



|                    |                       |
|--------------------|-----------------------|
| نام و نام خانوادگی | محمدتقی شروانی تبار   |
| مرتبه علمی         | استاد تمام            |
| آدرس محل کار       | دانشکده مهندسی مکانیک |
| تلفن               | ---                   |
| فکس                | ---                   |
| پست الکترونیک      | msherv@tabrizu.ac.ir  |
| آدرس وب سایت       | ---                   |

## تحصیلات

(1) دکتری، ---، مکانیک،

## عناوین دروس

- 1) آژ کاربرد هیدرولیک و پنوماتیک، کارشناسی B.Sc
- 2) آژ کاربرد هیدرولیک و پنوماتیک، کارشناسی B.Sc
- 3) آژ کنترل فرآیندها، کارشناسی B.Sc
- 4) آژ مکانیک سیالات، کارشناسی B.Sc
- 5) برنامه نویسی کامپیوتر، کارشناسی B.Sc
- 6) برنامه نویسی کامپیوتر، کارشناسی B.Sc
- 7) پروژه تخصصی، کارشناسی B.Sc
- 8) دینامیک- گازها، کارشناسی B.Sc
- 9) کارآموزی دو، کارشناسی B.Sc
- 10) کارآموزی یک، کارشناسی B.Sc
- 11) کاربرد هیدرولیک و پنوماتیک، کارشناسی B.Sc
- 12) کاربرد هیدرولیک و سیستمهای بادی، کارشناسی B.Sc
- 13) میانی دینامیک سیالات محاسباتی، کارشناسی B.Sc
- 14) مکانیک سیالات، کارشناسی B.Sc
- 15) مکانیک سیالات 1، کارشناسی B.Sc
- 16) مکانیک سیالات 2، کارشناسی B.Sc
- 17) پایان نامه، کارشناسی ارشد M.Sc
- 18) پایان نامه، کارشناسی ارشد M.Sc
- 19) دینامیک سیالات محاسباتی 2، کارشناسی ارشد M.Sc
- 20) دینامیک سیالات محاسباتی، کارشناسی ارشد M.Sc
- 21) دینامیک سیالات محاسباتی 1، کارشناسی ارشد M.Sc
- 22) دینامیک گازها، کارشناسی ارشد M.Sc
- 23) سمینار، کارشناسی ارشد M.Sc
- 24) شبیه سازی کامپیوتری، کارشناسی ارشد M.Sc
- 25) مباحث منتخب درسیالات، کارشناسی ارشد M.Sc
- 26) محاسبات عددی پیشرفته، کارشناسی ارشد M.Sc
- 27) محاسبات عددی پیشرفته، کارشناسی ارشد M.Sc
- 28) محاسبات عددی پیشرفته، کارشناسی ارشد M.Sc
- 29) هیدرولیک و پنوماتیک پیشرفته، کارشناسی ارشد M.Sc

- (30) دینامیک سیالات محاسباتی ، دکتری
- (31) دینامیک سیالات محاسباتی 1، دکتری
- (32) دینامیک سیالات محاسباتی 2، دکتری
- (33) رساله، دکتری
- (34) محاسبات عددی پیشرفته، دکتری

مقالات چاپ شده در نشریات بین المللی

- 1) Shervani Tabar Mohammad Taghi, Abdullah Amir, Shabgard Mohammad Reza, 2006/06/01, Numerical study on the dynamics of an electrical discharge generated bubble in EDM, *Engineering Analysis with Boundary Elements*, 30, 503-514
- 2) Shervani Tabar Mohammad Taghi, Abdullah Amir, Shabgard Mohammad Reza, 2007/02/13, Numerical and experimental study on the effect of vibration of the tool in ultrasonic assisted EDM, *International Journal of Advanced Manufacturing Technology*, 32, 719-731
- 3) Shervani Tabar Mohammad Taghi, Maghsoudi Karim, 2007/09/11, Numerical study on the splitting of a vapour bubble in the process of EDM, *International Journal of Advanced Manufacturing Technology*, 38, 657-673
- 4) Dadvand Abdolrahman, Khoo Boo Cheong, Shervani Tabar Mohammad Taghi, 2008/10/02, A collapsing bubble-induced microinjector: an experimental study, *EXP FLUIDS*, 46, 419-434
- 5) Shervani Tabar Mohammad Taghi, Dadvand Abdolrahman, Khoo Boo Cheong, H. Nobari Mohammadreza, 2009/07/01, A numerical and experimental study of a collapsing bubble-induced droplet ejector, *Theoretical and Computational Fluid Dynamics*, 23, 297-316
- 6) Zarifneshat Saeed, Ghassemzadeh Hamid Reza, Sadeghi Seyyed Mortaza, Abbaspour Fard Mohammad Hossein, Ahmadi Ebrahim, Javadi Arzhang, Shervani Tabar Mohammad Taghi, 2010/04/01, Effect of Impact Level and Fruit Properties on Golden Delicious Apple Bruising, *American Journal of Agricultural and Biological Science*, 5, 113
- 7) Shervani Tabar Mohammad Taghi, Majidi Seyyed Hojjat, Poursharifi Zahra, 2011/01/01, Investigation of Recirculation Effects on the Formation of Vapor Bubbles in Centrifugal Pump Blades, *World Academy of Science, Engineering and Technology*, 49, 521-526
- 8) Shervani Tabar Mohammad Taghi, Poursharifi Zahra, 2011/01/01, An Experimental Study of Tip Vortex Cavitation Inception in an Axial Flow Pump, *International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering*, 5, 86-89
- 9) Shervani Tabar Mohammad Taghi, Poursharifi Zahra, 2011/01/28, An Experimental Study of Tip Vortex Cavitation Inception in an Axial Flow Pump, *World Academy of Science, Engineering and Technology*, 5, 396-399
- 10) Shervani Tabar Mohammad Taghi, Mobadersany Nima, Seyyed Mahmoudi Seyyed Mohammad, Rezaee-Barmi Alireza, 2011/02/02, Velocity field and pressure distribution around a collapsing cavitation bubble during necking and splitting, *J ENG MATH*, 71, 349-366
- 11) Shervani Tabar Mohammad Taghi, Rambarzin Faramarz, Shabgard Mohammad Reza, Payamani Reza, 2011/02/03, Numerical study on the dynamics of an electrical discharge generated vapor bubble in EDM with different shapes of the tool and the workpiece, *International Journal of Advanced Manufacturing Technology*, 56, 151-159
- 12) Dadvand Abdolrahman, Shervani Tabar Mohammad Taghi, Khoo Boo Cheong, 2011/02/08, A note on spark bubble drop-on-demand droplet generation: simulation and experiment, *International Journal of Advanced Manufacturing Technology*, 56, 245-259
- 13) Shervani Tabar Mohammad Taghi, Shabgard Mohammad Reza, 2011/03/01, Numerical study on the effect of the frequency and amplitude of the tool on the material removal rate in ultrasonic-assisted electrical discharge machining, *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 225, 408-413
- 14) Paykani Amin, Khoshbakhti Rahim, Mohammadi-Kousha Asadollah, Shervani Tabar Mohammad Taghi, 2011/06/01, Performance and Emission Characteristics of Dual Fuel Engines at Part Loads Using Simultaneous Effect of Exhaust Gas Recirculation and PreHeating of Inlet Air, *International Journal of Automotive Engineering*, 1, 53-67

- 15) Paykani Amin, Akbarzadeh A., Shervani Tabar Mohammad Taghi, 2011/06/01, Experimental Investigation of the Effect of Exhaust Gas Recirculation on Performance and Emissions Characteristics of a Diesel Engine Fueled with Biodiesel, *IACSIT International Journal of Engineering and Technology*, 3, 239-243
- 16) Shervani Tabar Mohammad Taghi, Rezaee Mousa, Madadi-Kandjani Ehsan, 2012/01/01, Perfect Plastic Deformation of a Circular Thin Plate due to the Growth and Collapse of a Vapour Bubble, *International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering*, 6, 266-271
- 17) Shervani Tabar Mohammad Taghi, Shervani-Tabar Navid, 2012/01/23, Movement of Location of Tip Vortex Cavitation along Blade Edge due to Reduction of Flow Rate in an Axial Pump, *World Academy of Science, Engineering and Technology*, 6, 879-883
- 18) Paykani Amin, Khoshbakhti Rahim, Shervani Tabar Mohammad Taghi, Mohammadi-Kousha Asadollah, 2012/04/27, Effect of exhaust gas recirculation and intake pre-heating on performance and emission characteristics of dual fuel engines at part loads, *Journal of Central South University of Technology (English Edition)*, 19, 1346-1352
- 19) Shervani Tabar Mohammad Taghi, Mobadersany Nima, 2012/07/01, Numerical study on the hydrodynamic behavior of the dielectric fluid around an electrical discharge generated bubble in EDM, *Theoretical and Computational Fluid Dynamics*, 27, 701-719
- 20) Shervani Tabar Mohammad Taghi, Parsa Soran, Ghorbani Morteza, 2012/09/01, Numerical study on the effect of the cavitation phenomenon on the characteristics of fuel spray, *Mathematical and Computer Modelling*, 56, 105-117
- 21) Ohl S. W., Khoo B. C., Shervani Tabar Mohammad Taghi, 2012/10/02, Characterization of the interaction of two oscillating bubbles near a thin elastic membrane, *EXP FLUIDS*, 53, 1723-1735
- 22) Dadvand Abdolrahman, Khoo Boo Cheong, Shervani Tabar Mohammad Taghi, Khalilpourazary Saman, 2012/11/01, Boundary element analysis of the droplet dynamics induced by spark-generated bubble, *Engineering Analysis with Boundary Elements*, 36, 1595-1603
- 23) Hajizadeh Aghdam Abolfazl, Ohl S. W., Khoo B. C., Shervani Tabar Mohammad Taghi, H. Nobari Mohammadreza, 2012/12/01, Effect of the viscosity on the behavior of a single bubble near a membrane, *International Journal of Multiphase Flow*, 47, 17-24
- 24) Shervani Tabar Mohammad Taghi, Seyed-Sadjadi Mir Hamid, Shabgard Mohammad Reza, 2013/01/01, Numerical study on the splitting of a vapor bubble in the ultrasonic assisted EDM process with the curved tool and workpiece, *ULTRASONICS*, 53, 203-210
- 25) Shervani Tabar Mohammad Taghi, Maghsoudi Karim, Shabgard Mohammad Reza, 2013/01/01, Effects of Simultaneous Ultrasonic Vibration of the Tool and the Workpiece in Ultrasonic Assisted EDM, *International Journal of Computational Methods in Engineering Science and Mechanics*, 14, 1-9
- 26) Shervani Tabar Mohammad Taghi, Mobadersany Nima, 2013/07/01, Numerical study of the dielectric liquid around an electrical discharge generated vapor bubble in ultrasonic assisted EDM, *ULTRASONICS*, 53, 943-955
- 27) Shervani Tabar Mohammad Taghi, Sheykhvazayefi Meysam, Ghorbani Morteza, 2013/08/01, Numerical study on the effect of the injection pressure on spray penetration length, *Applied Mathematical Modelling*, 37, 7778-7788
- 28) Shayegan Zahra, Razzaghi Mohammad, Niaei Ali Gholi, Salari Darioush, Shervani Tabar Mohammad Taghi, Noshad Akbari Arash, 2013/08/10, Sulfur removal of gas oil using ultrasound-assisted catalytic oxidative process and study of its optimum conditions, *Korean Journal of Chemical Engineering*, 30, 1751-1759
- 29) Shervani Tabar Mohammad Taghi, Hajizadeh Aghdam Abolfazl, Khoo B. C., Farhangmehr Vahid, Farzaneh Babak, 2013/08/14, Numerical analysis of a cavitation bubble in the vicinity of an elastic membrane, *Fluid Dynamics Research*, 45, 055503
- 30) Shervani Tabar Mohammad Taghi, Rezaee Mousa, Madadi-Kandjani Ehsan, 2013/10/01, Perfect plastic deformation of a circular thin metal plate due to pulsation of a vapour bubble, *International Journal of Mechanical Sciences*, 75, 345-356

- 31) Farhangmehr Vahid, Hajizadeh Aghdam Abolfazl, Shervani Tabar Mohammad Taghi, Parvizi Rezayat, Ohl S. W., Khoo B. C., 2014/01/21, Numerical investigation on the pulsating bubble dynamics in a narrow cylinder with a compliant coating, *Fluid Dynamics Research*, 46, 015513
- 32) Saleki-Haselghoub Noureyeh, Shervani Tabar Mohammad Taghi, Taeibi-Rahni Mohammad, Dadvand Abdolrahman, 2014/05/01, Numerical study on the oscillation of a transient bubble near a confined free surface for droplet generation, *Theoretical and Computational Fluid Dynamics*, 28, 449-472
- 33) Hajizadeh Aghdam Abolfazl, Khoo B. C., Farhangmehr Vahid, Shervani Tabar Mohammad Taghi, 2015/01/01, Experimental study on the dynamics of an oscillating bubble in a vertical rigid tube, *EXPERIMENTAL THERMAL AND FLUID SCIENCE*, 60, 299-307
- 34) Farhangmehr Vahid, Shervani Tabar Mohammad Taghi, Parvizi Rezayat, Ohl S. W., Khoo B. C., 2015/03/24, Numerical study on ring bubble dynamics in a narrow cylinder with a compliant coating, *Fluid Dynamics Research*, 47, 025508
- 35) Saleki-Haselghoub Noureyeh, Shervani Tabar Mohammad Taghi, Taeibi-Rahni Mohammad, Dadvand Abdolrahman, 2015/11/07, Interaction of two spark-generated bubbles near a confined free surface, *Theoretical and Computational Fluid Dynamics*, 30, 185-209
- 36) Taghavifa Hadi, Shervani Tabar Mohammad Taghi, Abbasalizadeh Majid, 2015/12/01, Numerical study of the effects of injector needle movement and the nozzle inclination angle on the internal fluid flow and spray structure of a group-hole nozzle layout, *Applied Mathematical Modelling*, 39, 7718-7733
- 37) Rambarzin Faramarz, Shervani Tabar Mohammad Taghi, Taeibi-Rahni Mohammad, Tabatabaei-Nejad Seyyed Alireza, 2016/03/17, Energy transfer in a liquid filled elemental passage of a porous medium for permeability enhancement due to pulsations of a vapor bubble, *Mechanika*, 22, 25-30
- 38) Anvari Simin, taghavifar hadi, Khalilarya Shahram, Jafarmadar Samad, Shervani Tabar Mohammad Taghi, 2016/10/01, Numerical simulation of diesel injector nozzle flow and in-cylinder spray evolution, *APPLIED MATHEMATICAL MODELLING*, 40, 8617-8629
- 39) Rambarzin Faramarz, Shervani Tabar Mohammad Taghi, 2016/11/06, Numerical study on a bubble dynamic generated by ultrasound waves in liquid-saturated porous media, *Mechanika*, 22, 504-509
- 40) Shervani Tabar Mohammad Taghi, 2017/03/15, 1 Numerical modeling of the dynamic behavior of a gaseous plug in treatment of the cancerous tumors by embolism, *Acta Technica CSAV (Ceskoslovensk Akademie Ved)*, 21, ----
- 41) Mohammadi Hassan, Jabbarzaeh Parinaz, Jabbarzadeh Mehrnaz, Shervani Tabar Mohammad Taghi, 2017/05/01, Numerical investigation on the hydrodynamics of the internal flow and spray behavior of diesel fuel in a conical nozzle orifice with the spiral rifling like guides, *FUEL*, 196, 419-430
- 42) Etefagh Mir Mohammad, Shervani Tabar Mohammad Taghi, Lotfan saeed, Safarzadeh Hamed, 2018/08/19, Cavitation intensity monitoring in an axial flow pump based on vibration signals using multi-class support vector machine, *PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE*, 232, 3013-3026

#### مقالات چاپ شده در نشریات معتبر داخلی

- 1) Shervani Tabar Mohammad Taghi, Rezaee Mousa, Madadi-Kandjani Ehsan, 2012/01/01, Perfect Plastic Deformation of a Circular Thin Bronze Plate due to the Growth and Collapse of a Vapour Bubble, *International Journal of Mechanical and Aerospace Engineering*, 6, 181-186
- 2) Shervani Tabar Mohammad Taghi, Farzaneh Babak, Ahrabi Reza, Razavi Seyed Esmail, 2017/09/18, Numerical study on the impulsive growth of a gaseous plug inside a cylindrical vein with compliant coating, *BioImpacts*, 8, 271-279
- 3) Shervani Tabar Mohammad Taghi, Rouhollahi Roya, 2018/06/10, Numerical study on the effect of the concave rigid boundaries on the cavitation intensity, *Scientia Iranica*, 24, 1958-1965

4) Esmaelnajad Rasool, Shervani Tabar Mohammad Taghi, Jafari Moharram, Razavi Seyed Esmail, 2018/07/01, Numerical Study on the Effect of an Annulus Injector on the Hydrodynamic Behavior of a Spray, Journal of Applied Fluid Mechanics " JAFM", 11, 983-994

5) احقاقی بناب میربیوک، شروانی تبار محمدتقی، وجدی محمد، نمازی زاده محمد، 1395/10/01، بررسی عددی بهبود عملکرد پمپ گریز از مرکز روغن با پره‌های جدا کننده، مجله مهندسی مکانیک دانشگاه تبریز، 46، 18-9

6) اسمعیل نژاد رسول، شروانی تبار محمدتقی، جعفری محرم، رضوی سید اسماعیل، 1397/02/18، بررسی عددی تاثیر توابع پاششی مختلف در یک انژکتور مقطع حلقوی بر روی عملکرد موتور دیزل، مهندسی مکانیک مدرس، 18، 433-423

7) رضائی موسی، شرفخانی ناصر، شروانی تبار محمدتقی، بررسی رفتار دینامیکی میکروتیر تحت اثر ولتاژ و جریان سیال به عنوان میکروتولیدکننده گردابه، مهندسی مکانیک امیرکبیر

#### همایش‌های بین المللی

1) Shervani Tabar Mohammad Taghi, Arshadi Khalil, 14th Australasian Fluid Mechanics Conference, announcer, brief article, Numerical Study on the Dynamics of a Cavitation Bubble near a Rigid Body, 2001/12/09, 2001/12/14

2) Shervani Tabar Mohammad Taghi, Rezaee-Barmi Alireza, Seyyed Mahmoudi Seyyed Mohammad, Fifth international symposium on cavitation (CAV2003), announcer, complete article, Velocity Field and Pressure Distribution Around Two Parts of a Cavitation Bubble after its Splitting near a Rigid Boundary, 2003/11/01, 2003/11/04

3) Shervani Tabar Mohammad Taghi, Rezaee-Barmi Alireza, Seyyed Mahmoudi Seyyed Mohammad, Fifth international symposium on cavitation, announcer, complete article, Velocity Field and Pressure Distribution around a Collapsing Cavitation Bubble near a Rigid Boundary during the Necking Phenomenon, 2003/11/01, 2003/11/04

4) Shervani Tabar Mohammad Taghi, Javareshkian Mohammad Hasan, Zamzamian Kamyar, Dadvand Rahman, 14th Annual (International) Mechanical Engineering Conference, announcer, complete article, Investigation of flow field around flanged hoods with Rectangular and Circular cross-sections, 2006/05/16, 2006/05/18

5) Arjmandi Tash Hadi, Sadeghi Seyyed Mortaza, Shervani Tabar Mohammad Taghi, Ettefagh Mir Mohammad, Proceedings of FEDSM2008 2008 ASME Fluids Engineering Conference, announcer, complete article, CAVITATION INTENSITY MEASUREMENT BY ANALYSIS OF PUMP STRUCTURE OSCILLATION- A NEW PARAMETRIC METHOD APPROACH, 2008/08/10, 2008/08/14

6) Shervani Tabar Mohammad Taghi, Shabgard Mohammad Reza, Rezaee Mousa, Zabihyan Reza, International Symposium on Cavitation CAV2009, announcer, complete article, Dynamics of a vapor bubble near a thin elastic plate, 2009/08/17, 2009/08/22

7) Ghanbari Ahmad, Siah-Mansouri Mohsen, Shervani Tabar Mohammad Taghi, 12th MIC2010 Conference, announcer, complete article, Design and Implementation of Fish Robot and its Application, 2010/10/19, 2010/10/21

#### همایش‌های داخلی

1) اولاد قره گوز علی، ساطع آبتین، شروانی تبار محمدتقی، نصرتی رحیمه، سی و هشتمین همایش شیمی نیروگاه، ارائه پوستر، مقاله کامل، ایجاد نانو پوشش‌های آبگریز و ضد یخ زدگی بر روی سطوح فلزی و سرامیکی، 1394/07/28، 1394/07/29