# PERSONAL INFORMATION

# **Muhammad Shaban Munir**

Shah Muhammad Colony, Faisalabad road, Sargodha, Punjab, Pakistan **WhatsApp:** +92 305 7600205 | **Email:** shaban.munir.edu@gmail.com

**Date of Birth:** 11 Jan 2002 | **Nationality:** Pakistani



# RESEARCH INTEREST

Sustainable materials and sensor technologies based on renewable resources for advanced environmental and analytical applications.

# **EDUCATION**

# University of Agriculture, Faisalabad

Bachelor of Science (BS) in Chemistry (2020-2024)

**CGPA:** 3.64 / 4.0

**Technical Report Title:** "Advancements in the Solar Industry: Efficiency, Cost, and Environmental

Adaptability"

# RESEARCH PROJECTS

# **Undergraduate Research Project (Unpublished)**

University of Agriculture, Faisalabad, 2024

**Title:** "Advancements in the Solar Industry: Efficiency, Cost, and Environmental Adaptability"

#### **Abstract:**

- Conducted an in-depth analysis of photovoltaic technologies, focusing on thin-film and perovskite solar cells.
- Highlighted recent improvements in energy conversion efficiency and stability.
- Explored the impact of sustainable materials on reducing production costs.
- Investigated challenges in scaling solar technologies and improving performance under varied environmental conditions.
- Provided insights into the role of solar energy in advancing renewable energy and sustainability objectives.

# RESEARCH EXPERIENCE

#### Intern

## Crystalline Chemical Industries (Pvt) Ltd., Sargodha, Pakistan

June 2022 - August 2022

### **Achievements:**

- Collaborated with the Quality Control Laboratory team to ensure the quality of ethanol as the final product.
- Performed thorough analytical tests to verify ethanol purity, concentration, and compliance with industry standards.
- Conducted basic testing and operated spectrophotometers for accurate measurements.
- Worked closely with colleagues to troubleshoot issues and improve testing protocols.
- Maintained precise and detailed documentation of all quality control processes.
- Led research and development projects using various antibiotics to increase alcohol yield and

#### **Trainer**

# Hi-Tech Laboratory, University of Agriculture, Faisalabad (UAF), Pakistan

September 2023

#### **Achievements:**

- Worked under the supervision of the in-charge of Hi-Tech Laboratory, one of the largest laboratories in Pakistan.
- Gained hands-on experience with advanced analytical instruments used in chemical analysis and material characterization.
- Operated **High-Performance Liquid Chromatography (HPLC)** for precise separation and identification of chemical compounds.
- Used **spectrophotometers** to evaluate absorbance and determine concentration levels in various samples.
- Applied **refractometers** for accurate measurement of solution concentrations.
- Utilized an **ultracentrifuge** for density-based particle separation in complex mixtures.
- Conducted detailed structural analysis using a **Scanning Electron Microscope (SEM)**.

# Content Creator and Video Editor Chemia Solutions Corp, Boston, USA.

August 2022 – Present

#### **Achievements:**

- Produce premium video content for a YouTube channel focused on simplifying complex chemistry concepts and innovative start-up ideas.
- Translate intricate scientific principles into engaging, easy-to-understand narratives for a broad, non-specialist audience.
- Merge subject matter expertise in chemistry with creative storytelling to deliver informative and visually appealing content.
- Ensure scientific accuracy while making advanced topics accessible and marketable to general viewers.
- Contributed to a significant increase in channel visibility and audience engagement by making advanced chemistry more relatable and appealing.

# **ONLINE COURSES & CERTIFICATIONS**

- Can Renewable Energy Sources Power the World? Completed May 2025
- Climate Change and Renewable Energy Completed June 2025
- Green Investments: Renewable Energy Completed June 2025
- Metals in Medicine Completed June 2025
- What Chemical Compounds Might Be Present in Drinking Water? Completed June 2025
- **Discovering Chemistry** *Completed June 2025*

# RELEVANT RESEARCH SKILLS

- High-Performance Liquid Chromatography (HPLC)
- Spectrophotometry (UV/Vis)
- Atomic Absorption Spectroscopy (AAS)
- Nuclear Magnetic Resonance (NMR)
- Gas Chromatography (GC)
- Mass Spectrometry (MS)
- Scanning Electron Microscopy (SEM)
- ChemDraw

# **AWARDS & HONORS**

- **Appreciation Certificate** Annual Dinner Management, Department of Chemistry, UAF (2023 & 2024)
- **Appreciation Certificate** Sports Gala Management, Department of Chemistry, UAF (2023 & 2024)
- **Alumni Scholarship Recipient** University of Agriculture, Faisalabad (2023) Received scholarship for outstanding academic performance during undergraduate studies.
- **Provincial Benevolent Fund Educational Scholarship** Government of Punjab (2016–2023) Awarded annually for academic excellence; includes a special high-achiever bonus for securing 90%+ marks in board and university examinations.
- Internship Certificate Crystalline Chemical Industries (Pvt) Ltd., Sargodha (2022)
- **Participation Certificate** Hult Prize, University of Agriculture, Faisalabad (2021)
- **Best Writing Prize** Comprehensive Model High School, Sargodha (2017)

# **EXTRACURRICULAR ACTIVITIES**

# President — PU Bulletin (2025-Present)

Manage and curate official content sharing for Punjab University, increasing student engagement and campus involvement.

# **Coordinator** — **Education Updater (2025-Present)**

Lead initiatives to enhance and expand educational access and resources across Pakistan.

# **President** — UAF Bulletin (2022-Present)

Lead the student-run bulletin, managing content creation and promoting campus scientific events to enhance student engagement.

# Volunteer — Wheat Awareness Campaign, Government of Pakistan (2022-2024)

Contributed to nationwide awareness efforts promoting sustainable wheat production and food security.

## President — TGM, University of Agriculture Faisalabad (2023-2024)

Led and coordinated university-wide TGM events and inter-team collaboration.

## Joint Secretary — TGM, University of Agriculture Faisalabad (2022–2023)

Managed logistics, assisted in event planning, and coordinated activities across multiple TGM teams.

# Member — Child Labor Eradication Program (CLEP), University of Agriculture Faisalabad (2022–2023)

Supported initiatives aimed at raising awareness and combating child labor in local communities.

## Coordinator — University Guide Pakistan - UAF Team (2021-2023)

Guided and mentored new students; facilitated academic and social onboarding.

## LANGUAGES

Mother tongue(s): Urdu; Punjabi

# **English:**

Listening B2 | Writing B2 | Reading B2 | Speaking B2

## REFEREES

Prof. M. Asif Hanif, Dept. of Chemistry, University of Agriculture, Faisalabad

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Prof. M. Zahid, Dept. of Chemistry, University of Agriculture, Faisalabad

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Stacy Chin, Founder of Chemia Solutions Corp, USA

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