The Members of Asian Pacific Phycological Association Working Group

"The Asian Network for Using Algae as a CO₂ Sink"

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Professor John Beardall is Head of the School of Biological Sciences, Monash University, Australia. He received a B.Sc (Hons) in Microbiology from the University of London in 1973 and a PhD from the same university in 1976. Professor Beardall is a recognized leader in physiology and biochemistry of algae. He has a broad range of interests including *photosynthesis*,

respiratory metabolism, nutrient transport and energetics. In recent years his interests have turned to the *impacts of global change on algal* performance, and he has published extensively on this topic.

Professor Beardall serves as associate editor of the journal Phycologia and on the Editorial Board of Botanica Marina. He also co chairs the International Organising Committe for the Group for Aquatic Primary Productivity. He is currently Chair of the International Organising Committees for the 9th and 10th International Phycological Congresses and is on the International Advisory Committee for the Asia Pacific Phycological Forum and a member of the Asian Network for using Algae as a CO2 sink. He is the immediate past President of the Australasian Society for Phycology & Aquatic Botany.



Hu Zhengyu, male, born in October, 1957, Professor, Graduated from Hubei University in 1981 and obtained his Ph.D. in the Institute of Hydrobiology, the Chinese Academy of Sciences. in 1991. As a post-doctor he has worked in Ben Gurion University, Israel, for one and half year. His main subjects are *physiology* and biotechnology of algae. His current researches include the

change of the aquatic ecosystem dynamics and environment of the Three Gorges Reservoir upper region before and after impoundment; isolation. characterization and development of lipid bodies in Heamatococcus; physiological responses of unicellular green alga to elevated CO2 concentration; the eco-physiology of Nostoc (blue-green alga) and established mass-cultivation system of Nostoc sphaeroides.

Now he has published over 90 papers and possessed 4 patents.

He is the deputy director of the Institute of Hydrobiology, CAS, the former president of the Chinese Phycological Society.



Prof. Put O. Ang, Jr. has been with the Department of Biology, Marine Science Laboratory, The Chinese University of Hong Kong for 14 years. His areas of research include *seaweed* ecology, eco-physiology, phylogeography, systematics; coral biology, reef ecology and conservation biology. He is involved with the Group of Aquatic Productivity VIII,

examining various aspects of algal photosynthesis and physiological adaptations. He is associated with various academic and scientific organizations, especially in the Asia Pacific region and is an active member of the Asian Network for the Use of Algae as CO2 Sink.



his M.Sc. and Ph.D. degrees form University of Delhi, Delhi, India and presently serving as a faculty at Department of Botany, University of Delhi. He was the first Indian student to visit Antarctica during 1987-88 in the 7th Indian Scientific Expedition to Antarctica. He undertook two trips to Arctic during 1991 and 1992. He was a visiting fellow at Smithsonian Institution.

Washington DC, USA in 1992, INSA-JSPS visiting fellow at Kochi University, Japan 1999-2000 and visiting fellow at Stamford ,USA 2002-2003. He is a recipient of Young Scientist Award and Zahoor Qasim Gold Medal. He is member of several International and National bodies, holding positions in various societies and presently Secretary of Indian Phycological Society. He has organized many National and International conferences, participated in several International meetings and traveled widely all over the world. His major research field includes seaweeds cultivation and utilization. Biodesel production from algae and application of Science & Technology for societal development. He has been actively involved in various rural development programme at the grass root level and associated with several NGOs. He has published several papers and books.



Dr. Grevo S. Gerung. He is from Sam Ratulangi University, Faculty of Fisheries and Marine Science, Manado Indonesia in teaching subject and research field on marine algae and marine conservation. He was the head of Department of Marine Science. He received a M.Sc. from University of the Ryukyus, Department of Marine Biology, Okinawa Japan in 1994 and then

continues to do research in Usa Marine Biological Institute, Kochi University, Japan. In 2001, he received Ph.D from Department of Marine Biology and Aquaculture, Graduate School of Fisheries, Hokkaido University, Japan. During his study, he was focus on research field of marine algae. He is a member of Asian Network for Using Algae as a CO2 sink since 2006 and works on Pulp and Bio-Ethanol from Red Algae as a solution to the problem of alobal warming.



Dr. Hiroshi Kawai is a professor at Research Center for Inland Seas and Graduate School of Science, Kobe University. He received D.Sc. in Botany from Hokkaido University in 1983 on the systematic study of brown algae in cold water regions. His major research field is biodiversity and evolution of marine macroalgae, and conservation and restoration of coastal ecosystems. He served

as the president of the Japanese Phycological Society, Editor-in Chief of the journals 'Phyclogical Research' (JPS) and 'Phycologia' (Int. Phycol. Soc.). He has been also serving as members of various national and local governmental committees on coastal environmental issues.





Dr. Sung Min Boo is a professor at Department of Biology, and the dean of School of Biosciences and Biotechnology, Chungnam National University, Korea. He received a B.Sc. in Biology from Gongju Teachers' College and MSc & PhD in Botany from Seoul National University. His research fields are biodiversity and evolution of algae. His early interest

started from *phylogeny* of Ceramiaceae (Rhodophyta) and extends to Phaeophyceae. Recently he has been working on 'phylogeny of photosynthetic stramenopiles using multigene and ultrastructure data'. He published 107 papers in peer-reviewed journals. He stayed in Tsukuba Univ. & Hokkaido Univ. at Japan, Bamfield Marine St. at Canada, National Natural Hist. Mus. at France. He served as an editorial board of Korean J. Botany, Phycological Research, and as a president of Korean Soc. Phycology ('05-'07). From 2009, he will serve as editorial board of Journal of Phycology. He is member of International Phycological Society, International Biogeography Society and other scentific societies.



Dr. Ik Kyo Chung has been a professor at the Division of Earth Environmental System, *Pusan National University* since August 1988. His specialty areas are seaweed ecophysiology and mariculture. Currently, he is directing the project, <u>'Greenhouse gas</u> <u>emissions reduction using</u> <u>seaweeds'</u> from the Korean Ministry of Land, Transport and Maritime Affairs since 2006.

As a member of the Korean Society of Phycology since 1987, he has served as the Editor-in-Chief of Algae in 1999-2005. He obtained his B.S. and M.S. degree in Botany from Seoul National University in 1976. He received his M.S. degree In Marine Environmental Science in 1985 and Ph. D. degree in Oceanography from the State University of New York at Stony Brook in 1987. He was born on August 18, 1953 and grew up in Korea.



Dr. Jin Ae Lee is a professor at School of Environmental Science and Engineering, and the dean of College of Natural Science, *Inje University, Korea.* She received a B.S in Botany from Seoul National University in 1976 and a Ph. D. in oceanography from State University of New York @ Stony Brook in 1987. Her research field is <u>ecological</u> <u>effects of eutrophication and</u> <u>toxicology of harmful algal</u>

<u>bloom.</u> She served as a member of Presidential Commission on Policy Planning, Korea from 1999 to 2002, and also as a member of Presidential Advisory Council on Science and Technology, Korea from 2004 to 2005, working for environmental conservation and ESSD. She awarded an order of service merit of Korea in 2006. Since 2005 she works as the secretary of the Asian Network for Using Algae as a CO2 sink of Asian Pacific Phycological Association from 12 Asian countries to raise the international awareness about the importance of seaweeds in the era of global warming.



Prof. Dr. Phang Siew Moi

pioneered Applied Phycological Research in Malaysia, which later became the foundation of Algal Biotechnology Research. She co-founded the Asia-Pacific Society of Applied Phycology (APSAP) in 1995 and served as President from 2000-2002. She is the current President of the Asian-Pacific Phycological Association. Prof. Phang is a

Executive Council Member of the International Phycological Society. Prof. Phang leads the Algal

Research Group in research on algal & seaweed *biotechnology* which is recognised internationally. She is also Director, Institute of Ocean and Earth Sciences, University of Malaya. The Algae Research Group contributes significantly to taxonomy and phylogenetics of tropical algae. The group published the first paper on transient ransformation of a tropical seaweed. Prof. Phang, as an active member of the Malaysian Antarctic Research Programme, visited Nv Alesund, Svalbard, Arctic in the summer of 2006 to collect Arctic algae, adding onto the University of Malaya Algae Culture Collection. Prof. Phang has won several national and international awards for Research Achievements. She has published over 91papers in international journals, 11 books and 33 chapters in books; produced 8 PhDs and 33 Master of Science graduates. The group has received 6 Gold, 7 Silver, 7 Bronze Medals during National and International Scientific Exhibitions. Prof. Phang received several awards including the University of Malava Vice-Chancellor's Lifetime Achievement Award for Publications (2008). Prof. Phang is Associate Editor of the Journal of Applied Phycology and the Malaysian Journal of Science.

Dr. Charles S. Vairappan is an Associate Professor at the Institute for Tropical Biology and Conservation, *Universiti Malaysia Sabah, Malaysia*. He received his B. Sc Applied Science in Aquatic Chemistry and Master of Science in Seaweed Biochemistry from Universiti Science Malaysia, Penang, Malaysia. He then,

furthered his PhD in the field of Marine Natural Products Chemistry at Graduate School of Environmental Earth Science, The University of Hokkaido, Sapporo, Japan, and graduated with PhD (Natural Products Chemistry) in 2001. He is now actively doing research in the field of <u>drug discovery, ecological chemistry,</u> chemotaxonomy and volatile hydrocarbon from

<u>seaweed/terrestrial plants</u>. He is also a member of the American Chemical Society and Japanese Phycological Society. In 2006, Japanese Society for the Promotion of Science awarded him a fellowship to conduct research in drug discovery from Borneo Marine Invertebrates for 18 month at Graduate School of Aquatic Chemistry and Life Science, Faculty of Agriculture, The University of Tokyo. Now, he runs an active research laboratory with complete instruments for natural product chemistry and ecological chemistry research in Kota Kinabalu, Sabah, Malaysia.

Dr Wendy Nelson is a Principal Scientist at the National Institute for Water and Atmospheric Research (NIWA) in New Zealand. She leads the <u>Marine</u> <u>Biodiversity</u> research programme at NIWA. She has a BSC from the University of Auckland, a BSc(Hons)



from Victoria University of Wellington, and completed her PhD at the University of British Columbia. Her research is primarily on the biosystematics of marine macroalagae although she has also worked on seaweed ecology, commercial harvesting, aquaculture and life history studies. Wendy was a member

of the New Zealand Conservation Authority from 2000 until 2008, was awarded the New Zealand Marine Sciences Society Lifetime achievement award in 2007 and was made a Member of the Order of New Zealand in 2008. Wendy has been a member of the International Advisory Council of the Asian Pacific Phycological Association since 1996.



Dr. Danilo B. Largo is presently the Director, Office of Research at *University of San Carlos in Philippines.* He received a Ph. D. in Aquatic Environmental Science from United Graduate School of Ehime, Kochi and Kagawa Universities, Japan in 1998. His research is primarily on the *diseases in cultivated* <u>seaweeds</u>, and his major research projects were <u>Panglao</u> Marine Biodiversty Project 2004,

Seaweed Bed Establishment, Biological & Physicochemical Assessment of the Mactan Channel and Assessment of Water Quality Associated with Green Tide. His present membership in professional organizations is the Chairman of the Committee on Research and Monitoring of Mactan Channel Multi-Sectoral Management Council. He served as the Vice-President of Philippine Association of Japanese Monbusho Scholars (2001—2003) and the President of Philippine Society of Microbiology (2004—2005).



Dr. Yuwadee Peerapornpisal is a professor at Applied Algal Research Laboratory, Department of Biology, *Chiang Mai University, Thailand* from 1986. She received a B.Sc. and M.Sc. in Biology from Chiang Mai University and Kastsart, and a Dr. rer. Nat. in Biologie from Innsbruck University, Austria. Her research field is *biodiversity, ecology, cultivation of freshwater and extremophile*

algae; Biotechnology of freshwater and marine algae; Limnology and water quality by using algae as bioindicator; Toxic cyanobacteria.

She has won several national and international awards for Research Achievements; National award of excellence for outstanding lecturer in Science and Technology discipline (2007); Best Annual Researcher Award (1999), Best Applied Research Award (2005), Technology Transfer Award (2005),

and "Golden Elephant" Award of Excellence in Science and Technology discipline (2007) from Chiang Mai University.



Dr. Dang Diem Hong is Principal researcher, Head of Algal Biotechnology Department, Institute of Biotechnology belonging to *Vietnamese Academy* of Science and Technology, Hanoi, Vietnam. She received a B.S in Biophysics from Hanoi State University, Hanoi, Vietnam in 1982 and a Ph. D. in Biophysics from Moscow State University of Russia in 1993. She is biophysicist who teaches and

does research in a broad range of issues relating to processes in biophysics of micro and macro-algae. Her research fields are *Photosynthesis in the micro* and macro-algae under stress conditions (moderately elevated temperature, dehydration, and high salinity); Tissue and cells culture of seaweed for improvement of genetic characters; Biodiversity of micro-algae and macro-algae in the molecular level (including fresh and marine algae, toxic and harmful algae) based on RAPD, AFLP techniques, 16SrDNA, 18SrDNA, ITS1-5.8S-ITS2, 28SrRNA gene sequences and Single Cell PCR; Using macro and micro-algae for wastewater treatment; Nutritional guality and bioactive natural products from macro-algae and micro algae; Using biomass of marine micro-algae and macro-algae for medicine, pharmaceutical and aquaculture feed (rotifers, krill and also shrimp's larvae) and biofuel. Her name appears on more than 90 scientific publications. She served as a member of Committee of Scientific association of Vietnam Biophysics from 2000. Since 2005 she is the staff member of IOC/WESTPAC TTR Project concerning with harmful algal bloom. Since 2006 she works as the staff members of the Asian Network for Using Algae as a CO2 sink of Asian Pacific Phycological Association from 12 Asian countries.