

# Ali Sufali – Résumé

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<b>Address</b>	Institute of Petroleum Engineering (IPE), University of Tehran, Tehran, Iran	<b>Mobile Phone</b>	+98 (918) 488 9034
<b>Date of Birth</b>	2 <sup>nd</sup> September 1996	<b>Email</b>	ali.sufali@ut.ac.ir
<b>Nationality</b>	Persian	<b>LinkedIn</b>	ali sufali

## Personal Profile

Reservoir engineer, PVT Specialist and Programmer with 3+ years of experience in PVT simulations and Computational Fluid Dynamics (CFD) and 5+ years of experience in writing scientific programs, Looking to use my skills and experiences in developing and building accurate, robust and efficient simulation codes.

## Education

<b>2020-Now</b>	PhD. in Reservoir Engineering - University of Tehran, Tehran Straight Student (Using Educational Background) <i>Average Score</i> 18.70 / 20
<b>2018-2020</b>	M.Sc. in Reservoir Engineering - University of Tehran, Tehran Straight Student (Using Educational Background) <i>Average Score</i> 17.92 / 20
<b>2014-2018</b>	B.Sc. in Reservoir Engineering - Shiraz University, Shiraz Third Position in The Class (Among 69 Students) <i>Average Score</i> 18.12 / 20

## Researches and Experiences

<b>Project</b>	Molecular Dynamics Simulation of Oil Detachment from Calcite Surface As My M.Sc. Thesis Used Gaussian and GROMACS for simulations and Python Scripts to analyze and visualize outputs. A.Sufali, S.Riahi, M.Vaezalaei November 2019 - September 2020
<b>Project</b>	Developing streamline simulator with GUI. Supporting incompressible flow for water/oil 2-phase calculations. M.Siavashi, A.Sufali, M.Hosseini, M.Tahmasebi, S.Roshandel, S.Hosseini, M.Sharifi, H.Khoshtarash, H.Mohammadiha November 2020 - September 2021
<b>Project</b>	Writing a PVT flash calculation program for simulating 2-phase equilibrium problem. Phase Equilibrium Flash Calculations (2-Phase) using PR and SRK EOS with the ability to draw Phase Envelope Based on the Successive Substitution (S.S.) method A.Sufali June 2019 <a href="#">Link</a>
<b>Paper</b>	Exploring pH dependent delivery of 5-fluorouracil from functionalized multi-walled carbon nanotubes. Journal of Colloids and Surfaces B: Biointerfaces (Impact Factor: 4.389),

A.Solhjoo, Z.Sobhani, A.Sufali, Z.Rezaei, S.Khabnadideh, A.Sakhteman,  
September 2021  
[Link](#)

**Paper** Natural Fracture Description using Mud-Loss Data - ...  
Scientific- Propagative Journal of Oil and Gas Exploration and Production,  
M.Ghaedi, A.Sufali, M.Massah,  
April 2020  
[Link](#)

**Patent** Gas/Water Production Prevention Valve (RCP Valve).  
A bottom hole valve which works mechanically and prevents (or lowers) water and gas production,  
P.Talkab, A.Sufali, A.Ghamartale, M.Massah, H.Yavari, M.Eschrochi, M.Riazi,  
Patent Code: ir 139650140003007630,  
August 2017  
[Link](#)

**Project** Design and manufacture of Automated Intelligence Control Valve to decrease producing gas oil ratio.  
Design and manufacture of an AICV to control gas flow,  
With the Support of Premier Idea Support Center of Shiraz University.,  
P.Talkab, A.Sufali, A.Ghamartale, M.Massah, H.Yavari, M.Eschrochi, M.Riazi,  
August 2017

## Software Skills

### ■ Computational Chemistry Skills

*GROMACS, LAMMPS, OPENMM* - Molecular Dynamics Simulators  
*Gaussian, Quantum-Espresso* - Quantum Mechanics Simulators  
*PyMol, VMD* - Molecular Visualization Softwares

### ■ Programming Skills

*Python, C/C++, Fortran, MATLAB* - Programming Languages  
*PyQt5, Qt5, Kivy, Tkinter* - Graphical User Interface (GUI) Frameworks  
*Git* - Source Version Control (SVC)  
*CMD and Bash Scripting* - OS Scripting

### ■ Simulation Skills

*Ansys Fluent, COMSOL Multiphysics* - Computational Fluid Dynamics Simulators  
*Schlumberger Eclipse* - Reservoir Simulator  
*Schlumberger Pipesim and OLGA* - Well Multiphase Flow Simulator

### ■ Miscellaneous

*Microsoft Windows, Linux Ubuntu* - Operating Systems  
*Microsoft Office, L<sup>A</sup>T<sub>E</sub>X* - Typescripting and Office

## Language Skills

- **Persian:** Native, Professional
- **English:** Professional

## Interests

- **Molecular Dynamics Simulation**
- **Quantum Calculations**
- **Computational Fluid Dynamics**
- **Multiphase Flow in Porous Media and Well**

- **Reservoir Simulation**
- **PVT and Phase Equilibria Simulation**
- **Well Flow Control Devices**

## **Honors and Awards**

**May 2018**     2<sup>nd</sup> Rank in Team Theoretical Petroleum Engineering Olympiad  
Sharif University of Technology (Oilympic)

**May 2017**     6<sup>th</sup> Rank in Team Theoretical Petroleum Engineering Olympiad  
Sharif University of Technology (Oilympic)