

PERSONAL INFORMATION

Name **DR. HUSSAM ALI KHALAF**

Place of work Petroleum and Gas Engineering Department,
College of Engineering, University of Thi-Qar

Telephone +964 7814429792

E-mail eng.hussam@mail.ru

Nationality Iraqi

Date of birth 05 Feb., 1979

Place of birth Thi-Qar, Iraq



WORK EXPERIENCE

- **Dates (from – to)** **February, 2003 – September, 2003**
 - Name and address of employer **FAO Company for Construction Works, West Regions Projects, Baghdad, Iraq**
 - Type of business or sector **Projects Dept. in Western Iraq**
 - Occupation or position held **Engineer**
- Main activities and responsibilities

- **Dates (from – to)** **July, 2004 – Sept. 2012**
 - Name and address of employer **Marshes Research Centre. University of Dhi-Qar, Iraq**
 - Type of business or sector
 - Occupation or position held **Lecturer and Researcher**
- Main activities and responsibilities

- **Dates (from – to)** **Sept, 2012 – Sept, 2014**
 - Name and address of employer **Research and Development Department, University of Dhi-Qar, Iraq**
 - Type of business or sector
 - Occupation or position held **Manager**
- Main activities and responsibilities

- **Dates (from – to)** **Sept, 2014 – till now**
 - Name and address of employer **Petroleum and Gas Engineering Department,
College of Engineering, University of Thi-Qar**
 - Type of business or sector
 - Occupation or position held **Asst. Prof. in Petroleum and Gas Engineering Department**
 - Main activities and responsibilities

- **Dates (from – to)** **December, 2004 – March, 2006**
 - Name and address of employer **Marshes Research Centre. University of Dhi-Qar, Iraq**
 - Type of business or sector **Computer and Internet Centre**
 - Occupation or position held **Manager**
- Main activities and responsibilities

- **Dates (from – to)** **May, 2005 – September, 2006**
 - Name and address of employer **Reconstruction Council of Dhi-Qar Governorate, Dhi-Qar, Iraq**
 - Type of business or sector **The Planning and Economic Development**
 - Occupation or position held **Member**
 - Main activities and responsibilities **Provide recommendations and proposals on the priorities of all projects studied after**

coordination with the relevant departments. Preparation and evaluation of technical studies which would contribute to the reconstruction and raise the economic and social level of the people of the governorate

EDUCATION AND TRAINING

- Dates (from – to)

- Name and type of organization providing education and training
- Principal subjects/occupational skills covered

- Title of qualification awarded

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- Title of qualification awarded

- Dates (from – to)

- Name and type of organization providing education and training
- Principal subjects/occupational skills covered

- Title of qualification awarded

- Dates (from – to)

- Name and type of organization providing education and training
- Principal subjects/occupational

1996 – 2000

Al-MustansiriaUniversity, College of Engineering, Mechanical Engineering Dept., Baghdad, Iraq
<http://www.uomustansiriyah.edu.iq/c009.htm>

Mathematics, Electrical Engineering, Metallurgy, Eng. Mechanics, Eng. Drawing & Desc. Geometry, Production Eng. & Workshop, Programming, National & Social Education, Mechanical Drawing, Strength of Materials, Thermodynamics, Fluid Mechanics, Theory of Machine, Heat Transfer, Eng. Analysis, Internal Comb. Engines, Engineering management, Gas Dynamics, Turbo Machinery, Machine Design, Control, Air Conditioning, Mechanical Vibration, Power Stations, Operation Research

B.Sc. in Mechanical Engineering

2000 – 2003

Al-MustansiriaUniversity, College of Engineering, Mechanical Engineering Dept., Baghdad, Iraq
<http://www.uomustansiriyah.edu.iq/c009.htm>

Heat Transfer, Advanced Fluid Mechanics, Advanced Thermodynamics, Advanced Mathematics, Two Phase Flow, Renewable Energies, Turbo Machinery, Advanced Gas Dynamics, English Language

M.Sc. in Mechanical Engineering (Power)

2008 – 2012

Institute of Mechanical Engineering for Chemical and Petrochemical Industry, Kazan National Research Technological University, Kazan, Russia
http://www.knrtu.ru/page.jsp?id_e=14952
<http://www.kstu.ru/1leveltest.jsp?idparent=0>

Ph.D. in Mechanics of Liquids, Gas and Plasma

Supervisor: Prof. Dr. Tazyukov, F. Kh. , Mobile No.: +79047607693,
E-mail: tazyukov@mail.ru

2008 – 2009

Kazan National Research Technological University, Kazan, Russia
<http://www.kstu.ru/>

Diploma in Russian Language

2009 – 2012

Department of Foreign Languages in Professional Communication,
Kazan National Research Technological University, Kazan, Russia
<http://www.kstu.ru/1leveltest.jsp?idparent=2051>

Diploma in English Language

25 Jan. - 4 Feb., 2005

University Stuttgart, Institute of Hydraulic Engineering, Stuttgart, Germany

Water Management, Water Supply and Planning of Hydraulic Structures

- skills covered
- Title of qualification awarded
- **Dates (from – to)**
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

Training Course

13 - 19 Nov., 2005

Marshes Research Centre, University of Thi-Qar in cooperation with United Nations Environment Program (UNEP)
Management of Water Resources

Training Course

- **Dates (from – to)**
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

20 - 25 Nov., 2005

Marshes Research Centre, University of Thi-Qar in cooperation with United Nations Environment Program (UNEP)
Society Departures in Marshes Environment

Training Course

- **Dates (from – to)**
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

1 - 15 June, 2005

Raining and Education Department, University of Thi-Qar, Iraq

Second Qualifying Course of Lecturers Staff of University of Thi-Qar

Training Course

- **Dates (from – to)**
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

21 – 28 Feb., 2006

Marshes Research Centre, University of Thi-Qar in cooperation with University of Waterloo, Canada and Iraqi Foundation
Samples Taking, Keeping and Using Meters and Calibrating

Training Course

- **Dates (from – to)**
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

9 - 13 July, 2006

Computer Science Department, College of Science, University of Thi-Qar, Iraq

The Intensified Computer Course

Training Course

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE

Arabic language

OTHER LANGUAGES

- Reading skills
- Writing skills
- Verbal skills

English language

Good

Good

Basic

- Reading skills
- Writing skills
- Verbal skills

Russian language

Good

Good

Good

TECHNICAL SKILLS AND COMPETENCES

Windows, Microsoft Office (Word , Excel , Power Point), FORTAN 90 , ANSYS-Fluent, AUTO CAD , GRAFER , TecPLOT 9 , Adobe Photoshop and others.

1. The Numerical Simulation of Two-Dimensional Cartesian Incompressible Viscous Flow.
Tazyukov, F.Kh., Khalaf, H.A., Snigerev, B.A. and Aliev, K.M.
III Всероссийская научно-практическая конференция, «Научная инициатива иностранных студентов и аспирантов российских вузов», 20-21 мая 2010 года, С. 250-256, Tomsk-Russia.
2. Ламинарное Течение Обобщенной Ньютоновской Жидкости в Канале.
Халаф, Х.А., Алиев, К.М. and Тазюков, Ф.Х.
Содержащем Открытый Клапан”, VII Школа-семинар молодых ученых и специалистов - академика РАН В.Е.АЛЕКСАНДРОВ, 15-17 сентября 2010, С. 238-241, Kazan-Russia.
3. Бифуркация Решения Задачи Течения Жидкости через Плоский Симметричный Канал с Резким Расширением.
Тазюков Ф.Х., Халаф Х.А., Алиев К.М.
Всероссийская молодёжная научная конференция, Актуальные проблемы современной механики сплошных сред, 13-16 Октября 2010г, Том 276, С 173-176, Tomsk-Russia.
4. Asymmetric Flows of Non-Newtonian Fluids in Symmetric Planar Expansion Geometries.
Tazyukov, F. Kh. and Khalaf, H.A.
Десятая Всероссийская научная, “конференция ”Краевые задачи и математическое моделирование”. 26-27 ноября 2010г, Том 1, С 4-13, Novokuznetsk-Russia.
5. Numerical simulation of flow of shear-thinning fluids in a symmetric channel with a suddenly expanded and contracted part
F.Kh. Tazyukov, and Khalaf H.A.
Transactions of Academenergo, -2011, -№ 4, -С.38-49., Kazan-Russia.
6. Bifurcation Phenomena in the Flow of Non-Newtonian Fluids in a Symmetric Channel with a Suddenly Expanded and Contracted Part.
Khalaf, H.A., Tazyukov, F. Kh. , Snigerev, B.A. and Aliev, K.M.
AERC 2011: 7th Annual European Rheology Conference, 10-14 of May, 2011, Suzdal-Russia.
7. Non-Newtonian Models for Blood Flow through an Arterial Stenosis.
Tazyukov, F. Kh. and Khalaf, H.A.
ASME 2011: International Mechanical Engineering Congress and Exposition, 11-17 of November, pp. 831-838, Colorado-USA.
8. The possibility of using wind energy for groundwater lifting in Al-Nassriyah City.
Khalaf, H.A. and Alaa, L.H.
Accepted in Journal of Thi-Qar University, Thi-Qar-Iraq.
9. Effect of atmosphere factors on solar energy for Iraq Marshes.
Jafar, M.H. and Khalaf, H.A.
Accepted in Journal of Thi-Qar University, Thi-Qar-Iraq.
10. The Effect of Water Hammer upon Pipes at Suddenly Closed Valve.
Mahnnad, S.H. and Khalaf, H.A.
Accepted in Journal of Thi-Qar University, Thi-Qar-Iraq.
11. The Dynamics of a Piping System with Internal Steady and Unsteady Flow.
Jafar, M.H., Dr. Safaa, H.A. and Khalaf, H.A.
Accepted in Journal of Thi-Qar University, Thi-Qar-Iraq.
12. Study the Performance of the Solar Ponds for Iraq Marshes.
Jafar, M.H., Khalaf, H.A. and Alaa, L.H.
Accepted in Journal of Thi-Qar University, Thi-Qar-Iraq.
13. The Dynamic Stability of an Intermediately Supported Curved-Straight Tube Conveying Fluid.
Khalaf, H.A.
Accepted in Journal of Thi-Qar University, Thi-Qar-Iraq.
14. Hydraulic Design of Hai-Al-Eskan Sewerage Network in Al-Nassiriyah City.
Khalaf, H.A.
Accepted in Journal of Thi-Qar University, Thi-Qar-Iraq.
15. The Secondary Flow in Curved Rectangular Duct.
Khalaf, H.A.
Accepted in Journal of Thi-Qar University, Thi-Qar-Iraq.
16. Parametric and Combination Resonances of a Pipe Conveying Pulsating Fluid.
Khalaf, H.A. and Alaa, L.H.
Accepted in Journal of Thi-Qar University, Thi-Qar-Iraq.

17. Volume of Fluid (VOF) Method for Computing Solution to Incompressible Two-Phase Flows.
Tazyukov, F.Kh., Khalaf, H.A., Snigerev, B.A. and Aliev, K.M.
Accepted in Journal of Thi-Qar University, Thi-Qar-Iraq.
18. The Numerical Prediction of Flow of branched Polymer Melts through Planar Contraction Channel by finite element method.
Snigerev B.A., Tazyukov F.Kh. and Khalaf H.A.
Accepted in Journal of Thi-Qar University, Thi-Qar-Iraq.
19. Моделирование течений неньютоновских жидкостей в каналах, снабженных запорным клапаном
Х.А. Халаф, Ф.Х. Тазюков, К.М. Алиев, Р.С. Шайхетдинова
Вестник Казан. технол. ун-та. -2010, -№ 9, -С.496-504, Kazan-Russia.
20. The Numerical Simulation of Liquid Flows with Free Surface
Tazyukov F. Kh., Lutfullina G. N., Khalaf, H. A., Aliev K. M.
Proceedings of Almetevsk State Oil Institute. Volume VII. Almetevsk: Almetevsk State Oil Institute, 2010. Pp.361-365. ISSN 1993-8748.
21. Нелинейные явления притечения обобщенной ньютоновской жидкости в плоском канале
Х.А. Халаф, Ф.Х. Тазюков, К.М. Алиев
Журнал труды академэнерго, -2012, -№ 1, -С.44-49, Kazan-Russia.
22. Особенности течения жидкости во внезапно расширяющихся каналах
Ф.Х. Тазюков, Х.А. Халаф, К.М. Алиев, Р.С. Шайхетдинова
Вестник Казан. технол. ун-та. -2012, -Т.15, -№ 4. -С.113-115, Kazan-Russia.
23. Numerical simulation of the laminar flow of non-Newtonian fluid through a disk-type prosthetic heart valve
F.Kh. Tazyukov, H.A. Khalaf
Diyala Journal of Engineering Sciences, Special Issue, Iraq, 2010, -P. 26-39, Diyala-Iraq.
24. Bifurcation characteristics of flow in rectangular sudden expansion channels
H.A. Khalaf, F.Kh. Tazyukov, A.G. Kutuzov, G.N. Lutfullina
Высокоэффективные технологии в химии, нефтехимии и нефтепереработке, г. Нижнекамск, 20 мая 2011, -С. 185-189, Nizhnekamsk-Russia.
25. Numerical simulation of blood flow through a modeled arterial stenosis
H.A. Khalaf, A.F. Tazyukova, G.C. Layek
Межд. науч.-практ. конф. «Актуальные проблемы естественных и гуманитарных наук», г. Зеленодольск, 10-11 ноября 2011, Zelenodolsk-Russia.
26. Non-Newtonian Flow of Blood through a Symmetric Stenosed Artery.
Tazyukov F.Kh., Jafar M. Hassan, Khalaf H.A., Snigerev B.A., Safaa H. Abdul Rahman
Russian Journal of Biomechanics, vol.16, No.1, pp.41-50, 2012. Perm-Russia.
27. Течение нелинейно-вязкой жидкости в каналах, моделирующих кровеносные системы со стенозом
Тазюков Ф.Х., Халаф Х.А., Алиев К.М., Гарифуллин Ф.А., Карибуллина Ф.Р., Шайхетдинова Р.С.
Вестник Казан. технол. ун-та. -2012, -№ 6. -С.52-54, Kazan-Russia.
28. Особенности МГД течений нелинейно-вязких жидкостей в расширяющемся ступенчатом симметричном канале
Халаф Х.А., К.М. Алиев, Ф.А. Гарифуллин, Ф.Р. Карибуллина, Ф.Х. Тазюков,
Вестник Казан. технол. ун-та. -2012, -№ 7. -С.54-57, Kazan-Russia.
29. Моделирование МГД течений в плоском ступенчатом симметричном канале
Халаф Х.А., Алиев К.М., Гарифуллин Ф.А., Карибуллина Ф.Р., Тазюков Ф.Х.
Вестник Казанского технологического университета, (2012), 7, 58-61, Kazan-Russia.
30. Survey on Solid Waste Management in the Southern Governorates of Iraq
Riyadh A. Yasir, Talib E. Hussein, Hussam A. Khalaf, Mohammed D. Selman
Marsh Bulletin (2012), 7(1), 69-101, Basrah-Iraq.
31. Течение проводящих нелинейно-вязких жидкостей в условиях воздействия внешнего магнитного поля
Тазюков Ф.Х., Гарифуллин Ф.А., Алиев К.М., Халаф А.А.
ICPSMODM 2012 «Плазменные технологии исследования, модификации и получения материалов различной физической природы» 16 – 18 октября 2012 г., Kazan-Russia.
32. Влияние неизотермичности на течение жидкости во внезапно расширяющихся каналах.

- Ф.Х. Тазюков, Х.А. Халаф
Сборник содержит материалы Международной научно-технической студенческой конференции, проходившей 28, 29 ноября 2013 г. в г. Казань, Зеленодольск.
33. ТЕЧЕНИЕ КРОВИ В КРОВЕНОСНЫХ СОСУДАХ СО СТЕНОЗОМ.
BLOOD FLOW THROUGH ARTERIES WITH STENOSIS
Г.Н. Лутфуллина, Ф.Х. Тазюков, Х.А. Халаф,
Альметьевск Типография АГНИ, -2013. -с.118. Альметьевск-Russia.
34. Динамика течения вязкоупругой жидкости через плоское 8:1 сужение.
Э.Р. Кутузова, Ф.Х. Тазюков, Халаф Х.А.,
Вестник Казан. технол. ун-та. -2014, -№ 16. -С.83-86, Kazan-Russia.
35. Bifurcation phenomena and control for magnetohydrodynamic flows in a smooth expanded channel.
GC Layek, MS Mandal, HA Khalaf
Chinese Physics B 23 (11), 2014, 114701. China
36. Исследование сходящихся течений неньютоновских жидкостей в плоских каналах.
Кутузова Э.Р., Кутузов С.А., Халаф, Х.А.
Высокоэффективные технологии в химии, нефтехимии и нефтепереработке, г. Нижнекамск, 25 апреля 2014, Nizhnekamsk-Russia.
37. Исследование сходящихся течений неньютоновских жидкостей.
Кутузова Э.Р., Халаф, Х.А., Кутузов С.А.
IX Школа-семинар молодых ученых и специалистов - академика РАН В.Е. АЛЕМАСОВА, 10-12 сентября 2014, Kazan-Russia.
38. Numerical simulation of blood flow through a modeled arterial stenosis.
H. A. Khalaf
1st Conference for Science and Technology, College of Engineering, University of Thi-Qar, 2015
39. Volume of Fluid Method for Computing Solution to Incompressible Two-Phase Flows.
H. A. Khalaf
V Международная молодежная научная конференция «Актуальные проблемы современной механики сплошных сред и небесной механики - 2015» г. Томск, 25-27 Ноября 2015 г.
40. A NON-NEWTONIAN ARTERIAL BLOOD FLOW MODEL THROUGH MULTIPLE STENOSIS
HA Khalaf, AT Turkish, HA Hamoud
ББК 32.91 я74, 110, 2016
41. CONTROL OF BIFURCATION PHENOMENA IN THE FLOW OF NON-NEWTONIAN FLUIDS IN A SYMMETRIC STENOSED ARTERY
HA Khalaf
ББК 32.91 я74, 93, 2016
42. CONTROL OF FLOW SEPARATION IN A SYMMETRIC CHANNEL WITH A SUDDENLY EXPANDED AND CONTRACTED PART
HA Khalaf
ББК 32.91 я74, 87, 2016
43. INFLUENCE OF VISCOUS HEATING ON ASYMMETRIC FLOWS IN A SYMMETRIC SUDDEN EXPANSION WITH POWER LAW MODEL
HA Khalaf - aeterna-ufa.ru
СОВРЕМЕННЫЕ ПРОБЛЕМЫ И ПЕРСПЕКТИВНЫЕ НАПРАВЛЕНИЯ ИННОВАЦИОННОГО РАЗВИТИЯ НАУКИ, Международной научно - практической конференции, 25 апреля 2016 г.
44. MODELING OF PARAFFIN WAX IN OIL PIPELINES
HA Khalaf, M Jamel, R Abdalhammer - aeterna-ufa.ru
СОВРЕМЕННЫЕ ПРОБЛЕМЫ И ПЕРСПЕКТИВНЫЕ НАПРАВЛЕНИЯ ИННОВАЦИОННОГО РАЗВИТИЯ НАУКИ, Международной научно - практической конференции, 25 апреля 2016 г.

LIST OF WORKS IN THE FIELD OF WATER AND SEWAGE NETWORK DESIGNS

1. Updating the designs of pipelines and sewage and rainwater networks for the city of Nasiriyah and all the cities of Dhi Qar Governorate / 2019.
2. Designs and technical disclosure for the construction of a water compact unit with a capacity of (100 m³ / hour) / 2019.
3. Designs and technical disclosure for the construction of a water compact unit with a capacity of (200 m³/hour) near the seven compact units in Nasiriyah city / 2019.
4. Designs and technical disclosure for the construction of a water compact unit with a capacity of (200 m³/hour) to feed the military neighborhood in Souk Al-Shuyoukh district / 2019.
5. Designs and technical disclosure for the construction of a water compact unit with a capacity of (400 m³ / hour) near the five compact units in Nasiriyah city / 2019.
6. Designs and technical disclosure for a water project with a capacity of (400 m³/hour) with a pipelines to feed areas towards Shamiya in Nasiriyah city / 2019.
7. Designs and technical inspection of a water compact unit with a capacity of (400 m³/hour) to feed the teachers' houses, the old housing and the Al-Shumoukh compact unit until the end of the Victory Bridge in Nasiriyah city / 2019.
8. Designs and technical inspection of a water compact unit with a capacity of (400 m³/hour) to feed the Al-Sakhiyyin, Al-Alimeen, and 30th Streets in Ur neighborhood in Nasiriyah city / 2019.
9. Designs and technical disclosure for the construction of a liquefaction station with a capacity of (500 m³/hour) in Al-Tar district and neighboring villages / 2019.
10. Designs and technical disclosure for the construction of a water compact unit with a capacity of (600 m³/hour) to feed the areas of (Al Habbush, Al Sakkak, Abd Mays Village, Khalaf Al Kanazawa District, Al Mansouriya, Al Bawaba) in Nasiriyah City / 2019.
11. Designs and technical disclosure for the construction of a raw water lifting station with a capacity of (1100 cubic meters / hour) in Nasiriyah city / 2019.
12. Designs and technical disclosure for the construction of a water compact unit with a capacity of (1000 m³/hour) / 2019.
13. Designing a booster station in the center of Nasiriyah city with a capacity of (250 m³/hour) to treat water scarcity and shortage in the areas of Al-Zawiya, Baghdad Street, Al-Iskan, Al-Shula and adjacent areas / 2019.
14. An integrated design of the transmission lines and water networks in the oil compact unit in Nasiriyah, which belongs to the Dhi Qar Oil Company, which consists of a group of administrative and service buildings and a residential complex (2500 housing units) and the rest of the facilities/2018.
15. Designing a water compact unit with a capacity of (400 m³ / hour) and supplying pipelines of (2.5) km length to feed and deliver water to the areas of the Military Neighborhood and the neighborhoods and neighboring areas in the city of Qalaat Sukkar / 2018.
16. Study and evaluation of the water compact unit with a capacity of (200 m³/h) and the conveying line with a length of (7) km feeding the buildings and colleges of Dhi Qar University / 2018.
17. Designing a water complex with a capacity of (100 m³ / hour) and a pipelines with a length of (7.5) km to feed and deliver water to the residential compact unit of Dhi Qar University employees (Tina Residential Complex) in Nasiriyah / 2018.
18. Studying and evaluating the possibility of using an intermediate pumping station on the main pipelines and feeding the villages (Al-Awija, Umm Al-Shweij, Abdul-Razzaq) located on the outskirts of Nasiriyah city from the Batira water complex with a capacity of (200 m³ / hour) located on the outskirts of Nasiriyah / 2018.
19. Integrated design of transmission lines and water networks in the city of Al-Fajr and the villages and neighboring areas / 2018.
20. Designing a treatment plant, a pumping station, and a pipelines for the project to deliver water to the Nasiriyah Thermal Power Station/ 2014.
21. Preparing a study and designing pipelines and sewage and rainwater networks for the city of Nasiriyah / 2006.
22. Preparing a study and designing pipelines and sewage and rainwater networks for the city of Al-Nasr district/2006.