

Ministry of Education of the Republic of Azerbaijan,
Azerbaijan University of Architecture and Construction,
Associate Professor of Physics, PhD in Technical
Sciences **Musazadeh Imamhasan Veli**



INFORMATION

Musazadeh Imamhasan Veli was born on March 18, 1959 in Sadikhli village of Agstafa region. Musazadeh Imamhasan Veli graduated from the Physics Faculty of Baku State University (Azerbaijan State University). In 1986-1989, he studied full-time at the Azerbaijan State Oil Academy.

In 1993, he defended his dissertation on “Heat transfer at high pressures of substances from the crisis” (specialty “Theoretical foundations of thermal engineering”) and received the degree of Candidate of Technical Sciences. He studied the heat transfer of aromatic hydrocarbons flowing at high pressures from stainless steel pipes.

In 1990-1998, he worked as a senior laboratory assistant at the Department of Steam and Gas Turbines and Thermal Power Stations at the Azerbaijan State Oil Academy.

In 2000-2008, he worked as senior lecturer at the Department of Physics at the Azerbaijan International University and taught a general physics course.

In 2008-2015, he worked as a senior researcher at the Scientific Research Laboratory “Physics of Metal Alloys” of the Azerbaijan University of Architecture and Construction. He taught hourly calculus for a general physics course.

In 2015-2019, he worked as an acting associate professor and associate professor.

In 2018, he received the title of associate professor.

He is the co-author of 31 scientific works, including 3 books.

Books:

1. Fizika kursu. “Zaman-3. EİKM” məətbəsi. Bakı 2011.
2. Ümumi fizika. “Zaman-3. EİKM” məətbəsi. Bakı 2014.
3. Лабораторные работы по физике-2. AzMIU “Nəşriyyat və Poliqrafiya mərkəzi” 2016.

Main scientific works (including recent years):

1. Теплоотдача толуола при сверхкритических давлениях в изогнутых трубах. Нефть и Газ. №11. 1989.
2. Исследование особенности теплоотдачи ароматических углеводородов в переходной области течения теплоносителя при сверхкритических давлениях в условиях высокочастотной термоакустической неустойчивости. Нефть и Газ. 1989.
3. Экспериментальное исследование теплоотдачи в вертикальных криволинейных каналах при сверхкритических давлениях ароматических углеводородов. Нефть и Газ. 1991.
4. Теплоотдача в змеевиковых трубах при переходном режиме движения и СКД толуола. Нефть и газ. 1992. № 9-10.
5. Некоторые особенности переходного режима движения жидкости сверхкритического давления в змеевиковых трубах и расчетные уравнения теплоотдачи. Kimya və Neftkimyası. № 3. 2003.
6. Dizel mühərrikli elektrik stansiyaların işinin effektivliyinin artırılması. Ekologiya və su təsərrüfatı. Elmi-texniki istehsalat jurnalı. №4 2012.
7. Co əsaslı amorf metallik ərintilərin maqnit və impedans xassələri. Ekologiya və su təsərrüfatı. Elmi-texniki istehsalat jurnalı №1 2017.
8. Maddənin böhran təzyiqindən yüksək təzyiqlərində əyri borularda temperaturun istilik selindən asılılığı. Azərbaycan texniki universiteti. Elmi əsərlər. №3. 2017.
9. Maddənin böhrandan yüksək təzyiqlərində əyri borularda istilikvermə. Ekologiya və su təsərrüfatı. Elmi – texniki və istehsalat jurnalı. №2 , 2018. Səh. 116-118.

Main scientific results:

1. In curved pipes, heat transfer is always higher on the outer perimeter of the pipe than on the inner perimeter.
2. The average cost of heat transfer in curved pipes is several times higher than in straight pipes. As the diameter of the curve decreases, the heat transfer increases.
3. Free convection affects heat transfer in curved pipes at $Gr > 105$. The intensity of heat transfer changes under the influence of free convection. As fluid consumption increases ($Re > 8000$), the effect of free convection on heat transfer decreases.
4. A criterion equation is given to calculate the local values of wall temperature and heat transfer.

Main scientific achievements:

The dependence of the heat transfer coefficient of aromatic hydrocarbons at high pressures on the geometric dimensions of the pipe, radius of curvature, fluid flow, heat flux density, pressure, temperature was studied and a criterion equation was introduced to calculate the local value of heat transfer.

Phone: 051 516 88 11

e-mail: musazadeimamhesen@gmail.com

