HOOMAN **TAVAKOLIZADEH**

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Homepage

EDUCATION

SEPT. 2021 – PRESENT
Ph.D. in Chemistry, **UNIVERSITY OF BRITISH COLUMBIA (UBC)**
Supervisor: Dr. Ed. Grant

SEPT. 2016 – FEB. 2021
B.Sc. in Applied Chemistry, **SHARIF UNIVERSITY OF TECHNOLOGY (SUT) (QS RANKING)**

- **CGPA** = 3.69, **Last 2 years GPA** = 3.90 & **Major GPA** = 3.92

- **Elective Courses:**

Principles of Biochemistry (4/4), Cellular and Molecular Biology (4/4),
Principles of Chemometrics (4/4), Research Project (4/4)

RESEARCH INTERESTS

- Metabolomics
- Wearable Sensors
- Nanomedicine
- Drug Discovery
- Instrument Developement
- Neuromodulation

EXPERIENCE

SEP. 2019 – FEB. 2021
RESEARCH ASSISTANT • CHEMOMETRICS LAB. • CHEMISTRY DEPT. • SUT
"Contributed to an NMR-based cancer metabolomics study supervised by Dr. H. Parastar"

MAR. 2020 – JUL. 2020
TEACHING ASSISTANT • FUNDAMENTALS OF ANALYTICAL CHEMISTRY
Taught **"APPLICATIONS OF MICROSOFT EXCEL IN ANALYTICAL CHEMISTRY BY S. R. CROUCH"** to undergraduate students

MAY 2018 – MAY 2019
LEADER • SCIENTIFIC ASSOCIATION OF CHEMISTRY DEPT. • SUT
Organized several scientific seminars on trending chemistry topics and cultural ceremonies

FEB. 2018 – MAY 2018
AUTHOR • ELIXIR JOURNAL • SCIENTIFIC ASSOCIATION OF CHEMISTRY DEPT.
Gathered and Translated news and infographics in the chemistry world

MAY 2017 – MAY 2018

MEMBER • STUDENT UNION • CHEMISTRY DEPT. OF SUT

In the role of Public Relations, accomplished to connect students to their union

PUBLICATIONS

- The paper is being written and will be submitted in the forseeable future. The title will be close to: **"**Untargeted metabolomics based on nuclear magnetic resonance spectroscopy and multivariate classification techniques for identifying responsible metabolites in breast cancer patients**."**

SKILLS

INSTRUMENTAL

- UV-Vis Spectroscopy
- Chromatography
- FT-IR Spectroscopy
- Hyper Spectral Imaging

LANGUAGES

- Farsi (Native)
- English (TOEFL iBT = 101: R29 L27 S21 W24)
- Español (Elementary)

COMPUTER-BASED

- PLS toolbox (MATLAB)
- Design of Experiment
- Mendeley (& EndNote)
- Python (Basics)
- MS Excel (Data Analysis)
- Gaussian
- Mathematica
- LaTex (Basics)

WORKSHOPS

- **WINTER SCHOOL OF CHEMOMETRICS**
  (3-day theoretical and practical sessions about data processing)
- **BASICS AND INTRODUCTION TO COMPUTATIONAL CHEMISTRY (GAUSSIAN)**
  (Calculation of enthalpy, Visualization of Molecular Orbitals and prediction of IR, NMR and UV spectrum was taught)
- **NEUROSCIENCE AND COGNITIVE SCIENCES**
  A 6-month interdisciplinary school giving an insight into the branches of neuroscience

ACADEMIC PROJECTS

- ✓ Quantification of Manganese and Iron in stainless steel using UV-Vis Spectroscopy (Analytical Lab. 2)
- ✓ "Basics of ANN" presentation (Prin. Chemometrics)
- ✓ "Supercool Fluids" presentation (Physical Chemistry 2)

HOBBIES

- Hiking
- Photography
- Formula 1
- Reading
- Gardening
- Video Games