

2024 ChemE Cube Competition

The Duel Rubric

Ver 1, March 2024



Judge's Name:	
Team Affiliation:	

Duel 1

Criteria	Outcome	Scoring
1. Higher value of Total CO2 Captured Weighted by Cube Cost (mL/\$)	Yes / No	0 / 30
2. Higher Value of CO2 Captured Weighted by Power Consumption (mL/Wh)	Yes / No	0 / 30
3. Higher Value of Total CO2 Captured Weighted by Cube Mass (mL/kg)	Yes / No	0 / 30
4. Lower Value of Total Cost to Capture (\$/g CO2)	Yes / No	0 / 120
5. Output temperature does not exceed 75F	Yes / No	0 / 20
6. Does it smell?	Yes / No	0 / 20
SUB-TOTAL		/250
Competitor:		
Comments:		

Duel 2

Criteria	Outcome	Scoring
1. Higher value of Total CO2 Captured Weighted by Cube Cost (mL/\$)	Yes / No	0 / 30
2. Higher Value of CO2 Captured Weighted by Power Consumption (mL/Wh)	Yes / No	0 / 30
3. Higher Value of Total CO2 Captured Weighted by Cube Mass (mL/kg)	Yes / No	0 / 30
4. Lower Value of Total Cost to Capture (\$/g CO2)	Yes / No	0 / 120
5. Output temperature does not exceed 75F	Yes / No	0 / 20
6. Does it smell?	Yes / No	0 / 20
SUB-TOTAL		/250
Competitor:		
Comments:		

POINT DISTRIBUTION FOR TOTAL COST TO CAPTURE ACROSS ALL TEAMS	Rank	Points
	1	100
	2	90
	3	75
	4	60
	5	45
	6	30
	7	15
	8	5
	Outside of top 8	0
TOTAL (After a team completes two duels)		/600

POINT DISTRIBUTION FOR TOTAL COST TO CAPTURE ACROSS ALL TEAMS	Rank	Points
	1	100
	2	90
	3	75
	4	60
	5	45
	6	30
	7	15
	8	5
	Outside of top 8	0
TOTAL (After a team completes two duels)		/600