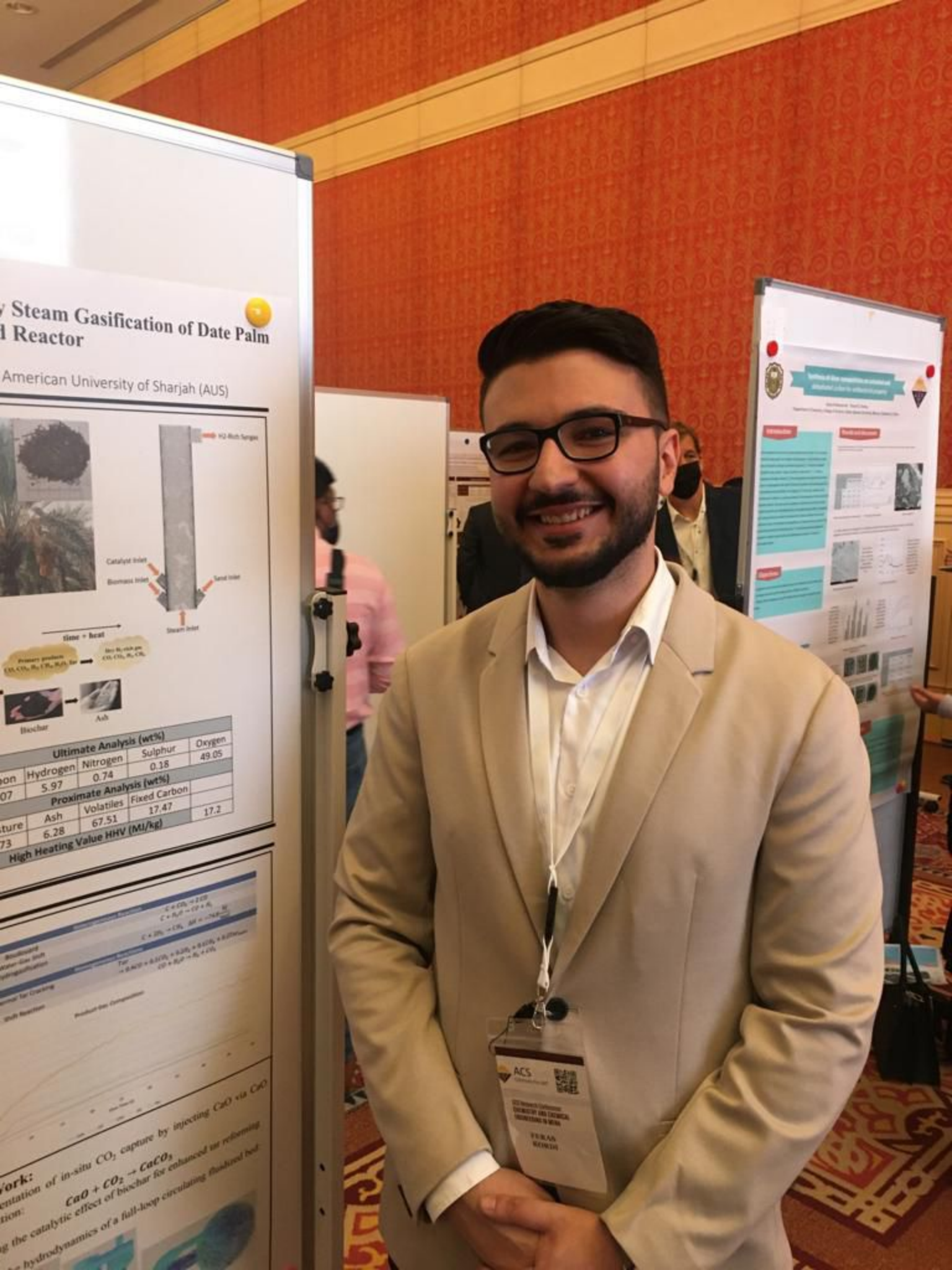
Steam Gasification of Date Palm
Reactor
American University of Sharjah (AUS)
Catalyst Inlet
Biomass Inlet
Sand Inlet
Steam Inlet
time + heat
Biochar
Ash
Ultimate Analysis (wt%)
Hydrogen
Nitrogen
Sulphur
Oxygen
5.97
0.74
0.18
49.05
Proximate Analysis (wt%)
Volatiles
Fixed Carbon
Ash
67.51
17.47
6.28
17.2
High Heating Value HHV (MJ/kg)
ork:
entation of in-situ CO_2 capture by injecting CaO via CaO
tion: $CaO + CO_2 \rightarrow CaCO_3$
g the catalytic effect of biochar for enhanced tar reforming
e hydrodynamics of a full-loop circulating fluidized bed


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AMERICAN CHEMICAL SOCIETY
ssir Makkawi
f Engineering, American University of Sharjah (AUS)
Results
Liquid
Biochar
Gas
Pure Food waste Bio-Oil
Co-feeding Bio-Oil
HHV
Conclusion