



# Sustainable Development Goals



## Clean Water and Sanitation

### 6 CLEAN WATER AND SANITATION



Water is essential across all sectors of society for producing food, energy, goods, and services. Over the past century, global water use has more than doubled the rate of population growth. Many water sources suffer from drought, increased pollution, or both. Clean water and adequate sanitation facilities are crucial for ensuring health and opportunities for individuals and families. Water resources need to be managed efficiently, responsibly, and fairly, and adequate sanitation and hygiene must be provided for everyone.

### College of Education

Professor Dr. Diao Najm Abdullah Al-Sabha, Head of the Department of Chemistry at the College of Education, Alnoor University, chaired the defense committee for a master's thesis in the Department of Chemistry at the College of Science, University of Duhok, submitted by the student Helan Saleh Omar, entitled: "Development of Thin Films from Recycled Polyethylene Terephthalate/Metal–Organic Frameworks (Recycled PET/MOF) and MOF/Magnetic Composites for Water Treatment and Pollutant Detection." The thesis addressed the issue of hexavalent chromium contamination in water, where thin films and metal–organic framework compounds (MOF1, MOF2, and MOF3) were examined, fabricated, modified, and innovatively developed to effectively remove Cr(VI) from aqueous media using the adsorption method.

