

IŞIK UNIVERSITY
Mechanical Engineering Department
Personnel Data Form

| A. PERSONAL | | |
|----------------------------|---|---|
| Title | Prof. Dr. |  |
| Name | İlker TARI | |
| Birth Place / Year | Eskişehir, 1966 | |
| e-Mail / Personal Web Site | ilker.tari@isikun.edu.tr , https://sites.google.com/view/ilkertari | |
| Working Field(s) | Heat Transfer, Renewable Energy | |
| Foreign Language(s) | English | |

| B. EDUCATION | | | |
|----------------------------------|------|---------------------|---------------------------------------|
| Degree | Year | Subject | Institution |
| Doctorate | 1998 | Mechanical Eng. | Northeastern University, Boston, MA |
| Engineer Degree & Science Master | 1994 | Nuclear Eng. | MIT, Cambridge, MA |
| Master of Science | 1991 | Nuclear Eng. | University of Michigan, Ann Arbor, MI |
| Bachelor of Science | 1987 | Nuclear Energy Eng. | Hacettepe University, Ankara |
| Associate | - | - | - |

| C. ACADEMIC | | |
|---------------------|------|---|
| Title | Year | Institution |
| Professor | 2017 | Middle East Technical University |
| Associate Professor | 2011 | Middle East Technical University |
| Assistant Professor | 1999 | Middle East Technical University |
| Lecturer | 1997 | University of California, Riverside, CA |
| Research Assistant | 1996 | Northeastern University, Boston, MA |
| Research Assistant | 1987 | Hacettepe University |

| D. PROFESSIONAL EXPERIENCE | |
|----------------------------|---|
| a. Domestic | |
| 2025 - | Işık University, Mechanical Engineering Department, Faculty Member |
| 1998-2022 | Middle East Technical University, Mechanical Eng. Dept., Faculty Member |
| 1987-1989 | Hacettepe University, Nuclear Energy Eng. Dept., Teaching Assistant |
| | |
| b. Abroad | |
| 2010-2012 | Technische Universität München, Nanoelectronics Inst., Visiting Professor |
| 1997-1998 | University of California, Riverside, Mechanical Eng. Dept., Lecturer |
| 1993-1997 | Northeastern University, Mechanical Eng. Dept., Teaching Assistant |

| E. ADMINISTRATIVE EXPERIENCE | |
|------------------------------|-------------------------------------|
| a. At Işık University | |
| 2025- | Elected member of the Faculty Board |

| b. At Other Institutions/Companies | |
|---|--|
| 2019 - | International Centre for Heat and Mass Transfer, Secretary-General |
| 2014-2022 | ODTÜ-GÜNAM Lead Researcher / CSP Division Coordinator |
| 2001-2008 | METU Mechanical Engineering Dept. Advisor to Department Head |

| F. INTERESTED SUBJECTS |
|-------------------------------|
| Thermal Energy Storage |
| Heat Exchanger Design |
| Fuel Cells and Batteries |
| Computational Heat Transfer |
| Solar Energy Applications |

| G. INSTRUCTED COURSES | |
|---|---|
| a. At Işık University | b. At Other Institutions |
| MECH4370 Energy Systems | ME570 Adv. Topics in Rad. Transfer (METU) |
| MECT3322 Fundamentals of Thermal Sciences | ME508 Thermal Radiation (METU) |
| MECH2322 Thermodynamics | ME492 Fuel Cell Fundamentals (METU) |
| ME512 Advanced Heat Transfer (MSc) | ME478 Intro. to Solar Energy Utilization (METU) |
| | ME421 Steam Gen. & Heat Exch. Design (METU) |
| | ME351 Thermodynamics of Heat Power (METU) |
| | ME312 Thermal Engineering (METU) |
| | ME311 Heat Transfer (METU) |
| | ME310 Numerical Methods (METU) |
| | ME306 Fluid Mechanics II (METU) |
| | ME305 Fluid Mechanics I (METU) |
| | ME203 Thermodynamics (METU) |
| | ME170 Experimental Techniques (UCR) |
| | ME160 Mechanical Engineering Lab. (UCR) |
| | ME131 Comp Aided Design of Mech. Sys (UCR) |
| | ME100 Adv Engineering Thermodynamics (UCR) |
| | ME014 Properties of Eng. Materials (UCR) |
| | ME009 Engineering Graphics and Design (UCR) |
| | ENGR 115 Fluid Mechanics Lab (UCR) |

| H. NUMBER OF SUPERVISED GRADUATE THESIS | |
|--|----|
| Master of Science | 37 |
| Doctorate | 6 |

| I. PUBLICATIONS | | | | | | |
|--|---|------------------------------------|----------------------------------|--------------------------------|---------------------------|--|
| Type | SCI-Expanded International Journal Papers | Other International Journal Papers | National Referred Journal Papers | International Symposium Papers | National Symposium Papers | Books / Chapters in Books (Translations Incl.) |
| Numbers | 30 | 1 | - | 54 | 2 | 1 |
| SCI-Expanded Total Number of Citations | | | | 1053 | | |
| Important Publications | | | | | | |
| E. Ozden, I. Tari, " Shell Side CFD Analysis of a Small Shell-and-tube Heat Exchanger," Energy Convers. Manage., 51, 1004-1014 (2010). | | | | | | |

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| I. Tari, M. Mehrtash, "Natural Convection Heat Transfer from Inclined Plate-fin Heat Sinks," Int. Journ. of Heat and Mass Transfer, 56, 574-593 (2013). |
| E. Öztürk, I. Tari, "Forced Air Cooling of CPUs with Heat Sinks: a Numerical Study," IEEE Trans. Compon. Packag. Technol., 31, 650-660 (2008). |
| I. Tari, F. S. Yalçın, "CFD Analyses of a Notebook Computer Thermal Management System and a Proposed Passive Cooling Alternative," IEEE Trans. Compon. Packag. Technol., 33, 443-452 (2010). |
| I. Tari, "Natural Convection Simulations and Numerical Determination of Critical Tilt Angles for a Parallel Plate Channel," Energy Convers. Manage., 51, 685-695 (2010). |
| I. Tari, "Passive Cooling Assembly for Flat Panel Displays with Integrated High Power Components," IEEE Trans. Consumer Electron., 55, 1707-1713 (2009). |
| M. Mehrtash, I. Tari, S. Yesilyurt, "Numerical modeling of visco-elasto-plastic hygro-thermal stresses and the effects of operating conditions on the mechanical degradation of PEFC membranes," Journal of Power Sources, 396, pp 164-174 (2018). |
| N. Cubukcu, I. Tari, "Buildings Sector from a Sustainable Carbon Constrained Energy Generation Perspective," Energy and Buildings, Vol. 259, 111865 (2022). |
| O. Polat, I. Tari, "Solar Hybridization Paths for Cement Production Processes," Heat Transfer Engineering, Vol. 45(2), pp. 165-175 (2023). |
| D. Degirmenci, E. Çubuk, I. Tari, O. Selimoglu, "Cooling optimization for concentrating photovoltaic modules: A study of convective and radiative cooling with a focus on plate fin applications," Renewable Energy, Vol. 247, 122953 (2025). |

J. RESEARCH EXPERIENCE

| | DPT Projects | TÜBİTAK Projects | SANTEZ Projects | BAP Projects | EU Projects | Other Projects |
|---------------------------|--------------|------------------|-----------------|--------------|-------------|----------------|
| Number of Projects | | | | | | |
| As Supervisor | | 2 | 1 | 3 | 2 | |
| As Researcher | | 1 | | | 3 | |

K. REFERREING

| Type | SCI Journals | Other Journals | | Symposiums | | R & D Projects | | |
|----------------|--------------|----------------|---------------|------------|---------------|----------------|--------|---------------|
| | | National | International | National | International | ARDEB | TEYDEB | International |
| Numbers | >50 | >20 | >30 | 3-4 | >30 | >40 | 5 | 2 |

L. INTELLECTUAL PROPERTIES

| Patents | Utility Models | Industrial Designs | Other |
|---------|----------------|--------------------|-------|
| - | - | - | - |

M. PROFFESIONAL ASSOCIATION MEMBERSHIPS

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| International Centre for Heat and Mass Transfer |
| Türkiye Kojenerasyon Derneği |
| Türkiye Isı Bilimi ve Tekniği Derneği |
| American Society of Thermal and Fluids Engineers |
| Nükleer Mühendisler Derneği |

N. OTHER USEFUL INFORMATION (if any)

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