------|---------------------|-------------------|--------|
| #  | Project Title                         | Duration  | (Research Team)     | Agency            | (OMR)* |
| 1. | Energy Efficient Scheduling in        | 2020-2023 | Principal           | Internal Research | 5.704  |
|    | Manufacturing: Energy-Time Trade-     |           | Investigator        | Grant, SQU        |        |
|    | off in Parallel Machine Environments  |           | (with: Chefi Triki) |                   |        |
|    | Code: IG/ENG/MIED/20/02               |           |                     |                   |        |
| 2. | Green Robotic Cell Scheduling,        | 2016-2018 | Principal           | Scientific and    | 31,250 |
|    | Code: 215M845                         |           | Investigator        | Technological     |        |
|    |                                       |           | (with: Sinan        | Research Council  |        |
|    |                                       |           | Gurel)              | of Turkiye        |        |
|    |                                       |           | ,                   | (TUBITAK)         |        |
| 3. | Integrated Business Management in     | 2016-2018 | Academic            | Scientific and    | 44,615 |
|    | Packaging Production: Design of       |           | Consultant          | Technological     | ,      |
|    | Production and Management             |           |                     | Research Council  |        |
|    | Processes, Data Collection, Analysis, |           |                     | of Turkiye        |        |
|    | Reporting and Decision Support        |           |                     | (TUBITAK) &       |        |
|    | Systems Design and Development,       |           |                     | Eminis AS         |        |
|    | Eminis Ambalaj (Industrial Project)   |           |                     |                   |        |
|    | Code: 3160006                         |           |                     |                   |        |
| 3. | Line Balancing in Flowshops with      | 2014-2016 | Principal           | Scientific and    | 22,500 |
|    | Single and Dual Gripper Material      |           | Investigator        | Technological     | ·      |
|    | Handling Robots                       |           | -                   | Research Council  |        |
|    | Code: 213M435                         |           |                     | of Turkiye        |        |
|    |                                       |           |                     | (TUBITAK)         |        |
|    |                                       |           |                     | × /               |        |

| 4. | ThroughputMaximizationinFlowshopswithFlexibleOperations:BenefitsofFlexibility,MathematicalModels and Solution Procedures  | 2011-2013                     | Principal<br>Investigator | Scientific and<br>Technological<br>Research Council<br>of Turkiye<br>(TUBITAK) | 30,384 |
|----|---|-------------------------------|---------------------------|--|--------|
| 5. | Maximization of the throughput<br>rate of the Fiancate robotic<br>assembly line, TOFAS<br>Automobile<br>Factories (Industrial Project)<br>Code: IG/ENG/MIED/18/01 | 1 June-31<br>December<br>2008 | Academic<br>Consultant    | TOFAS<br>Automobile<br>Factories Platform<br>AS                                | 15,000 |

\*1 OMR = 2.6 USD

#### 4.11 PROFESSIONAL MEMBERSHIPS

- 1. Industrial Engineering and Operations Management Society, 2022-...
- 2. Operational Research Society, Turkey, 2007-...
- 3. EURO Working Group on Metaheuristics (EU/ME), 2023-...
- 4. EURO Working Group on Combinatorial Optimization (ECCO), 2012-....
- 5. EURO Working Group on Project Management and Scheduling (PMS), 2008-....
- 6. The Institute for Operations Research and the Management Sciences, INFORMS, 2014-2015

#### 4.12 NATIONAL AND INTERNATIONAL RECOGNITION IN SCHOLARSHIP

- 1. Editorial Board Associate/Member for the international refereed journals
- Associate Editor: The Journal of Engineering Research (TJER) (2022- present).
- 2. Reviewer of several proposals for Internal Research Grants, SQU, 2020-2023.
- 3. Engineering Research Support Group Advisory Committee Member, Scientific and Technological Research Council of Turkiye TUBITAK, Turkiye, April 2017 August 2018.
- 4. Panelist/reviewer/reporter for **46** academic grant proposals for the Scientific and Technological Research Council of Turkiye (TUBITAK).
- 5. Referee/Outer Consultant/Observer for **70** industrial project proposals for the Scientific and Technological Research Council of Turkiye (TUBITAK).
- 6. Panelist/reviewer/reporter for 7 project proposals Entrepreneurship funding program for the Ministry of Industry and Technology of Turkiye.
- 7. Commission member/reviewer for **4** proposals for Research and Development Centers for Ministry of Industry and Technology of Turkiye.
- 8. Referee/observer for 8 proposals for Technology Development Foundation of Turkiye.
- 9. Commission member for Small and Medium Enterprises Development Organization of Turkiye.
- 10. Referee for 7 industrial project proposals for Technopark Ankara, Turkiye.
- 11. Verified peer reviews according to Web of Science: 154
- 12. Manuscript Reviewer for:

#### <u>Journals:</u>

• Operations Research

- Production and Operations Management
- INFORMS Journal on Computing
- IIE Transactions
- Annals of Operations Research
- Discrete Applied Mathematics
- Computers & Operations Research
- International Journal of Production Research
- 4OR A Quarterly Journal of Operations Research
- International Journal of Production Economics
- INFOR: Information Systems and Operational Research
- Journal on Computing
- International Journal of Robotics and Automation
- European Journal of Industrial Engineering
- Discrete Optimization
- IIE Transactions on Mechatronics
- Transportation Logistics Part C: Emerging Technologies
- Transportation Logistics Part E: Logistics and Transportation Review
- International Journal of Economics and Management Engineering
- CIRP Journal of Manufacturing
- Engineering Optimization
- IMA Journal of Management Mathematics
- Journal of Advanced Manufacturing Systems
- IEEE/ASME Transactions on Mechatronics
- IEEE Transactions on Industrial Informatics
- IEEE Transactions on Automation Science and Engineering
- IEEE Transactions on Sustainable Energy
- IEEE Internet of Things Journal
- RAIRO Operations Research
- Flexible Services and Manufacturing
- Robotics and Computer Integrated Manufacturing
- Journal of the Operational Research Society
- Operations Research and Decisions
- Sigma Journal of Engineering and Natural Sciences
- Turkish Journal of Electrical Engineering & Computer Sciences.
- An International Journal of Optimization and Control: Theories & Applications (IJOCTA)
- Gazi Universitesi Muhendislik Mimarlik Fakultesi Dergisi
- ICT Express
- IMA Journal of Management Mathematics
- International Journal of Operational Research
- International Journal of Combinatorial Optimization
- Journal of Optimization in Industrial Engineering
- The Journal of Engineering Research
- Scientia Iranica
- Bankacilar Dergisi
- Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi

#### **Book Chapters:**

• Industrial Engineering Management, Tools, and Applications, Three Volume Set Edited By: Bopaya Bidanda, Ihsan Sabuncuoglu, Bahar Y. Kara CRC Press, 2015, ISBN 9781138747708

## Conferences:

- International Conference on Decision Aid Sciences and Applications, DASA'2020, 8-9 November 2020, Bahrain.
- 36th National Operations Research and Industrial Engineering Conference, Izmir, Turkiye, 13-15 July 2016
- IFAC Conference on Manufacturing Modelling, Management and Control, June 19-21, Saint Petersburg, Russia, 2013.
- Combinatorial Optimization Second International Symposium, ISCO 2012, Athens, Greece, April 19-21, 2012.

13. Chaired sessions/panels for:

- International Conference on Science, Engineering Management and Information Technology (SEMIT), Turkiye, September 14-15, 2023.
- International Conference on Industrial Engineering and Operations Management Istanbul, Turkiye, March 7-10, 2022.
- National Operations Research and Industrial Engineering Conference, Yasar University, Izmir, Turkiye, 13-15 July 2016.
- National Operations Research and Industrial Engineering Conference, Middle East Technical University, Ankara, Turkiye, 9-11 July 2015.
- INFORMS Annual Meeting 2014, San Francisco, USA, 9-12 November 2014.
- The International IIE Conference and National Operations Research and Industrial Engineering Conference, Istanbul, Turkiye, 26-28 June 2013.
- 14. Track Organizer (Scheduling), National Operations Research and Industrial Engineering Conference, Yasar University, Izmir, Turkiye, 13-15 July 2016.
- 15. Membership of Conference Committees:
  - Co-chair, 2nd GCC (Gulf Cooperation Council) IEOM Conference, Sultan Qaboos University, Muscat, Oman, to be organized in December 2024.
  - Scientific Committee Member, International Conference on Science, Engineering Management and Information Technology (SEMIT), Turkiye, September 14-15, 2023.
  - Organizing committee member, 16th World Conference on Applied Science, Engineering and Technology WCASET, Dubai, 21 22 February 2019.
  - Program Committee Member, the International IIE Conference and National Operations Research and Industrial Engineering Conference, Istanbul, Turkiye, 26-28 June 2013.
  - International Scientific Committee Member, 8th International Symposium on Intelligent and Manufacturing Systems, Adrasan, Antalya, Turkey, 27-28 September 2012.
  - International Scientific Committee Member, 7th International Symposium on Intelligent and Manufacturing Systems, International University of Sarajevo, Sarajevo, Bosnia and Herzegovina, 15-17 September 2010.
- Best Paper Award, The Second International Conference on Business and Economics, 12-13 December 2022.

- 17. Selected as one of five finalists in the Undergraduate Operations Research Prize Competition, INFORMS, 2019 with paper entitled "Energy Aware Scheduling of a Material Handling Robot in an m-Machine Robotic Cell" (student name: Rabia Taspinar).
- 18. Project Performance Award for project no: 213M435, Scientific and Technological Research Council of Turkiye, 8 July 2019.
- 19. Project Performance Award for project no: 110M489, Scientific and Technological Research Council of Turkiye, 31 July 2015.
- 20. Young Researcher Career Development Award, Scientific and Technological Research Council of Turkiye, 2011-2013.
- 21. Scholarship for postdoctoral study, University of Liege, August 2007 November 2007.
- 22. Scholarship for postdoctoral study, Scientific and Technological Research Council of Turkiye, January 2007 August 2007.
- 23. Scientific and Technological Research Council of Turkiye, grant for attending international scientific activities to attend INCOM'2006 conference in St-Etienne, France, May 2006.
- 24. EU Erasmus exchange grant to give a seminar and lectures at the University of Liege, Belgium, December 2005.
- 25. Scholarship for Ph.D. study, awarded by Scientific and Technological Research Council of Turkiye, September 2003 September 2006.
- 26. Scholarship for Ph.D. study, awarded by Bilkent University, September 2002 December 2006.
- 27. Scholarship for MSc. study, awarded by Bilkent University, September 2000 June 2002.
- 28. Undergraduate Study Fellowship, awarded by Bilkent University, September 1996 July 2000.
- 29. Ranked 96th over a million in University Entrance Exam, Turkiye, 1996.

# 5. SERVICE

# 5.1 INSTITUTIONAL SERVICE

### **<u>5.1.1</u>** <u>College and University Committees (Sultan Qaboos University)</u>

| #  | Name of Committee                                   | Date         | Role   |
|----|---|--------------|--------|
| 1. | College Postgraduate Studies and Research Committee | 2020-2022    | Member |
| 2. | College Research Committee                          | 2022-present | Member |
| 3. | College Board                                       | 2023-present | Member |

#### 5.1.2 Departmental Committees (Sultan Qaboos University)

| #  | Name of Committee   | Date         | Role        |
|----|---|--------------|-------------|
| 1. | Department Postgraduate Studies and Research (DPGSR)      | 2020-present | Chair,      |
|    |   | _            | IE program  |
|    |   |              | coordinator |
| 2. | Department Postgraduate Studies and Research (DPGSR)      | 2019-2020    | IE program  |
|    |   |              | coordinator |
| 3. | Continuous Assessment and Evaluation Committee–Industrial | 2019-present | Member      |
|    | Eng. Program (CAEC-IE)                                    | _            |             |
| 4. | Department Publications/web Committee                     | 2020-2021    | Member      |
|    | -   |              |             |

| 5. | Department Strategic Planning Committee              | 2020-present | Member   |
|----|--|--------------|----------|
| 6. | Department Recruitment Committee                     | 2022-present | Member   |
| 7. | Department Academic Programs Modernization Committee | 2022-present | Member   |
| 8. | Department Self Study Report Committee               | 2022-present | Co-chair |
| 9. | Department Conference Committee                      | 2023-present | Co-chair |

5.1.3 University Service (TOBB University of Economics and Technology)

| #   | Name   | Date                               | Role                  |
|-----|--|------------------------------------|-----------------------|
| 1.  | College of Engineering Faculty Board                         | 2014-2018                          | Member                |
| 2.  | University Cooperative Education Task Force                  | November 2014 –<br>January 2015    | Chair                 |
| 3.  | College of Engineering                                       | May 2011 –<br>November 2013        | Assistant<br>Dean     |
| 4.  | University Registration Committee                            | June 2011 –<br>November 2012       | Chair                 |
| 5.  | University Registration Committee                            | October 2010 –<br>June 2011        | Member                |
| 6.  | University Academic Performance Evaluation Committee         | September 2010 –<br>September 2011 | Member                |
| 7.  | University Research and Development Committee                | September 2010 –<br>September 2011 | Vice-<br>chair        |
| 8.  | Institute of Engineering and Sciences (postgraduate studies) | September 2010 –<br>September 2011 | Assistant<br>Director |
| 9.  | College of Engineering ABET Committee                        | October 2010-<br>December 2011     | Member                |
| 10. | Department ABET Committee                                    | October 2010 –<br>June 2011        | member                |
| 11. | College of Engineering Faculty Board                         | January 2008 –<br>April 2009       | Member                |

#### 5.2 **PROFESSIONAL SERVICE**

- 1. Referee for several promotion applications from different universities.
- 2. External examiner for PhD Qualifier Examinations for different universities.
- 3. Reviewer for several Internal Grant Proposals at College of Engineering (SQU).
- 4. Engineering Research Support Group Advisory Committee Member, Scientific and Technological Research Council of Turkiye, TUBITAK, April 2017 August 2018.

### 5.3 SERVICE TO THE PUBLIC

- 1. **Speaker** at The Sixth Technology Talk at the department of Mechanical and Industrial Engineering with the title: "Privacy in Smart Grids and Load Shaping Based Privacy Prevention Strategies", April 09, 2019.
- 2. Jury Member for:

- Student Project Competition, National Operations Research and Industrial Engineering Conference, Bogazici University Istanbul, Turkiye, 4-7 July 2021.
- Student Project Competition, National Operations Research and Industrial Engineering Conference, Middle East Technical University, Ankara Turkiye, 9-11 July 2015.
- Student Project Competition, The International IIE Conference and National Operations Research and Industrial Engineering Conference, Istanbul, Turkiye, 26-28 June 2013.
- 3. YouTube Channel: https://www.youtube.com/channel/UCxUWR1TfRgTxCof0DIT9YDw

## 5.4 PERSONAL DEVELOPMENT

- 1. Attended a seminar on "Publishing Scholarly Content with IEEE: Publisher's Perspective", Sultan Qaboos University Main Library and IEEE, 8 May 2023.
- 2. Attended a workshop on "Teaching Philosophy and Teaching Strategies", Sultan Qaboos University, 27 April 2023.
- 3. Attended a workshop on "Arduino", Communication & Information Research Center, Free and Open Source Software Society, 16 June 2021.
- 4. Attended a workshop on "Principles from Cognitive Science for Teaching Online", Center for Excellence in Teaching & Learning (CETL), Sultan Qaboos University, 27 January 2021.
- 5. Attended a workshop on "Using Luban (HPC) System", Center for Information Systems, Sultan Qaboos University, 2 November 2020.
- 6. Attended a seminar on "Microgrid: An Emerging Solution for Renewable Energy Integration", Independent Learning Center for Skills Development, Sultan Qaboos University, 12 November 2020.
- 7. Attended a workshop on "Use of E-Learning System", Center for Educational Technology, Sultan Qaboos University, 25 August 2020.
- 8. Attended a seminar on "Significant Learning Best Practices for Remote Teaching", College of Engineering, Sultan Qaboos University, 12 July 2020.
- 9. Attended a seminar on "Modernization of Industrial Engineering Program Challenges and Solutions", Department of Mechanical and Industrial Engineering, Sultan Qaboos University, 19 September 2019.

# 5.5 <u>RECOGNITION AND AWARDS IN SERVICE</u>

- 1. Certificate of Appreciation, in the field of Scientific Research and Postgraduate Studies, College of Engineering, Sultan Qaboos University, 2 May 2023.
- 2. Certificate of Appreciation for leading role and efforts in the Postgraduate and Research Committee, Department of Mechanical and Industrial Engineering, Sultan Qaboos University, 22 November 2022.