

REFERENCES

- Achalabhuti, C., 1974, Petroleum Geology of the Gulf of Thailand, DMR., Contribution on Circum Pacific Energy and Mineral Resources Conferences, August 26-30, Honolulu, Hawaii.
- Ad Hoc Working Committee on the Environment for Basic Industry in the Eastern Part of Thailand., 1981, Existing Environment of the Eastern Coast of Thailand - Vol.1, Report on the Initial Environmental Impact Assessment of the Basic Industry Project of the Eastern Coast of Thailand, 188 pp. (in Thai).
- Agocs, W.B., 1959, Preliminary and Tentative Interpretation Report of Airborne Magnetometer Survey of Parts of Thailand, Aero Service Corporation, Philadelphia, PA., 18 pp.
- , 1959, Qualitative Analysis-Aeromagnetics, Thailand, Supplementary Report, Aero Service Corporation, Philadelphia, PA., 13 pp.
- Allersma, E., Hockstra, A.J. and Bijker, E.W., 1961-1963, Transport Patterns in the Chao Phya Estuary, The Netherlands Engineering Consultants (NEDECO), pp. 632-650.
- Anderson, J.R., Hardy, E.E., Roach, J.T. and Witmer, R.E., 1976, A Land Use and Land Cover Classification System for Use with Remote Sensor Data, Geological Survey Professional Paper 964, 28 pp.
- Bhotiwihok, S, 1976, Feasibility Study on Water Resources in Pattaya-Bang Lamung Areas, Subcommittee on Water Resources Planning, NESDB, 405 pp.
- Brewer, P.G., 1975, Chemical Oceanography, 2nd Ed., Vol. 1.

- (2) Chancharoonpong, K., 1978, Iron Investigation at Khao Som, Chanthaburi, Economic Geology Division, DMR., 3 pp. (in Thai).
- (3) ,and Sa-ngiamsak, S., 1976, The Potential of Stibnite Mineral in Thailand, (unpublished), Mining Technology Division, DMR., 7 pp. (in Thai).
- (4) , 1978, Iron Investigation at Khao Ta Plai, Chanthaburi, Economic Geology Division, DMR., 9 pp. (in Thai).
- (5) , 1978, Iron Investigation at Noen Yai Lao, Chanthaburi, Economic Geology Division, DMR., 9 pp. (in Thai).
- Chantrakul, A., Mee-Sung, R., Watcharaskuni, J., Parisudhiyarn, P., Parisudhiyarn, P., Khumpra-phan, S. and Charupong, P., 1978, A Report on the Economics of the Easternpart of Thailand, Department of Business Economics, 190 pp.
- Chivakul, K., 1978, The Study on the Physical Environment and Socio-economics of the Easternpart of Thailand, 325 pp.
- Clawson, M. and Stewart, C.L., 1965, Land Use Information, A critical survey of U.S. statistics including possibilities for greater uniformity, Baltimore, Md., The Johns Hopkins Press for Resources for the Future, Inc., 402 pp.
- Crofts, R., 1973, Slope Categories in Environmental Management, (unpublished paper), Department of Geography, University College London.
- de Medina, J., n.d., Laterites and Their Application to Highway Construction, based on the text of a course at the Brazilian Highway Research Institute.
- Department of Mineral Resources, n.d., Report on the Mineral Investigation in the Provinces of Eastern Coast of Thailand, (unpublished), 6 pp. (in Thai).

- (7)
Department of Mineral Resources, 1978, Report Conference on Acceleration of Iron and Uranium Investigation. (in Thai).
- (8)
Dhanusawat, T., and others, 1963, Report on the Investigation of Geophysics and Iron Deposits at Khao Wong, Lopburi province, (unpublished), Dept. of Mineral Resources, Bangkok. (in Thai).
- (9)
Dusadeepanes, C., Shoosuan, S. and Boonton, A., 1979, Geology of Ban Khlong Ta Phet, Kingamphoe Bo Thong, Chon Buri, (unpublished), Department of Geological Sciences, Chiang Mai University, 137 pp. (in Thai).
- Electricity Generating Authority of Thailand (EGAT), 1970, Report on Hydrographic Survey, Nuclear Power Project, Survey Division, Planning Department, 42 pp.
- EGAT, 1974, Sand Movement Investigation of Nuclear Power Project, Progress Report from October 1973 to March 1974, Survey Division, Planning Department, 83 pp.
- , 1976, Report on Earthquake Study, Nuclear Power Project, 16 pp.
- Evans, J.R., 1977, Economic Geology of Mc Cloud Limestone, South Gray Rocks Area, Shasta County, California, California Geology, Vol. 30, No. 6, pp. 123-132.
- Emery, K.O., 1961, Submerged Marine Terraces and Their Sediments, Zeitschr. Geomorphologic, Supp., Vol. 3, pp. 17-29.
- , 1968, Relict Sediments on Continental Shelves of World, AAPG Bull., Vol. 52, No. 3, pp. 445-464.
- , and Niino, H., 1963, Sediments of the Gulf of Thailand and Adjacent Continental Shelf, Geol. Soc. of America Bull., Vol. 74, pp. 541-554.

- FAO, 1971, Fishery Resource No. 99, Supplement No. 1.
- Fisher, W. L., Brown, L.F., Jr., and Scott, A.J., 1972, Clastic Depositional Systems - A Genetic Approach to Facies Analysis, Univ. Texas, Bur. Econ. Geology, Special Publication, 211 pp.
- Flawn, P.T., Fisher, W.L. and Brown, L.F., Jr., 1970, Environmental Geology and the Coast-Rationale for Land-Use Planning, Journal of Geol. Educ., Vol. 18, No. 2, pp. 85-86.
- Hackett, J.E., 1967, Geology and Physical Planning, In, Water, Geology and the Future, Indiana University, Water Resources Research Center, pp. 83-90.
- Hedgpeth, J.W., 1957, Treatise on Marine Ecology and Paleoecology, Geol. Soc. Amer. Memoir 67, Vol. 1.
- Hinthong, C., Pholprasit, C. and Pholehan, 1976, Geological Map of Changwat Phra Nakhon Si Ayutthaya, (Scale 1:250,000), Geological survey Division, DMR.
- Howell, J.V., 1957, Glossary of Geology & Related Sciences, NAS + NRC, Washington, pp. 178.
- (10)
- Jantaranipa, W., 1973, Report on Investigation of Stibnite Deposit., Ban Nayaiam and Kaeng Hang Maew, Tha Mai, Chanthaburi (unpublished), in Sampattavanija, S. and Suwanasing, A., Proceeding for excursion, 17-19 Feb., GST.
- Japakasetr, T., 1978, Potash Deposits of Northeast Thailand, Economic Geology Div., DMR., 14 pp.
- ,and Workman, D.R., 1978, The Evaporite Deposits of Northeast Thailand, Circum - Pacific Energy and Mineral Resource Conference, Honolulu, Hawaii, 25 pp.

- Japan International Cooperation Agency (JICA), 1979, The Feasibility Study Report on the Integrated Flat Steel Plant in the Kingdom of Thailand.
- (11) Javanaphet, J.C., 1945, Report on the 60 Mine investigation, (unpublished), DMR. (in Thai).
- (12) , 1948, Report on geological investigation of Chanthaburi Region (Chon Buri, Rayong, Chanthaburi, Trat), (unpublished), DMR. (in Thai).
- , 1969, Geological map of Thailand, scale 1:1,000,000, Dept. Mineral Resources, Bangkok.
- Jungyusuk, N. and Sirinawin, T., 1981, Petrography and petrochemistry of the Khorat Plateau Basalt, Northern Thailand, (unpublished), Geological Survey Division, DMR. (in Thai).
- (13) Karunamitra, K., Sripongpan, P. and Medhisuvakul, S., 1976, Geology of Tombon Takhian Thong, Amphoe Ma-Kham, Chanthaburi, (unpublished), Department of Geological Sciences, Chang Mai University, 40 pp. (in Thai).
- (14) Kheokao, N., Chuprasert, P. and Assavarittiprom, V., 1976, Geology of Ban Kaeng, Amphoe Tha Mai, Chanthaburi, (unpublished), Department of Geological Sciences, Chiang Mai University, 54 pp. (in Thai).
- Kuentag, C., 1979, Marl, Limey Marl, Marl-Lime and Marly Limestone, Economic Geology Division, DMR, 12 pp. (in Thai).
- Kumanchan, P., 1974, Barite, Economic Geology Bulletin No. 5, Economic Geology Division, DMR., 88 pp. (in Thai).

(15)

Kumanchan, D., Sukontapongpow, S. and Boonkosang, S., 1977, Iron Investigation at Bo Din Daeng and Ban Bhu Phai, Kingamphoe Na Dee, Prachinburi, Economic Geology Division, DMR., 13 pp. (in Thai).

Land Classification Division, 1974, The Land-Use Map of the Central Plain of Thailand, scale 1:250,000, Land Development Department.

., 1979, The Land-use Map of Chon Buri, scale 1:100,000, (first draft preparation), Land Development Department.

(16)

Maneeprapun, K., Somboonanak, P. and Saetung, S., 1978, Geology of Ban Nong Yai, Ban Khlong Phlu and Ban Thup Rang, Chon Buri (unpublished), Department of Geological Sciences, Chiang Mai University, 122 pp. (in Thai).

Maunsell Consultants Limited, Sir William Halcrow & Partners and Sindhu Pulsirivong & Associates, 1980, Sattahip Commercial Port Study, Final Report Vol. 1 & 2, Ministry of Communications, Bangkok, Thailand.

Mc Harg, I.L., 1969, Design with Nature, Natural History Press, New York.

Mckeever, J.R., ed., 1968, The Community Builders Handbook, Anniversary Edition, Urban Land Institute, Washington, D.C.

Meteorological Department, 1977, Climatological Data of Thailand, 25 Year Period (1951-1975), Climatology Division, Ministry of Communications, pp. 34-35.

Moser, P.H., 1969, Alabama Investigates Resources to Determine Economic Benefits, Appalachia, Vol. 2, No. 9, pp. 32-34.

,and Hyde, L.W., 1974, Environmental Geology, An Aid to Growth and Development in Lauderdale, Colbert and Franklin Counties, Alabama, Geological Survey of Alabama, Atlas Series 6, 45 pp.

- Nakinbodee, V., Chaturongkawanich, S. and Maranetr, S., 1976, Report on the Geology of Bangkok Metropolitan and Rayong Map Sheets, an unpublished report in files of Geol. Surv. Div., DMR., 59 pp. (in Thai).
- National Environmental Board (NEB), 1980, Initial Environmental Impact Assessment of Soda-Ash and Rock Salt Project, Environmental Impact Division, 27 pp. (in Thai).
- Neelasri, K., 1980, Marine Current Analysis in the Inner Gulf of Thailand, Hydrographic Journal, Hydrographic Department, Vol. 4, No. 4. (in Thai).
- Netherland Engineering Consultants (NEDECO), 1971, Deep-Seaport of Laem Chabang, Survey and Design, Part II a, 186 pp.
- Nutalaya, P., 1977, Engineering Geology of the Nuclear Power Plant Site at Ao Phai, Sri Raja, Report Seminar on Geology & Mineral Deposit, D.M.R., 5 pp.
- (17)
- Panjasutharot, S., Pawinabumpen, T. and Suwanwerakumthorn, 1979, Geology of Ban Song Phinong-Kha Talat, Kingamphoe Wang Chan, Rayong, (unpublished) Department of Geological Sciences, Chiang Mai University, 83 pp. (in Thai).
- Persons, B.S., 1970, Laterite, Genesis, Location, Use, Plenum Press, New York - London, 103 pp.
- Petroleum Authority of Thailand, 1979, Environmental Impact Statement for National Gas Development Project, Final Report, Vol. 3 of 5, Existing environmental prepared by Floor Ocean Services International, Inc.

- Pettijohn, F.J., 1957, Sedimentary Rocks, second edition, Harper & Row, New York, pp. 368.
- Phiancharoen, C. and Ramnarong, V., 1976, On the Groundwater Resources of Pattaya and Adjacent Areas, East Thailand, Journal of the Geol. Soc. of Thailand, Vol. 2, No. 1-2, pp. 59-66.
- , and Isarankura, S., 1976, Hydrogeologic Map of Chon Buri and Rayong (scal 1:200,000), Groundwater Division, DMR.
- Phongphiphat, T., 1978, Marine Current Analysis in the Inner Gulf of Thailand, Hydrographic Journal, Hydrographic Department, Vol. 4, No. 4, (in Thai).
- Phungrasami, T and Wasuwanich, P., 1972, The Investigation on Clay Deposits in Nakhon Nayok, Prachinburi, Saraburi, Chanthaburi, Rayong and Trat., Economic Geology Division, DMR., 138 pp. (in Thai).**
- (18)
- Pierre, C., 1962, L' Indice Cuivreux de Chun Tuk, Province de Nakhon Ratchasima, District de Pak Chon, Village Chun Tuk, (unpublished), Mission De Cooperation Technique De 7' Janvier 1960 au 7 octobre, 37 pp.
- (19)
- Pitayaphumichan, U., 1936, Report on the Investigation of Gold Deposit, Ban Bo Thong, Kabinburi, Prachinburi (unpublished), (in Thai).
- (20)
- Potissat, S., n.d., Iron Deposit, (unpublished) Economic Geology Division, DMR. (in Thai).
- (21)
- , 1974, Drilling Report of the Gold Deposit, Bo Thong, Kabinburi, Prachinburi, (unpublished), Economic Geology Division, DMR.

- Provincial Water Supply Division, 1980, Record of Well Logging in Chon Buri and Rayong, Public Work Department.
- Research Institute of Applied Science of Thailand, 1979, The Feasibility study on the reclamation of the Sea in Chon Buri Municipal Area, submitted to NESDB, (in Thai).
- Research Institute of Chulalongkorn University, 1980, Reconnaissance Survey on Various Baseline Conditions of Rayong, Chanthaburi and Trat for the Development of Tourism, submitted to TAT, (in Thai).
- (22) Royal Department of Mines, 1936, Report on the Mineral Investigation in Chon Buri Province, (unpublished), 2 pp. (in Thai).
- , 1959, Report of Investigation on Occurrence of Ferro-Magnetic Mineral Deposits, Chachoengsao and Chon Buri Province, Thai Geological Survey, 6 pp.
- (23) Sampattavanija, S and Yaemniyom, N., 1975, Copper., Economic Geology Bulletin No. 11, Economic Geology Division, DMR., 51 pp.
- Sapsomwong, G., 1977, Sedimentation in the Pier Area of Royal Operation Fleet, Sattahip Naval Base, Chon Buri, a thesis submitted in partial fulfillment of the requirements for the Degree of Master of Science, Department of Marine Science, Graduate School, Chulalongkorn University, 116 pp.
- Sarapirome, S., Hinthong, C. and Wunapeera, A., 1982, Carbonate Rock Investigations and Their Potentials in Chon Buri Area, Eastern Thailand, an unpublished manuscript to be prepared for a final report of Geol. Surv. Div., DMR.
- Secretariat Office of Sub-Committee on the Study of Primary Industry along the Eastern Coast of Thailand, 1981, Final Report on the Study of Primary Industries and Deep-Seaport Development, along the Eastern Coast of Thailand, Office of the General Secretary to the Prime Minister.
- Seed, H.B., Idriss, I.M. and Ricfer, R.W., 1968, Characteristic of Rock Motions During Earthquakes, University of California, Berkley, California.

- Shepard, F.P., 1973, Submarine Geology, 3rd edition, Harper & Row, Publishers, New York, London, pp. 111-122.
- Siriphokakit, W., and Wongsawat, S., 1972, Lithologic Map of the Eastern Thailand, scale 1:500,000, Groundwater Div., Dept. Min. Resources (DMR), Bangkok (unpublished).
- Siripong, A., 1976, The Causes of the Fluctuation of the Sea-level at Sattahip, (Unpublished paper), 350 pp. (in Thai).
- Soil Survey Division, 1979, Soil Map of Chon Buri and Rayong, scale 1:100,000 (during preparation), Land Development Department.
(24)
- Study Group on Gold Deposits Investigation, 1979, Report of the study on gold deposits, (unpublished and classified report), DMR., (in Thai).
- Suensilpong, S., Putthapiban, P. and Mantajit, N., 1981, Some Aspects of Tin Granite and Its Relationship to Tectonic Setting, project paper No. 8, Granite project, DMR., 9 pp.
(25)
- Sukontapongpow, S., 1974, Molybdenite, Economic Geology Bulletin No. 6, Economic Geology Division, DMR., 23 pp.
- Suwanasing, A., 1963, Geochemical Exploration of Tin in Granite Mountain Range of Chon Buri, Rayong and Chanthaburi, 15 pp. (in Thai).
(26)
- , 1966, Iron Deposits, Mineral Resources Gazette, Vol. 11, No. 3, pp. 37-68. (in Thai).
(27)
- , 1973, Geology and Mineral Deposits in the Eastern Thailand, Economic Geology Division, Department of Mineral Resources, Bangkok, Thailand, 23 pp.

- Suwanasing, A., 1976, Progressing on the Investigation of Potash and Rock Salt Deposits, Northeast Thailand., Economic Geology Div., DMR., 14 pp. (in Thai).
- Thanasuthipitak, T., 1978, A Review of Igneous Rocks of Thailand, Proceedings of the Third Regional Conference on Geology and Mineral Resources of Southeast Asia, Bangkok, Thailand, pp. 775-782.
- Triyarn, A., 1972, Report of Investigation on the Silica Sand at Phuket, Trung, Nakhon Sithamrat, Songkhla, Pattani, Rayong, Chanthaburi and Trat., Economic Geology Division, DMR., pp. 35-46. (in Thai).
- USS. Engineers and Consultants, Inc. (UEC), 1980, Project 2020 Site Selection Study for Iron, Steel and Fertilizer Complex, Ministry of Industry, Bangkok, Thailand.
- Vallentine, Laurie & Davies, R.O.P. (VL & D), 1977, Construction of a Road from Ban Bung to Ban Khai, Soil and Material Report, Ministry of Communications, 43 pp.
- Vichit, P., Vudhichati, S., and Hansawek, R., 1978, The Distribution and Some Characteristics of Corundum-bearing Basalt in Thailand, Journal of the Geol. Soc of Thailand, Vol. 3, No. 1, M 4/1 - M 4/38.
- Vongvisessomjai, S. and Thinaphong, S., 1976, Sedimentation Processes and Navigation Channel Improvement - Sattahip Harbour -, Incooperation with Oceanographic Division, Hydrographic Department, Royal Thai Navy, Bangkok, Thailand, 80 pp.

- Wentworth, C.K., 1930, A Simplified Method of Determining the Average Slope of Land Surfaces, Amer. Journ. Sci. 20, pp. 184-194.
- (28)
- Wongpornpakdi, S., Thongkam, S. and Sujaritpornchaikul, O., 1976, Geology of Khao Klaed, Amphoe Tha Mai, Chanthaburi, (unpublished), Department of Geological Sciences, Chiang Mai University, 47 pp. (in Thai).
- Woodward - Clyde and Associates, 1969, Preliminary Engineering and Geologic Investigation of Subsurface Conditions for Proposed Nuclear Power Plant near Sri Racha, Thailand, Prepared for EGAT, 14 pp.
- Workman, D.R., 1972, Geology of Laos, Combodia, South Vietnam, and the eastern part of Thailand - a review, Instit. Geol. Sciences, London, Rept. No. 19, 49 pp.
- Wyrтки, 1961, Scientific Results of Marine Investigations of the South China Sea and the Gulf of Thailand, NAGA Report, Vol. 2, Scripps Inst. of Oc., La Jolla, Ca., 195 pp.
- Yaemniyom, S. and Yaemniyom N., 1976, Lead-Zinc, Economic Geology Bulletin No. 12, Economic Geology Division, DMR., 115 pp. (in Thai).

BIODATA

Mr. Sunya Sarapirome, the author, was born in Chanthaburi Province, Thailand, on December 14, 1953. He graduated from the Department of Geology, Faculty of Science, Chulalongkorn University in 1974 with a B. Sc. degree in Geology. His past experiences are as follows : he was employed by Royal Kaolin Co, Ltd., as geologist in year 1975 and later on by CERMAS Co, Ltd., as geologist and technical representative for a year in 1976. During that time, both companies trained him in the field of raw materials supporting to ceramic industry including the knowledge on industrial minerals and rocks. At the present moment, he is working at Geological Survey Division, Department of Mineral Resources as the associate chief of the Engineering Geology and Environmental Geology unit.