

CV – Ahmad Bin Ashar

Address Gamle Jonsvannsveien 107,7048 Trondheim

E-mail ahmad.b.ashar@ntnu.no

Telephone 98 25 37 07

Key qualifications

Flexible, hardworking, positive, motivated, innovative, adaptability and team player.

Education

08/2018 – 02/2021 NTNU, Master's in Chemical Engineering

11/2013 – 05/ 2017 Sharif college of engineering & technology, B.Sc. Chemical Engineering

07/2011 – 05/2013 Unique college, Intermediate F.Sc. (pre – engineering)

Work experience

06/2021– Present NTNU, Trondheim, Norway (50%)

Designation Staff Engineer at Particle Engineering Center

Tasks:

- Training users for equipment's such as zeta sizer, zeta view, MPAES, Lumisizer, UV-Vis.
- Calibration of weighing balance, pH meters and other lab equipment's.
- Maintaining documentation and protocols for different instruments.
- Ensure lab safety and imposition of regulations in the lab.

03/2021– Present	NTNU, Trondheim, Norway
Designation	Researcher at Particle Engineering Center (50%)
	<u>Tasks:</u> ▪ Synthesis of Iron Oxide Nanoparticles (IONPs) for Biomedical Applications ▪ Synthesis of silica coated IONPs (SIONPs) for detection of COVID-19 from wastewater. ▪ Development of methodology to detect COVID-19 from wastewater. ▪ Characterization of IONPs and (SIONPs) by STEM and DLS. ▪ Use of RT-PCR for detection of COVID-19 RNA from wastewater at St Olav Hospital.
04/2020 – 12/2020	NTNU, Trondheim, Norway
Designation	Staff Engineer for Production of Magnetic Beads Nanoparticles For Corona Virus Testing
	<u>Tasks:</u> ▪ Synthesis of Magnetic Nanoparticles. ▪ Characterization of magnetic beads (DLS, FTIR, TGA, UV-Vis, XRD, STEM, HPLC) ▪ Upscaling and optimization of process for production of nanoparticles at large scale.
01/2020 - 04/2020	NTNU, Trondheim, Norway
Designation	Teaching Assistant
	<u>Tasks:</u> ▪ Fluid mechanics and heat transport course development. ▪ Helping students in solving assigned tasks. ▪ Evaluation of assignments

06/2019 - 08/2019 Thermo Fisher Scientific, Lillestrøm Norway.

Designation Summer Scientist

Tasks:

- Compatibility of porogens and solvents.
- Dynabeads characterization
- Dynabeads phase transfer.

**06/2016 – 08/2016 Internship at Coca Cola Beverages private limited, Lahore
Pakistan.**

Designation Summer Intern

Tasks:

- Feasibility report of RO water treatment recovery tank
- Process Flow Diagram of Complete Plant
- P&ID of the process

Personal Projects

**08/2020-02/2021 Magnetic Polymeric Nanoparticles for Biomedical
Applications (Master Thesis)**

End date: 28/01/2021

Outline:

- Synthesis of IONPs
- Synthesis of Biodegradable polymers
- Functionalization of IONPs
- Synthesis of Polymer encapsulated IONPs by Nanoprecipitation and Flash Nanoprecipitation
- Study of parameters that influence size and morphology of encapsulated IONPs
- Comparative study of in-house and commercial polymers used for encapsulation of IONPs

**08/2019 – 12/2019 Synthesis and Functionalization of Iron Oxide
Nanoparticles, (Specialization Project) Grade B**

08/2019-12/2019 Synthesis of carbon nanofibers by electrospinning

**08/2018 – 12/2018 Production of 3000 metric ton per year of Furfuryl alcohol
from furfural by hydrogenation process, Grade A**

08/2016 – 04/2017	Production of 35 ton per hour Salicylic Acid by Kolb Schmitt Process, Grade A
09/2016 – 11/2016	Design and Fabrication of Water tube Steam Boiler
07/2016 – 08/2016	Reactor Design for Production of Maleic Anhydride from Benzene
02/2014 – 04/2014	Design and Fabrication of Series and Parallel Pumps

Volunteer Works

08/2019 –	Biralee International School Trondheim, Cricket Trainer
03/2019 –	Trondheim Cricket Klubb, Cricket Trainer
01/2019 –	Pakistan Student Association Trondheim, Treasurer
09/2018 –	Enhet i Norge, Volunteer
08/2018 –	NTNUI, Team manager
08/2018 –	MSIT, Volunteer

Languages

English: Fluent oral and good writing skills

Urdu: Fluent oral and good writing skills

Computer Skills

Microsoft Office – Word, Excel, PowerPoint, Microsoft Visio,
MATLAB
Aspen Hysys
Sigma Plot
JMP

Publications

Master thesis work is aimed to be published.

Reference

Sulalit Bandyopadhyay – Associate Professor at NTNU (Supervisor for Master Thesis)

Email: sulalit.bandyopadhyay@ntnu.no Phone No. 73550339

Talha Gokmen – Staff Scientist, Thermo Fisher Scientific (Supervisor for Summer Job)

Email: talha.gokmen@thermofisher.com Phone No. 46597660

Anuvansh Sharma – PhD Candidate NTNU (Co-Supervisor for Master Thesis)

Email: anuvansh.sharma@ntnu.no Phone No. 47146364

Ina Beate Jenssen – PhD Candidate NTNU (Co-worker in Corona Virus Testing Project)

Email: ina.b.jenssen@ntnu.no Phone No. 90919458