Methods	Molecule	Regex	RFP	ZINC
$\mathcal{D}(best)$	2.26	2.78	3.75	4.01
End-to-End	$\textbf{2.68} \pm \textbf{0.11}$	2.80 ± 0.00	3.79 ± 0.00	/
End-to-End + GradNorm	1.03 ± 0.03	2.80 ± 0.00	$\textbf{4.09} \pm \textbf{0.24}$	/
End-to-End + PcGrad	1.59 ± 0.58	2.80 ± 0.00	3.84 ± 0.00	4.04 ± 0.04
Multi-Head	1.63 ± 0.51	2.80 ± 0.00	4.06 ± 0.29	4.16 ± 0.00
Multi-Head + GradNorm	1.24 ± 0.13	2.38 ± 0.00	3.75 ± 0.00	3.82 ± 0.00
Multi-Head + PcGrad	1.04 ± 0.02	2.80 ± 0.00	3.76 ± 0.01	3.90 ± 0.02
Multiple Models	2.39 ± 0.57	2.80 ± 0.00	3.86 ± 0.00	4.16 ± 0.00
Multiple Models + COMs	2.39 ± 0.00	2.55 ± 0.17	3.70 ± 0.01	3.97 ± 0.10
Multiple Models + RoMA	1.82 ± 0.00	/	/	3.95 ± 0.00
Multiple Models + IOM	/	/	/	/
Multiple Models + ICT	2.66 ± 0.00	/	/	4.05 ± 0.02

 2.03 ± 0.00

 2.22 ± 0.08

 2.16 ± 0.00

 2.10 ± 1.04

 5.12 ± 0.17

 3.83 ± 0.00

N/A

 3.77 ± 0.00

N/A

 3.94 ± 0.00

 4.26 ± 0.00

 4.05 ± 0.02

N/A

Multiple Models + Tri-Mentoring

MOBO

MOBO-ParEGO

MOBO-JES

Table 13. Sci-Design