

### ○ **Technology Assessment of In Situ Uranium Mining**

Principal Investigator: C. E. Cowan

The objective of the PNL portion of the Technology Assessment project is to provide a description of the current in situ uranium mining technology; to describe the physical, ecological, institutional and socio-economic environment within which the technology exists; to evaluate, based on available data, the environmental impacts and, in a limited fashion, the health effects; and to explore the impediments to development and deployment of the in situ uranium mining technology. This material, which is reported in PNL-3439, will be used as a source document for the Technology Assessment project.

For further information on the technology assessment of in situ uranium mining refer to:

*Part 5 of Pacific Northwest  
Laboratory Annual Report for  
1980 to the DOE Assistant  
Secretary for Environment.  
PNL-3700 PT 5.*

### ○ **Technology Assessment of Advanced Isotope Separation (Uranium Enrichment)**

Principal Investigator: P. J. Mellinger

Additional nuclear fuel is retrievable by recovering uranium ( $^{235}\text{U}$ ) from uranium flouride ( $\text{UF}_6$ ) tails. This potential has led to the establishment of the Advanced Isotope Separation (AIS) program in the Department of Energy.

For detailed information on this topic refer to:

*Part 5 of Pacific Northwest  
Laboratory Annual Report for  
1980 to the DOE Assistant  
Secretary for Environment.  
PNL-3700 PT 5.*