

Rigs-to-Reefs: Prospects for Large Artificial Reefs in Tropical Southeast Asia

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SPEAKERS PROFILES



Nor Isham ABDULLAH is currently assigned as Manager for Facilities Management at Petroleum Management, PETRONAS with a scope to overlook on decommissioning of upstream installations. For Facilities Management, he is responsible in managing Asset Integrity activities from strategizing, planning, assurance and execution of upgrading, rejuvenations and modification proposal. For decommissioning, he is responsible in developing overall strategy, long term planning, PSC negotiations for PETRONAS and reviewing abandonment work program & budget by PSC Contractors. Guiding and facilitating PSC's proposal to decommission upstream facilities towards approval of the plan is also part of his jurisdiction. He has served his current position at Petroleum Management for four years. Prior to this, he was with MTBE (M) Sdn Bhd for eight years as Process Technologist, Operation Engineer and subsequently Production Shift Manager for propylene & MTBE chemical production, a subsidiary of PETRONAS group in Kuantan, Pahang.



Ahmad ALI is a Senior Researcher with Marine Fishery Resources Development and Management Department, Southeast Asian Fisheries Development Centre (SEAFDEC/MFRDMD) based in Terengganu, Malaysia. His current position is Head of Resource Enhancement Unit as well as National Research Coordinator for artificial reefs since 2006. He carried out many research on artificial reefs, fish aggregating devices, sharks and rays, sea turtles, physical and biological oceanography as well as marine recreational fishing for the past 22 years. In addition he is an author, co-authored and editor of 21 books and proceedings, many papers and other related fisheries issues published by SEAFDEC, Department of Fisheries Malaysia, 'Dewan Bahasa dan Pustaka' as well as in proceedings and journals. In 2013, he was appointed as Regional Vice Chair International Union Conservation for Nature (IUCN) Sharks Specialist Group for Southeast Asian Region. He is a part-time PhD candidate (Fisheries Oceanography) at Institute of Oceanography and Environment, University Malaysia Terengganu.



Daud AWANG has an educational background in coral and artificial reef. Currently, he works with the Department of Fisheries Malaysia as Head of Marine Research Station Layang Layang Island. In 2004, he was involved full time in the deployment of rig to reef for Baram 8 in Miri, Sarawak. For the past 17 years, he has been involved in coral reef and artificial reef research and development in Malaysia, especially for Sabah and Sarawak. He has also served as a scientific advisor for Malaysia CITES committee. Mr Daud Awang earned his M.Sc in Ecological Marine Management from the Free University of Brussels, Belgium.



Robert BECKMAN is the Director of the Centre for International Law (CIL), a university-wide research centre at the National University of Singapore (NUS) which was established in 2009 to promote the rule of international law in the region. Prof Beckman heads CIL's research projects on Ocean Law and Policy. Prof Beckman teaches Ocean Law & Policy in Asia, Public International Law and International Regulation of shipping at the NUS Faculty of Law. He also lectures in the summer programme at the Rhodes Academy of Oceans Law & Policy in Rhodes, Greece and in the International Maritime Boundary Workshops organized by CIL and the International Boundaries Research Unit (IBRU) of Durham University. Prof Beckman is co-editor of the two CIL books which have been published by Edward Elgar: Piracy and International Maritime Crimes in ASEAN: Prospects for Cooperation (2012) and Beyond Territorial Dispute in the South China Sea (2013). He is also a co-editor of Submarine Cables: The Handbook of Law and Policy which was published only a few days ago by Brill. His article on "The UN Convention on the Law of the Sea and the Maritime Disputes in the South China Sea" was published in the January 2013 issue of the American Journal of International Law. Prof Beckman received his J.D. from the University of Wisconsin and his LL.M. from Harvard Law School. He is an Associate Professor at the NUS Faculty of Law, where he has taught for 35 years. He is also an Adjunct Senior Fellow in the Maritime Security Programme at the S Rajaratnam School of International Studies (RSIS), NTU, and a member of the National Executive Committee of CSCAP Singapore.



CHOU Loke Ming is currently Professor in the Department of Biological Sciences, National University of Singapore. He is a coral reef biologist and has, in recent years, focused more on coastal management and reef restoration throughout Southeast Asia. He was the main editor of the "State of the Marine Environment Report for the East Asian Seas 2009" published by UNEP-COBSEA (Coordinating Body on the Seas of East Asia). As co-founder of the 'Aseanarean Expeditions', an initiative to document the marine parks of the region, he co-authored two books ('Marine Parks of Thailand' in 1998 and 'Marine Parks of Indonesia' in 2012 – the latter was covered by National Geographic Channel in a three-part documentary). He holds positions of Senior Research Affiliate in the Tropical Marine Science Institute, Research Associate in the Raffles Museum of Biodiversity Research and is Director of the Bachelor of Environmental Studies Programme, launched in 2011. Prof. Chou served on the Scientific Advisory Committee of the Global Coral Reef Monitoring Network (International Coral reef Initiative) from 1992 to 2011 and since 2010, became a member of GESAMP (Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection). He is currently an Honorary Fellow of the Singapore Institute of Biology and a Fellow of the Singapore National Academy of Science. He has provided consultancy services in the field of marine environment management to international agencies like the United Nations Environment Programme, Food and Agriculture Organisation, World Bank, WorldFish Center, and many national agencies.



Ash FOWLER is a marine scientist specialising in the ecology of artificial structures. He completed his PhD on the role of well heads and coastal infrastructure as fish habitat, during which time he conducted and coordinated field-based research for the SEA SERPENT organisation on Australia's oil and gas infrastructure. He has published numerous articles on the ecology of oil structures, including a high impact review (Macreadie et al. 2011) on the impacts of decommissioning in the deep sea. He is currently reviewing the environmental impacts of decommissioning offshore structures for a major industry partner in Australia, as well as conducting research

into the chemical contamination of fishes inhabiting abandoned structures. Dr Fowler has eight years experience liaising with Australia's oil and gas industry. His involvement with the *SEA SERPENT* organisation and current collaborations with major industry partners has provided insight into industry operations and requirements within Australia. Dr Fowler was an invited speaker at the 3rd Annual Asia-Pacific Decommissioning Summit, where he outlined the need for environmental research to oil and gas industry representatives from the region. He is an invited speaker at this year's Offshore Decommissioning Training Workshop for the Asia-Pacific region.



Simon FUNGE-SMITH, a fishery and aquaculture professional with extensive experience in Asia, has spent his career promoting more responsible aquaculture and fisheries and developing capacity within government and private sector to do this. Simon Funge-Smith obtained his first degree at the University of Liverpool (Marine Biology honours) and his PhD from University of Stirling (Tropical aquaculture). His work has subsequently seen him working in the Asia-Pacific region for the past twenty years. Over this time he has worked in the environment and management related aspects of coastal aquaculture, extension and development of rural aquaculture in the FAO member countries throughout the Asian region. He has spent the last 12 years working as the FAO Regional Officer for fisheries and aquaculture, based in the FAO Regional Office for Asia and the Pacific in Bangkok. As Senior fishery Officer, he coordinates the FAO regional fisheries group and concurrently heads the Secretariat of the Asia-Pacific Fishery Commission (APFIC) based in the FAO Regional Office for Asia and the Pacific. His expertise covers sustainable development of fisheries and aquaculture, promotion of responsible fisheries, particularly in developing countries; coastal and inland fisheries ecosystem management; fisheries livelihoods. The Asia-Pacific Fishery Commission (APFIC), a regional fishery body that acts as a consultative forum and works in partnership with other regional organizations, arrangements and members on fisheries and aquaculture related issues of regional concern (www.apfic.org). APFIC's role is to advocate fisheries issues in a regional context and to promote responsible management and sustainable use and build capacity amongst its member countries.



Claudio GENTILE is a project engineer working at Heerema Marine Contractors, with a MSc in mechanical engineering, gained at La Sapienza in Roma, and several years of experience in work preparation and offshore support for the execution of decommissioning and installation of offshore platforms. When based in the Netherlands, he was involved in the biggest removal projects completed in the last years and offered his knowledge for feasibility studies on, among others, removal of subsea structures and single buoy mooring. Claudio is currently working in Singapore to coordinate the engineering of a major installation project, which will be executed in West Africa in 2014.



Youna LYONS is a Senior Research Fellow with the Centre for International Law at the National University of Singapore focusing on regional environmental governance in Southeast Asia. Her primary research areas are offshore oil and gas in Southeast Asia including decommissioning and the prospects for rigs to reef, the use of satellite imagery to inform marine environmental management through habitat mapping and maritime boundary disputes on remote features, the protection of marine sensitive environments in the seas of Southeast Asia and the underlying legal and institutional governance framework. Prior to this, Youna created and led the private international law practice of the Litigation and Arbitration Group at Clifford Chance (Paris office), one of the world's leading law firms, for more than 12 years. Passionate about the ocean, Youna has been trained in marine ecology and policy at the College of Ocean and Fisheries of the University of Washington (where she obtained a Masters in Marine Affairs). Youna's dual expertise in law and marine sciences uniquely position her to integrate these fields for marine policy making purposes. In addition she focuses on developing industry relevant research and on involving the industry in marine policy proposals.



Richard J. MCLAUGHLIN is Endowed Chair for Marine Policy and Law at the Harte Research Institute for Gulf of Mexico Studies (HRI) at Texas A&M University – Corpus Christi. Prior to joining HRI, Dr. McLaughlin was Professor of Law and Ray and Louise Stewart Lecturer at the University of Mississippi School of Law where he regularly taught International Law, Property Law, Admiralty Law, Ocean and Coastal Law, International Environmental Law, and other courses. Dr. McLaughlin has research interests in a broad range of marine and coastal policy and legal issues including the international law of the sea, ocean energy policies, ocean and coastal governance, and marine ecosystem-based management. He has been actively involved in a variety of leadership positions in the marine law and policy field, is a former Fulbright Scholar to Japan and has published over seventy-five articles and monographs on marine and coastal policy issues. Dr. McLaughlin currently serves on the Outer Continental Shelf Scientific Advisory Committee, a group that advises the Bureau of Ocean Energy Management (BOEM) regarding development of Outer Continental Shelf energy and mineral resources. A graduate of Tulane University Law School and the University of Washington School of Law, he holds a doctorate degree in law from Boalt Hall School of Law, University of California at Berkeley.



Amnaj SIRIPECH is a marine fisheries biologist. He currently heads Phangnga Marine Fisheries Station under the Department of Fisheries for the Andaman Sea Marine Fisheries Research and Development Center (in Phuket), Department of Fisheries, Ministry of Agriculture and Cooperative. Since 1989, his mission has been to sustainably develop and manage marine fishing grounds and protect marine biodiversity through the installation of artificial reefs. This has led him to train others in artificial reef installation for the purpose of rehabilitating fisheries resources. He also creates public awareness in fisheries resources conservation and sustainable use, and communicates with government organizations and private sector for fisheries resources development in Thai waters.



Peter NG is a native born scientist who started his early career in the forests of Malaysia and Singapore exploring the diversity of crabs and rose to be a world-renown authority on the subject and winner of the local heritage prize for unearthing Singapore's endemic and highly-endangered species. Explorations in the regions then pushed to the forefront to Southeast Asian peat swamp fish systematics, racing against time to identify species even as habitat destruction wiped out species, attracting the attention of the world scientific community to the grim situation here. He has published hundreds of technical and popular papers and books over the last 30 years, mostly in international journals, and is serving on the editorial board of over a dozen international journals. In the late 1980's he revived the stalled Bulletin of the Raffles/National Museum and established it as the Raffles Bulletin of Zoology, now the premier international journal of Southeast Asian zoology. He has been and remains on the scientific committees of some 30 international organisations, ranging from external academic review boards for major organisations (e.g. Smithsonian Institution and the International Commission of Zoological Nomenclature, a select team of some 28 senior scientists tasked with overseeing the naming of animals.), conservation agencies (e.g. World Conservation Union), global and regional biodiversity agencies (e.g. UNEP), as well as numerous peer-reviewed journals from Europe, America and Asia. Over the years, he has supervised some 35 graduate students from half a dozen different countries on topics as diverse as crab systematics, otter biology, beetle development and water quality. Nationally, he is serving on various government panels dealing with issues of conservation, biodiversity, sustainable national development and education. Fascinated with museums as a child, he has spearheaded the transformation of the zoological collections of the Raffles Library and Museum to an entity which plays an active role in research, education and conservation. In 2014, the museum's collections will excite and educate local and international visitors once again at the Lee Kong Chian Natural History Museum.



Thorwald STERKER commenced his career in the oil and gas industry as a mud logger and data engineer with Dresser Magcobar working on deep onshore wells after graduating as a mechanical engineer. In 1979, he joined Heerema as field engineer working onboard of the crane barges "Challenger", "Odin", "Thor", "Balder" and "Hermod". Over a period of 34 years he was involved in offshore installation work, fabrication of oil and gas platforms and decommissioning of oil and gas platforms. In 1992 he became involved, as principal consultant, in the Amoco North West Hutton and the Conoco Viking field abandonment studies followed. After the Public Outcry which followed the decision to dump the Brent Spar in the North Atlantic, Thor was engaged by the European Commission DG17 to research and report the cost impact from the ban on dumping of offshore structures in the Sea. He was involved in several R&D projects related to underwater cutting techniques such as abrasive water jet, explosive and diamond wire cutting and Re-use of Offshore facilities. Over the years several project management positions were held at Heerema Marine Contractors, Bluewater Engineering involving the design, engineering, fabrication and installation of several single point turret mooring systems. In 1994, he developed platform re-use app and has participated in the development of the project since that time. Amongst other activities, he is now Senior Decommissioning Consultant for PB Consultants was/is engaged by PTTEP, Niko India, Petronas, Petrofac, ExxonMobil, Shell, Pearl, Talisman to name a few.



Greg STUNZ is marine biologist who specializes in fisheries ecology and sport-fisheries. He holds the Endowed Chair of Fisheries and Ocean Health at the Harte Research Institute for Gulf of Mexico Studies and is a Professor of Marine Biology at Texas A&M University-Corpus Christi. He is also Executive Director of the Center for Sportfish Science and Conservation. He received both his M.S. and Ph.D. in Wildlife and Fisheries Sciences from Texas A&M University (1995, 1999), and a B.S. in Biology from the University of Texas at San Antonio (1990). A major goal of Dr. Stunz's research program is to provide scientific data for sustainable management of our marine fisheries and ocean resources to ensure healthy environments. Dr. Stunz's research program is diverse but currently focuses on migration patterns marine life using a variety of state-of-the-art electronic tracking devices, how marine animals interact with their habitats, and the vital role that estuaries and near-shore waters play in sustaining marine populations. Specifically, his research includes understanding how artificial reef enhance fisheries, the roles of apex predators (i.e., sharks) in Gulf ecosystems and tracking their movement patterns, dolphin-fish migration patterns and life history studies, red snapper ecology and management, several projects dealing with many estuarine fishes such as spotted seatrout and red drum and their sustainable management, and many others. Dr. Stunz is also engaged with numerous boards, panels, scientific advisory committees from the local to national levels. In addition to numerous scientific publications, his research program is frequently covered by television, radio, print news and other media outlets.

For more information see webpages at:
www.fisheries.tamucc.edu
www.hartheresearchinstitute.org



Amila Noor ABDULLAH WAN ZAWAWI is currently holding the administrative post of Deputy Head, Civil Engineering Department, at Universiti Teknologi PETRONAS. For her research, Dr Amila is a member of Offshore Engineering Center UTP (OECU), a research arm under the Deepwater Technology Research Group. She has been tasked to lead the Decommissioning Initiatives since 2011. Some of the initiatives taken thus far include research into the sustainable options, environmental impact, cost estimation and assessment of local services providers for decommissioning. Apart from these, she is also actively engaged in other research areas on construction management and private foreign investments. It has been almost 14 years since she embarked on her academic career, and she has published in indexed journals and proceedings. Apart from academic role, she is actively involved with the parent company, PETRONAS, as the Secretariat for SKG11-UTP Steering Committee, a working committee consisting of technical personnel from PETRONAS Carigali.



Adam ZECHARIAH is a Director with Ernst and Young Advisory Services. He has been with the firm over 13 years. Prior to joining the Risk practice he was an external auditor with Ernst and Young for 3 years. He is an engagement manager with project responsibilities involving the supervision, coordination and overall management of internal audit and risk management assignments including the assessment of control environment and the design of internal controls and risk management systems. His key projects include the two following projects with the oil and gas industry:

- engagement lead for the out-sourced internal audit engagement for an international oilfield services company based in Malaysia and one of the largest Floating Production Storage and Offloading

(FPSO) vessel operators in the world. The engagement also involved developing a Group-wide risk-mapping matrix as the basis to develop the internal audit plan.

- Project Manager for specific scope internal audit review of the Indonesian operations of a Malaysian oilfield chemical and equipment provider. The review covered the sales & billings, procurement & payment, fixed asset and inventory management processes for the Indonesian office and associated warehouses;
- Asia-Pacific region coordinator for the Contracting & Procurement Compliance Review global engagement under taken by Ernst & Young for one of the world's largest oil and gas conglomerates;
- Testing of financial reporting controls of the upstream and downstream Malaysian operations of one of the world's largest oil and gas conglomerates.