Research Personnel

Thierry Bourbie graduated from the Ecole Polytechnique in Paris in 1975. The same year he obtained a D.E.A. (Engineer Degree) in nuclear physics from the University of Paris Orsay. In 1978 he graduated from the Ecole des Mines de Paris (as a member of the Corps des Mines); obtained a Maitrise (M.S. degree) in geology-geophysics from the University of Paris VII; and worked for the French Government on nuclear energy problems. He then joined the Institut Francais du Petrole, who is supporting his stay at Stanford. Thierry is a Ph.D. candidate in geophysics who has been working on wave propagation in rocks from a theoretical and experimental point of view for the Stanford Rock Physics Project. He is now involved in generating synthetic seismograms into the SEP.

Vlastislav Červený received a degree in Physics and a Ph.D. in Geophysics from Charles University in Prague in 1956 and 1962, respectively. He joined the Institute of Geophysics of Charles University in Prague in 1956. Currently he is a Professor of Geophysics at Charles University and Chairman of the Geophysical Division of the Department of Geophysics and Meteorology, Faculty of Mathematics and Physics, Charles University. During the last twelve years he has been a visiting professor or a senior research visitor at numerous universities and institutions (Dalhousie University, Halifax; University of Toronto; University of Cambridge; Univ. Pierre et Marie Curie, Paris; Univ. Fridericiana, Karlsruhe; USSR Academy of Science - Siberian Branch, Novosibirsk; University of Alberta, Edmonton; Rijksuniversiteit Utrecht; etc.). His areas of interest are seismic wave propagation in complex laterally inhomogeneous media with curved interfaces and block structures. He is Chairman of the Working Group "Theory of Seismic Waves" of the European Seismological Commission. He is the author of two books and more than one hundred papers and lecture notes. At present he is a Visiting Professor at Stanford.

Jon F. Claerbout received his education at M.I.T. (B.S. physics, 1960, M.S. geophysics, 1963, Ph.D. geophysics, 1967). He worked for United Electrodynamics (now Teledyne, Inc.) in 1963 and studied in Uppsala, Sweden, in 1964. He joined the geophysics faculty at Stanford University in 1967. From 1967 to 1973, he was a consultant to the Chevron Oil Field Research Company. He is an active member of the Society of Exploration Geophysicists, receiving the Best Presentation Award for a paper, "Extrapolation of Wave Fields," presented at the 1972 international SEG meeting, and receiving the Society's Medal Award in 1973 "in recognition of his outstanding and original pioneering work in seismic wave analysis." During the year 1972-73, he was a visiting research geologist at Princeton University and a visiting lecturer at Sydney University. His textbook **Fundamentals of Geophysical Data Processing** was published in 1976 and translated to Chinese (1979) and

Russian (1981). In 1977, he was elected a Fellow of the American Geophysical Union. In 1979, he joined the MIT Corporation Advisory Committee to Earth Sciences. He is professor of geophysics at Stanford University and director of the Stanford Exploration Project. During the 1979-80 year he was on sabbatical leave at the Department of Geodesy and Geophysics, Cambridge University.

Alfonso González-Serrano received his B.S. (Licenciado) degree in oceanography from Universidad Autónoma de Baja California, México, in 1977, and a M.S. degree in geophysics from Stanford University in 1979. His B.S. thesis was a structural model for Todos los Santos Bay, using gravity and magnetics data. During the summer of 1980 he worked on Minimum Entropy Seismic Detection for Gulf Research and Development Company. He is currently a Ph.D. candidate in Geophysics and is recipient of a graduate scholarship from Consejo Nacional de Ciencia y Tecnología. His research interests are in velocity estimation and probabilistic dynamic systems in geophysics. He is a member of SEG and AAPG.

Dave Hale received a B.S. in physics from Texas A & M University in 1977. He then worked for Western Geophysical Company as a field seismologist in Venezuela and later as a research geophysicist in Houston. In the latter role, he implemented frequency domain methods of multichannel filtering and migration of seismic data and studied marine seismic sources with respect to wavelet processing techniques. In July of 1979, he joined the SEP. He received a fellowship from the Amoco Foundation in 1981, and is currently a Ph.D. candidate in geophysics. Dave is a member of SEG.

Allan (Bert) Jacobs received a B.S. in physics from M.I.T. in 1977. He is now working toward a Ph.D. in geophysics at Stanford. During the summer of 1979 he worked on migration programs for Atlantic Richfield. Bert's research activities center around the problem of extracting physical parameters from seismic records.

Lawrence C. Morley received a B.Sc. in math and physics ('73) and an M.Sc. in geophysics ('75) - both from the University of Toronto. His master's research was on artificial source techniques in magnetotellurics. After M.Sc. graduation he worked with Chevron Geosciences in seismic data acquisition and processing. He is currently a Ph.D. student in geophysics at Stanford.

Richard Ottolini has been with the SEP since October 1977. He received a B.S. degree in earth and planetary sciences from M.I.T. in 1976 and an M.S. in geophysics from Stanford in 1978. He did reflection seismology research for GSI during the summer of 1977. He is interested in migration, the automated interpretation of geophysical data, deep continental seismic reflections and Chinese geophysics. During 1979 Rick spent six months studying at

the Peking Language Institute, Peking, China. He is a Ph.D. candidate at Stanford, a member of SEG and AGU.

Chuck Sword received a B.S. in physics from Stanford University in 1980. That summer he worked at Marathon Oil Company's Denver Research Center, where he helped process experimental marine data and implement a migration scheme. In September of 1980 he joined the SEP, and is currently working toward his Ph.D. in geophysics.

Jeff Thorson received a B.S. degree in geology from the University of Washington in 1973 and an M.S. degree in geophysics from the University of Houston in 1975. He has worked for Getty Oil Company as an interpreter and in the field as a company representative on various seismic surveys. He is a member of SEG and EAEG, and is the recipient of an N.S.F. graduate fellowship.

Mathew J. Yedlin received his Ph.D. degree in geophysics from the University of British Columbia in 1976. His thesis research involved the application of disk ray theory to anisotropic media. Post-doctoral research, during 1978-79, at both the University of Alberta and the Institute of Geological Sciences at Edinburgh concerned the development of ray-tracing techniques in arbitrarily anisotropic media. While on a post-doc at the SEP in 1980-81, Mat studied reflection processing. He now works in the Exploration Research Division of Conoco.

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