

RESEARCH INTERESTS

- Heat Transfer and Fluid flow in Micro Heat Exchangers.
- Single-Phase Heat Transfer and Boiling Heat Transfer in Micro Heat Exchangers.
- Single-phase and two-phase pressure drop and critical heat flux (CHF), in MEMS based pin fin and second generation Micro Heat Exchangers.
- Flow instabilities in Micro Heat Exchangers.

Application Areas : Electronic Cooling, Lab on a Chip Devices, Microreactors, Microbiological Applications, Spot Cooling, Nano-plasmonic applications, Micro/Nano Scale Energy Conversions...etc.

EDUCATION

April 2012- July 2016 **PhD. Brunel University, London, UK**
School of Engineering and Design
Department of Mechanical Engineering

2008 - 2010 **MSc. Sabanci University (SU), Istanbul, Turkey**
Faculty of Engineering and Natural Sciences (FENS),
Mechatronics (ME) Module
GPA: 3.72/4.00

2004 - 2008 **BSc. Marmara University, Istanbul, Turkey**
Faculty of Engineering,
Department of Mechanical Engineering
GPA: 3.12/4.00

WORK EXPERIENCE

February 2009 to date **Marmara University Mechanical Engineering Department**

- Research Assistant

2010 – 2012 **Sabancı University Mechatronics Module**

- Research Fellow - High mass flux flow boiling and critical heat flux in microscale

2008 – 2010 **Sabancı University Mechatronics Module**

- TUBITAK Research Fellow – Boiling Instabilities in Microtubes Tubitak 1001 Project

SCI and SCI-E JOURNAL PUBLICATIONS

Publication Year	Citation	Title of the Publication	Name of the Journal
2016	-	Single Phase Flow Pressure Drop and Heat Transfer in Rectangular Metallic Microchannels	Applied Thermal Engineering
2014	4	The Effects of Inlet Restriction and Tube	Applied Thermal Engineering

		Size on Boiling Instabilities and Detection of Resulting Premature Critical Heat Flux in Microtubes Using Data Analysis	
2013	3	Thermally Developing Single-Phase Flows in Microtubes	ASME Journal of Heat Transfer
2013	13	High Mass Flux Flow Boiling and Critical Heat Flux in Microscale	International Journal of Thermal Sciences
2011	6	Low Mass Quality Flow Boiling in Microtubes at High Mass Fluxes	ASME Journal of Thermal Science and Engineering Applications
2011	18	Parametric Study on the Effect of End Walls on Heat Transfer and Fluid Flow across a Micro Pin-Fin	International Journal of Thermal Sciences
2010	15	Pressure Drop across Micro-Pin Heat Sinks under Unstable Boiling Conditions	International Journal of Thermal Sciences

REGIONAL JOURNAL (Non Indexed) PUBLICATIONS

Publication Year	Citation	Title of the Publication	Name of the Journal
2016	-	Flow Boiling Heat Transfer in a Rectangular Copper Microchannel	Journal of Thermal Engineering

CONFERENCE PROCEEDINGS (Referee Reviewed)

Year	Country	Title	Oral/Poster
2015	Edinburgh/UK	Flow Boiling Heat Transfer in a Shallow Metallic Microchannel	Poster
2015	Istanbul/Turkey	Flow Boiling Heat Transfer in a Rectangular Copper Microchannel	Oral
2014	London/UK	Single Phase and Two Phase Heat Transfer in Microchannels	Oral
2014	London/UK	Single Phase Flow Pressure Drop	Oral

		and Heat Transfer in a Rectangular Metallic Microchannel	
2011	Zonguldak/Turkey	Exergy Analysis of Marmara University Engineering Faculty C Building	Oral
2011	Istanbul/Turkey	Numerical Simulation and Optimization of Solar Tower	Oral
2011	Thessaloniki/Greece	Boiling Instabilities in Microtubes	Oral
2010	Washington D.C./USA	Boiling Heat Transfer in Microtubes at High Flow Rates	Poster
2010	Montreal/Canada	Experimental Study on Single Phase Flow in Microchannels at High Mass Flow Rates	Oral
2010	Istanbul/Turkey	Thermal-Hydraulic, Exergy And Exergy-Economic Analysis Of Micro Heat Sinks At High Flow Rates	Oral
2009	Tenerife/Spain	Parametric Study On The Effect Of Endwalls On Fluid Flow in Micro Pin-Fin Heatsinks	Oral
2009	Florianopolis/Brazil	Pressure Drop Across Micro-Pin Heat Sinks Under Boiling Conditions	Oral

TEACHING EXPERIENCES

- Spring 2012 **Research Assistantship – Marmara University, Turkey**
Lecturer: Mustafa Yılmaz
Course: Heat Transfer
- Fall 2011 **Research Assistantship – Marmara University, Turkey**
Lecturer: Mehmed Rafet Özdemir
Course: Physics Lab.
- Spring 2011 **Research Assistantship – Marmara University, Turkey**
Lecturer: M. Hakan Akyüz
Course: Technical Drawing
- Fall 2010 **Research Assistantship – Marmara University, Turkey**
Lecturer: M. Hakan Akyüz
Course: Technical Drawing
- Spring 2010 **Research Assistantship – Marmara University, Turkey**
Lecturer: Bülent Ekici
Course: Machine Design I
- Spring 2010 **Graduate Assistantship - FENS, SU, Turkey**
Lecturer: Mahmut F. Akşit

Course: Machine Design II

Fall 2009 **Graduate Assistantship - FENS, SU, Turkey**
Lecturer: Plamen Djakov
Course: Calculus I

Spring 2009 **Graduate Assistantship - FENS, SU, Turkey**
Lecturer: Ali Koşar
Course: Mechanics of Materials

Fall 2008 **Graduate Assistantship - FENS, SU, Turkey**
Lecturer: Plamen Djakov
Course: Calculus I

AWARDS & SCHOLARSHIPS

- Turkish Higher Education Fully Funded PhD Scholarship, 2012-2016.
- Low Mass Quality Flow Boiling in Microtubes at High Mass Fluxes journal became one of the 10 most downloaded research articles in the ASME Journal of Thermal Science and Engineering Applications in October, November and December 2011.
http://asmedl.aip.org/journals/doc/ASMEDL-home/most_downloaded.jsp?KEY=JTSEBV&Year=2011&Month=10&agg=md

http://asmedl.org/journals/doc/ASMEDL-home/most_downloaded.jsp?KEY=JTSEBV&Year=2011&Month=11&agg=md

http://asmedl.org/journals/doc/ASMEDL-home/most_downloaded.jsp?KEY=JTSEBV&Year=2011&Month=12&agg=md
- Full tuition waiver in Sabanci University for MSc ,2010-2012.
- Research Fellowship from The Scientific and Technological Research Council of Turkey during MSc, 2010-2012.

LANGUAGES & SKILLS

Foreign Languages: English (Advanced), Arabic (Basic), Spanish (Intermediate-Certificate from Institute of Cervantes)

Design Environments: 3-D CAD/CAM Programs

Computer Skills: Matlab, Comsol Multiphysics, Abaqus, EES, FORTRAN, Autolev

SOCIAL ACTIVITIES & INTERESTS

Professional Memberships

- ASME
- TMMOB
- MMG

Interests

Squash, Swimming, Ping-pong, Music, Theatre, Avionic, Cinema, Music and History

REFERENCES

Prof. Dr. Tassos G. Karayiannis – tassos.karayiannis@brunel.ac.uk (PhD Supervisor)

Assoc. Prof. Dr. Ali Koşar – kosara@sabanciuniv.edu (MSc. Supervisor)

Prof. Dr. Abdülkerim Kar – akar@marmara.edu.tr (BSc. Supervisor)

Assoc. Prof. Dr. Mahmut Faruk Aksit – aksit@sabanciuniv.edu (Sabancı University Faculty Member)