GUIRR Industry Conversation Series:
Future STEM Workforce Skills, Gaps, and Staffing Demand Reflecting New Student Dynamics

MONDAY, AUGUST 12, 2024
2:00 -3:30 PM ET

Purpose

To capitalize on the importance and critical role of private and industrial partners in this discussion, a conversation series will be convened as a partnership between GUIRR and the National Academy of Engineering President's Business Advisory Committee. The purpose of this conversation is to identify the skills needed by a future STEM-oriented workforce. It will ask leaders to forecast R&D trends in their sectors and project what types of students need to emerge from institutions of higher education to meet those emerging trends.

Guided Panel Questions

- What percentages of PhDs, Masters, and Undergraduate degree holders do you think we need in each STEM discipline?
- Are some disciplines overrepresented or underrepresented from an industry perspective?
- What primary skill sets do you need to see from future STEM trainees that will be transferable to your industry/sector?
- Thinking beyond AI-driven disruption, what are innovation trends in your sectors where you see a coming gap between university-produced talent and need?
- What are your thoughts on current STEM degree programs? Are they working?
- What would that training look like if we reimagined the STEM major (at either the undergraduate or graduate level) to be more aligned with industry needs?
- Do you think industry should be more active in directly funding graduate students and postdocs in industry-focused training programs before they become employees? Why or why not?
- In the context of building more pathways from academia to industry for trainees, what are specific challenges that the research community needs to consider with respect to women in STEM?
- Can early involvement from industry partners building transitions to industry specifically tailored to retain women in the STEM workforce help to increase innovation output?

Panel 1 (45 minutes, 2:00-2:45 PM)

- **Robert Slone**, Senior Vice President and Chief Scientist UL Solutions
- **Lillian Fishman**, Director of Academic Affairs, SENS Research Foundation
- **Luca Oriani,** SVP, Global Chief Engineering Services Officer, Westinghouse
- **Anshul Sonak,** Digital Readiness Program Strategy, Global Government Affairs, Intel Corporation

Panel 2 (45 minutes, 2:50-3:35 PM)

- **Gavin Towler**, Corporate Chief Scientist, Sustainability Technologies & Chief Sustainability Officer, Honeywell
- **Amanda Palumbo,** Associate R&D Director, External Technology, Dow
- **Andrea Mohamed,** COO & Co-Founder, QuantumBloom
- **Hernan Londono,** Chief Technology and Innovation Strategist – Education, Dell

WEBINAR ADJOURNS