

Introduction

Between April and June 2020, the GMG Mineral Processing Working Group circulated a survey on collaboration priorities on the topic to help narrow down key focus areas for future work that will be the most beneficial for the broader industry. 95 respondents completed the survey.

Respondents identified **testing and evaluation** as the highest priority practice area for guidance and **water and tailings** as the highest priority process or work area.

Collaboration Priorities

Interest in developing guidelines

When asked about their interest in developing guidelines, 74% of respondents identified that they had high or very high interest.

Priority practice areas

Testing and evaluation was identified as the highest priority practice area, followed by **design or engineering** and **operations** (Figure 1). Education, research and academia, innovation, and all of the above were prominent among the 21% of “other” responses.

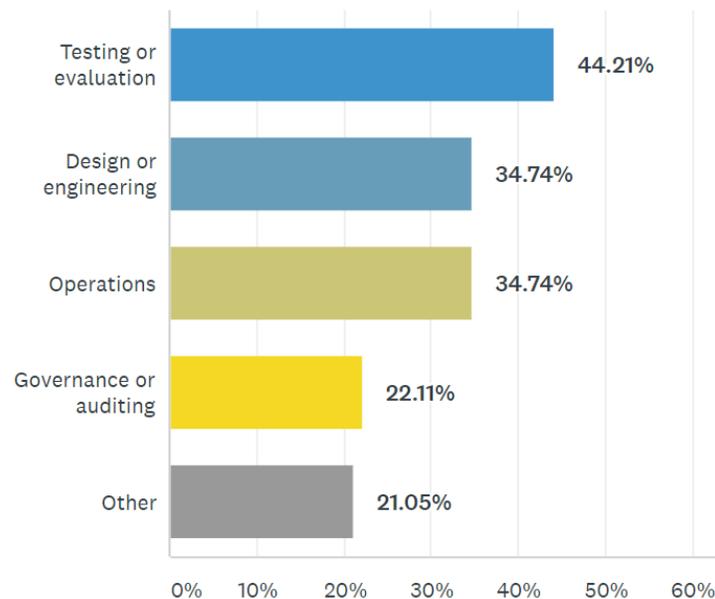


Figure 1 Priority Practice Areas

Priority Process Areas

Water and tailings was identified as the highest priority process area (i.e., topic or work area), followed by **metal recovery** and **comminution**. These results are consistent when considering the weighted average (Table 1) and the number of respondents who selected “high priority” and “very high priority” (Figure 2). The respondent interest or work areas (Figure

Table 1 Priority Process areas

	VERY LOW PRIORITY	LOW PRIORITY	MODERATE PRIORITY	HIGH PRIORITY	VERY HIGH PRIORITY	N/A	TOTAL	WEIGHTED AVERAGE
Water and tailings	0.00% 0	1.09% 1	10.87% 10	29.35% 27	56.52% 52	2.17% 2	92	4.44
Metal recovery	0.00% 0	2.30% 2	18.39% 16	44.83% 39	28.74% 25	5.75% 5	87	4.06
Comminution	0.00% 0	4.30% 4	31.18% 29	25.81% 24	36.56% 34	2.15% 2	93	3.97
Geometallurgy	2.20% 2	6.59% 6	28.57% 26	32.97% 30	28.57% 26	1.10% 1	91	3.80
Concentration	0.00% 0	6.59% 6	30.77% 28	32.97% 30	25.27% 23	4.40% 4	91	3.80
Process control	1.09% 1	9.78% 9	26.09% 24	35.87% 33	25.00% 23	2.17% 2	92	3.76
Hydrometallurgy	1.15% 1	8.05% 7	34.48% 30	33.33% 29	16.09% 14	6.90% 6	87	3.59
Metallurgical accounting	2.15% 2	17.20% 16	24.73% 23	32.26% 30	19.35% 18	4.30% 4	93	3.52
Oxidation	2.27% 2	21.59% 19	45.45% 40	13.64% 12	6.82% 6	10.23% 9	88	3.01

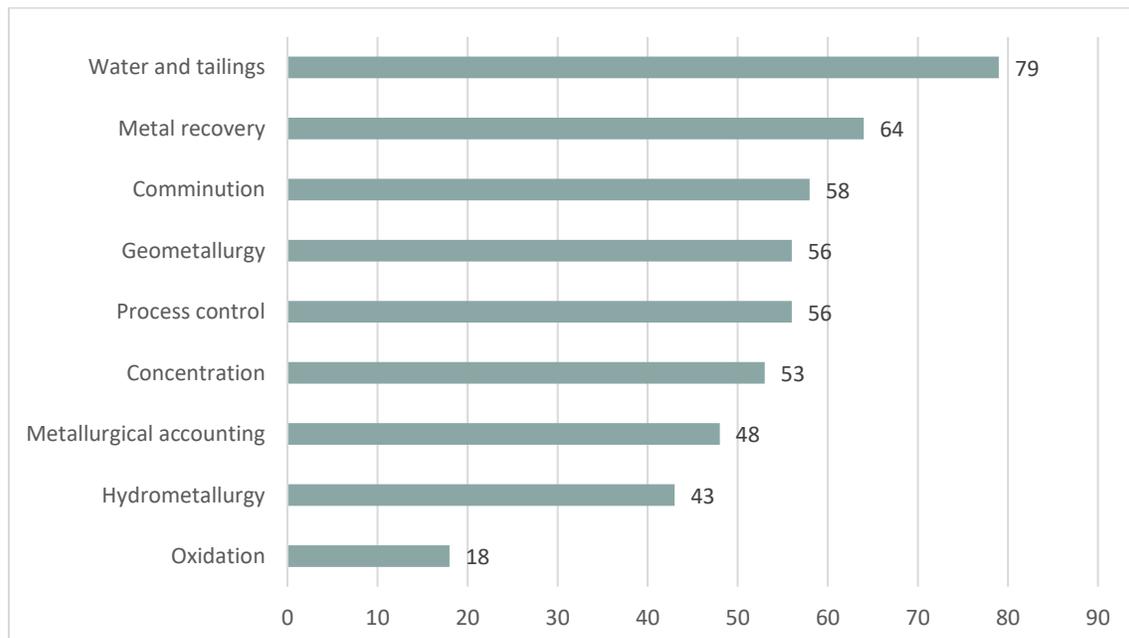


Figure 2 Number of Responses of Very High Priority and High Priority Process Areas

Priority Topics

When provided a list of potential topics already identified by the community, the largest number of respondents selected **energy and water efficiency** (58), followed by **geometallurgical planning** (35) and **metallurgical test work for greenfield projects** (30). See Figure 3.

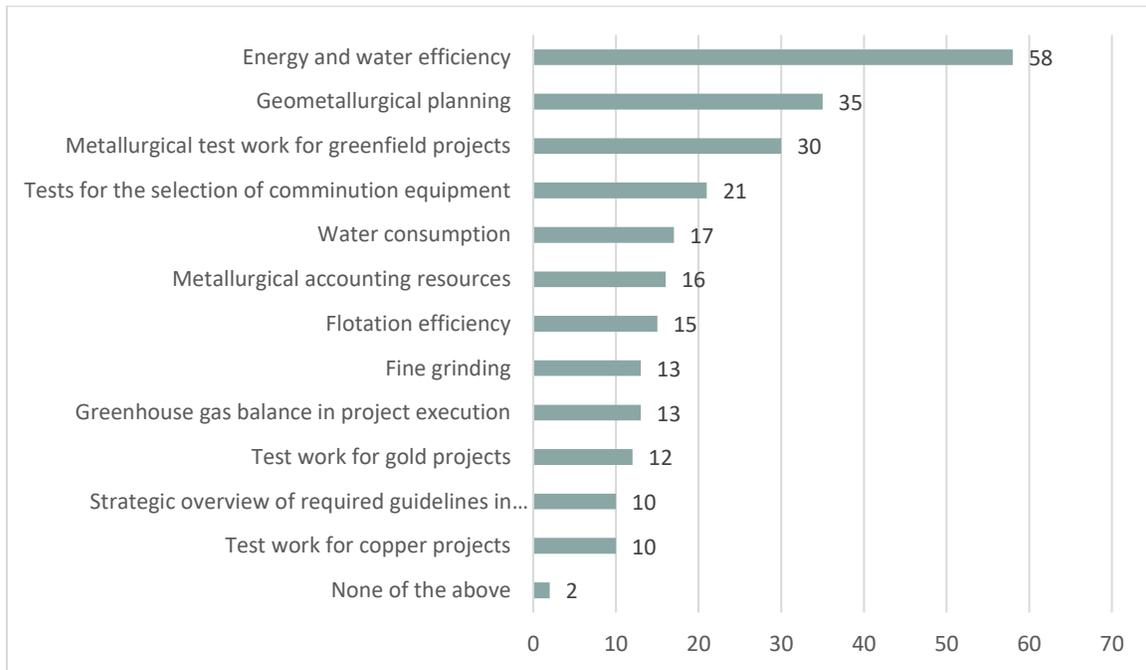


Figure 3 Potential Topics

Demographics

Respondents came from all six continents, but North Americans and Australians were the highest represented (Figure 4). In terms of roles, professionals (engineers, geologists, etc), senior management (corporate) and technology leaders (corporate) were the most highly represented (Figure 5). Mine operators and consultants were the most highly represented organization types (Figure 6)

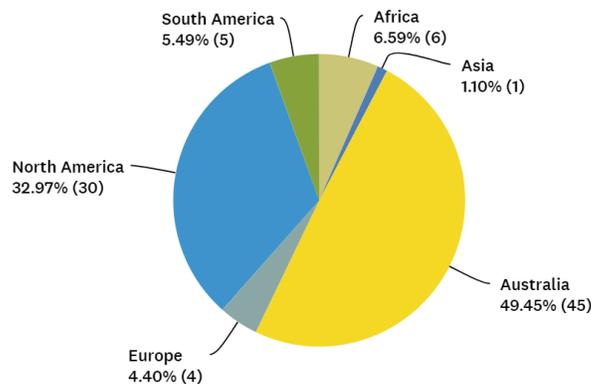


Figure 4 Respondent Locations

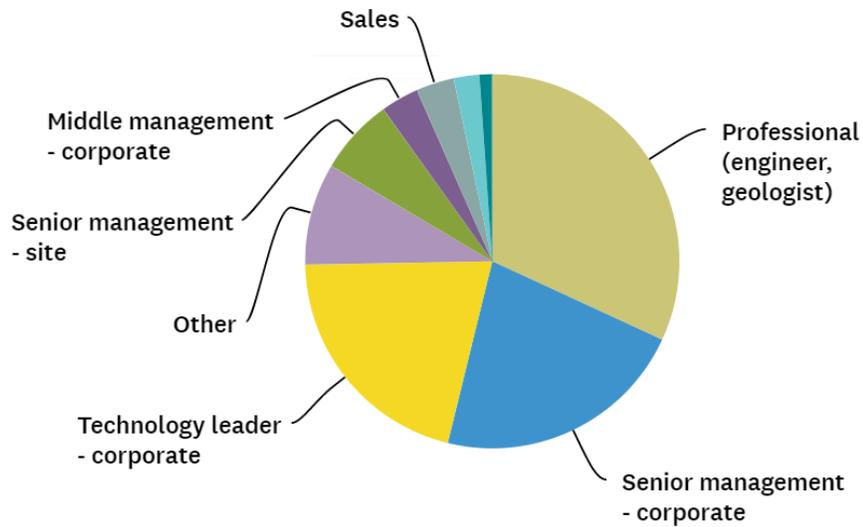


Figure 5 Respondent Roles

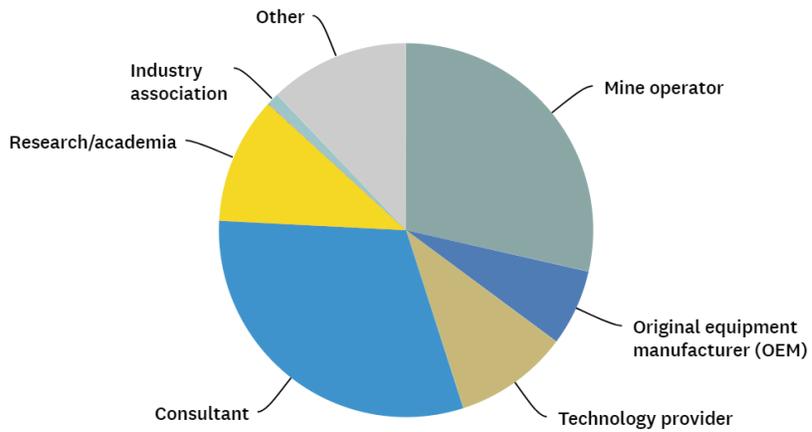


Figure 6 Organization Types