

JOI/USSAC  
Distinguished Lecturer Series  
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**HYDROTHERMAL SYSTEMS OF THE MID-ATLANTIC RIDGE**

Dr. Susan Humphris, Woods Hole Oceanographic Institution

Dr. Humphris has been involved in ocean drilling since 1977 and has participated in cruises to mid-ocean ridges with both DSDP and ODP. She has served on the ODP Lithosphere Panel since 1988, taking over as chairperson in 1990. Her research interests include variations in the compositions of oceanic igneous and metamorphic rocks, and the importance of their interactions with seawater for elemental geochemical budgets. Drawing from her experience on ODP Leg 106 (Mid-Atlantic Ridge) and on subsequent *Alvin* expeditions, Dr. Humphris will focus on two large hydrothermal systems recently discovered on the Mid-Atlantic Ridge, and the contribution that proposed drilling in such areas might make to an understanding of their formation and evolution. These hydrothermal fields will be compared to those observed in the Pacific, and contrasted with a hydrothermal area recently drilled during Leg 139 on the Juan de Fuca Ridge.