

Innovation and Workforce Development for Geochemical Applications in Sustainable Energy Transition: Insights from Ongoing Collaborative Research Initiatives with Industry

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To tackle the energy issues of the future, academicians need to work hands in glove with industry and governmental agencies to innovate, accelerate development, and train the next generation of workforce for these new emerging energy technologies. Researchers and individuals in these sectors have different skill sets, strengths, goals, and incentives. Therefore, this setup not only promotes interdisciplinary collaboration and innovation, but also allows for the development of holistic solutions to complex energy-related challenges.

Geochemistry is at the forefront in developing energy transition technologies because it helps in 1) the assessment of resources, 2) enhancing the efficiency of extraction or production of resources 3) the assessment and remediation of environmental impacts stemming from the development of technologies, and, 3) the development of materials used in energy technologies. Academicians can play a key role in providing geochemistry training to students and developing future workforce for this sector.

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