

## ABOUT THE AUTHORS

**EMIL Q. JAVIER** Academician. A young and energetic young scientist, he was named Director General of the NSTA, he is currently chancellor of the UP at Los Baños. Minister Javier is a holder of Ph.D. in plant breeding and genetics from Cornell University in 1969, obtaining his MS. in Agronomy from the Illinois U. and his B.S. in Agriculture from the UP College of Agriculture.

He started out as research assistant at the UPCA and the University of Illinois and later as graduate assistant at Cornell U. He went back to the UP Academic halls at Los Baños in 1966, after 10 years he became a professor — up to this day. He is responsible for the creation of the Institute of Plant Breeding in 1975 at UPLB.

In his earlier years, he came up with 48 research works and he is still working on many more. Because he believes that the man-in-the-street will have an increasing amount to say about some issues raised by applied science, he came up with more than fifteen popular articles.

A TOYM awardee, it is not surprising to see behind him a very rich scientific and technological accomplishment.

**ALFREDO V. LAGMAY**, Academician, Ph.D. in Experimental Psychology, 1955, Harvard University. He is presently a professor of Psychology, College of Arts and Sciences, University of the Philippines.

His awards include: Professorial Chair, UPAA Research Professor of Psychology, 1974-75; Fellow of the University of the Philippines to Harvard University, 1950-55, 1962; Postdoctoral fellow at Harvard under a Rockefeller Foundation scholarship, 1967-68. Research fellow at University of California, Berkeley, under Fulbright Hays program administered by the Philippine-American Educational Foundation and the International Exchange of Scholars, New York; cum laude, Bachelor of Philosophy, U.P.; recipient of UP President's pin for graduating with honors, 1947.

**ENCARNACION ALZONA**, Academician. Ph.D. Columbia University. She has become specialized in Philippine History. Dr. Alzona has received several national awards in recognition of her dedication to historical writings that brought about Philippine history in a nationalistic perspective. Among the awards are: Republic Cultural Heritage Award for Historical Writing in 1966, Rizal Pro-Patria Award and Apolinario Mabini Memorial Award. The Philippine Women's University had conferred on her a degree of Doctor of Laws, *honoris causa*. She is engrossed on researches involving important people and events in Philippine past, one of these is about T.H. Pardo de Tavera. With these series of works, she initiated the translation of several works of our national heroes from Spanish to English. She sees a fair chance of getting these published in the future.

**ROMEO N. BAUTISTA**, Ph.D. An economics professor at the University of the Philippines, he obtained his Ph.D. from Yale University in 1970. He is likewise on special detail as deputy director general at the National Economic Development Authority. Prior to this, he was consultant since October, 1980 of the National Economic Council, 1970-72; Economic Commission for the Asia and the Far East, World Bank, 1975 and 1979-80.

He was named one of the Most Outstanding Young Scientists in 1982 by the National Academy of Science and Technology. A visiting fellow, Department of Economics, Research School of Pacific Studies, Australian National University, 1977; Research fellow, National Bureau of Economics Research, Inc. (New York), 1975-76; fellow, Technology and Development Institution at the East West Center in Honolulu from 1972-73 are some of his awards. Having attended several conferences and seminars here and abroad, he has close to 50 published works. In 1980-81, he was head of the Philippine Society for International Development.

**ERNESTO M. PERNIA**, Ph.D. As director for research at the Institute of Economic Development and Research, UP School of Economics, he is also associate professor. He is currently a consultant to Population Council, Regional Office, East and South Asia, among others. Likewise, he has served as consultant at the United Nations University in Tokyo, Japan 1978-79 and the World Bank (IBRD) in 1975.

In 1971-75, he was named to the Ford Foundation Fellowship at the University of California in Berkeley, Dr. Pernia was likewise a research grantee, Interdisciplinary Communications Program at the Smithsonian Institute in Washington, D. C., from 1974-75.

Centering on urbanization, population growth and statistics, his voluminous works dealt on economic development and its allied fields. He is a member of the International Union for the Scientific Study of Population based in Leige, Belgium.

**ELY ANTHONY R. OUANO**, Ph.D. He is a holder of doctor of engineering (Environmental) in 1972 from the Asian Institute of Technology, Bangkok, Thailand, he is a balik-scientist awardee of the NSDB (now NSTA) in 1978, his stint abroad includes: Environmental Background Level Assessment for the Proposed Thai Petrochemical Site in Chron Buri, Thailand from '74 to March '75.

Air pollution levels monitoring; Development of Air Pollution Management Structure and Consultant in many endeavors at the same time, including: at present, a consultant to MPW's REWARDS project on the availability, demand and quality needs of water resources throughout the Philippines; Environmental Impact Assessment of San Roque Dam; To Ayala Corporation on Water Supply, Sewerage and Sewage treatment and solid waste management for the New Alabang Subdivision and rehabilitation of water supply system for Makati; Black Mountain, Inc. in its water pollution problems; Secretary to the Board of Directors Consultancy Services Construction Management Firm involved in the construction of La Tondeña Canlubang, Intel (Phils.) and Ciba Geigy, since May 1979.

**PATROCINIO SEVILLA-SANTOS**, Ph. D. A holder of Doctor of Philosophy (Chemistry), UST, Merrisitimus in 1972 and a doctorate

in Pharmacy in 1931, also from the same University.

A grantee of the PHILCUSA-MSA Fellowship in Antibiotics Technology and Microbiology Special Training, she made exclusive antibiotics research, also in microbiology, mycology, industrial fermentation and pilot plant operations at the University of Illinois, USA. Most of her researches focused on antibiotics and microbiology. From 1967-68, she took studies on Laboratory Administration at the Polytechnic School of Management Studies in London England as a Colombo Plan scholar.

The Philippine Medical Association gave her two Abott Research Awards in 1973. These are in Basic Science in 1973 as First Prize on "Antitumor Activity of Locally-isolated Actinomycins (co-author, 1978 and Third Prize on Toxicity Studies on Locally-isolated Actinomycins (co-author), 1971.

**FE VILLANUEVA DEL MUNDO**, National Scientist, Doctor of Medicine, University of the Philippines, 1933. Ramon Magsaysay Awardee for Public Service by a Private Citizen, 1977 and Professor Emeritus of FEU, 1977. She was conferred three Doctor honoris causa degrees by the Philippine Women's University, 1968; Medical Women's College of Pennsylvania, 1970; and Smith College, Northampton, Massachusetts. At present, Dr. del Mundo's various positions are: Director and Founder, the Children's Medical Center Foundation of the Philippines; Director, Institute of Community Health; and many others. A leading Pediatrician and medical stateswoman, Dr. del Mundo has been the moving spirit behind the establishment of various medical institutions in the country. She is an outstanding woman in the Philippine, Asian and world medicine. A proficient scholar, distinguished educator, medical researcher, exemplary citizen, she is a humanitarian dedicated to help promote better living conditions through better health.

**JULIAN A. BANZON**, Academician, Ph.D. in Biophysical Chemistry, Iowa State University, 1940, Emeritus Professor of Food Science and Technology, University of the Philippines at Los Baños and Scientific Consultant, Maya Farms, Philippine Coconut Authority and Philippine Coconut Research and Development Foundation. His most important recognitions include, Professor Emeritus at UPLB, Chemist of the Year Award by the Professional Regulation Commission, 1978, PHILSUGIN award for Research, Crop Science Society of the Philippines, 1976 and the Distinguished Service Award conferred by the Integrated Chemists of the Philippines, Inc. in 1980.

His primary research interests are on the chemical aspects of food and energy. Ten publications on coconut as a renewable source of energy, two on the fermentive utilization of cassava and three on photochlorination of coconut oil are only a few of such researches geared towards energy and the utilization of local plant materials.

**JOSE R. VELASCO**, Ph.D. obtaining it from the University of California in 1949, he was a commissioner of NIST for ten years.

In the academe, he started out as assistant instructor for five years, an instructor (4 years); assistant professor (6 years); chairman of the Department of Agricultural Botany, College of Agriculture and a Botany professor for a year at the Graduate School of Arts and Sciences, UP. This is prior to his being named NIST head. His

research touched various areas of plant physiology like mineral nutrition, photoperiodism, chemical weed control and plant growth in general. These works have laid out the foundation of some important crop production management practices and paved way for research directions for the UP College of Agriculture.

Among his honors and awards are: fellowship from SEATO, in 1963; the Guggenheim Foundation, also in 1963; the UP Alumni Award in 1967; Colombo Plan Special visitor to Australia in 1979 and Distinguished Alumnus Award by the UPAA in 1971.

**OFELIO R. EXCONDE**, Ph. D. A doctor of philosophy (Plant Pathology) from Kansas State University, U.S.A. He is a professor at the Department of Plant Pathology and senior scientist at the Institute of Plant Breeding, College of Agriculture, University of the Philippines, at Los Baños.

Plant pathology is Dr. Exconde's field of specialization. He started out as instructor at the Department of Botany and Plant Pathology, Kansas State U., where he also obtained his Ph. D. in 1961. On his return to UPLB, he was appointed assistant professor at its Plant Pathology Department and rose to associate professor after seven years. He has over 80 published works.

To his credit, he is a recipient of the Rizal Pro Patria Awards from President Marcos in October, 1976 as well as the Presidential Plaque of Merit in August 1967 as Outstanding Plant Pathologist among others.

**CARMEN C. VELASQUEZ**, Academician, An Emeritus Professor of Zoology at the UP in Diliman, Q.C.

Appointed twice as member of the Executive Council of the National Academy of Science and Technology. She worked her way up before she became Full Professor VIII at UP's Zoology Department from 1975-78. Dr. Velasquez started out as student assistant in 1934 and rising to assistant professor in 1954. Four years after, she left for abroad and had a stint as a visiting investigator at the US Dept. of Agriculture, Beltsville in Maryland, USA and as a professional lecturer at the University of Maryland.

In 1961, she was back at UP and this time as associate professor and stayed here for six years. She returned to Maryland as a visiting professor and investigator at the Smithsonian Institute in Washington, D.C. The same year she was named full Professor I at the Zoology Department and from there made a phenomenal rise.

Behind her is over 50 research papers and most of them hit print in reputable international journals. Her brilliant works made it easy for her to garner several awards, among them: the Presidential Distinguished Service Medal and Diploma of Honor, Republic of the Philippines, 1965, "In recognition of valuable service to science and people" and the Phi Sigma Award" in recognition of meritorious graduate school achievement in the field of Biological Science in 1953 and Outstanding Woman in Science in the Philippines by UNESCO during its biennial conference in 1975.

**JOVENTINO D. SORIANO**, Academician, Ph.D. in Cytogenetics and Mutations Research, University of Chicago, 1957 and currently professor of Botany, Department of Botany, College of Arts and

Sciences, University of the Philippines.

He has held various positions like member, Fulbright Hays/East-West Center Grants Committee, 1975 to 1980; Director, U.P. Office of Research Coordination, 1971-1979; Chairman, U.P. Natural Science Research Committee, 1970 to 1974; Chairman, Committee on Evaluation of B.S. Biology Curricula, Higher Education Council, Senate of the Philippines, 1971; Director, U.P. Arboretum, 1970-1973; Chairman, Committee on Biological and Health Sciences, U.P. Graduate School, 1969 to 1980; Chairman, Department of Botany, 1969 to 1973; Professor of Botany, 1970 to date; Associate Professor of Botany, 1986-1970; Assistant Professor of Botany, 1957-1964; Instructor in Botany, U.P., 1949-1957; Instructor in Biology, 1944.

**RAFAEL D. GUERRERO III**, A Ph. D. holder is Fisheries Management from Auburn University, he is dean of the College of Inland Fisheries of Central Luzon State U, where he is also associate and assistant project director and research coordinator of the university's Freshwater Aquaculture Center. In 1960, while a consultant on tilapia cage culture project, of San Miguel Corporation and also that of LLDA-ADB, he was also elected to head the Fisheries Research Society of the Philippines. In 1978 up to the present, he is consultant for Aquaculture at NSDB (now NSTA) and the SEAFDEC Aquaculture Department.

The National Academy of Science and Technology elected him one of the Most Outstanding Young Scientists in 1981, Dr. Guerrero is also recipient of the 1978 TOYM Awardee for Fisheries — Aquaculture and the Rizal Pro Patria Award for Fisheries in 1975, among others.

**SALCEDO L. EDUARDO**, Ph. D. He obtained his doctoral degree from the Commonwealth Institute of the Helminthology, St. Albans in England. At present, he is assistant professor at the College of Veterinary Medicine in UP Diliman.

Parasitology (amphistomes of ruminants) is his research interest. Recent works include: A parasite of the Red Lechwe (*Kabus Lechwe Gray, 1850*) from Zambia and *Orthocoelium indonesiense*: A New Species of Amphistome from Ruminants in Indonesia (1980). Both articles appeared in *Systematic Parasitology* in 1980. He is currently working on World Amphistomes (Digenan). Dr. Eduardo is a member of the British Society of Parasitology and fellow, British Royal Society of Tropical Medicine and Hygiene. He has a number of published works, among them: *Comparative Histology and Egg Shell Formation of Cermyerius synethes (Fischoeder) 1901 Gastrothylax crumenirer from Babalus, bubalis Linn.* in the Philippines.

**CLARO M. SANTIAGO, Jr.**, Ph. D. A holder of Ph. D. in Botany from the Nottingham University in England in 1982. He is Science Research Specialist IV and chief of Pre-Pilot and Culture Collection Section, Biological Research Center, NIST, Manila since 1974.

He has about 10 published works, including some eight papers presented on different occasions and has about 17 more researches in different forthcoming publications. A recipient of SEAMEO-

BIOTROP Research Fellowship on Tropical Forest Biology in East Kalimantan (Borneo) Indonesia in 1971 and again in 1973, the SEAMEO-BIOTROP Research Fellowship on Tropical Pest Biology in Bogor, Indonesia; the Colombo Plan-British Council Post Graduate Course in Fungal Genetics 1978-82 in Nottingham University.

For a year, he served as research consultant at Tropical Pest Biology Program BIOTROP-SEAMEO in Bogor Indonesia in 1978.

**JOHN F. PEBERDY**, A Ph.D. holder in Fungal Biochemistry from the University of Nottingham in England, he is currently a lecturer there and a reader in Microbiology. Likewise, he serves as a Microbiologist on the Water Pollution Program in England.

An active member of the Council of the British Mycological Society, he is very much involved in Biotechnology program in Hungary and Brazil. For the present, he is busy in the preparation of a major volume on Fungal Protoplasts, although he has edited several books and has published a textbook on microbiology. This is in addition to the other 50 research papers on fungal protoplasts, which he has already published.

Dr. Peberdy has been invited speaker at several international symposia, for example, he was guest lecturer in UNESCO Course on Fungal Protoplasts in Hungary in 1981. Recently, he was named member of the International Advisory Board for "Genetics of Industrial Microorganism" GIM '82.