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## **Mazlan Bin Madon (Malaysia)**

### **Current Position**

Chief Geoscientist,

PETRONAS (Malaysia's National Petroleum Company)

Kuala Lumpur, Malaysia.

### **Biodata**

Date of Birth: 6 February 1961

Place of Birth: Johor, Malaysia

### **Education**

1996 Doctor of Philosophy: Earth Sciences (Tectonics & Basin Analysis),  
University of Oxford, United Kingdom

1992 Master of Science: Geology (Sedimentology), University of Malaya,  
Malaysia

1984 Bachelor of Science (Hons.) in Geology, University of Southampton,  
United Kingdom

### **Professional Profile**

Dr Madon is a Geologist with 27 years working experience in the petroleum industry, primarily in a research (R&D) environment, specializing in regional basin analysis and modelling, sedimentology, tectonics, structural geology, and reservoir geological studies. He has conducted many basin studies and exploration evaluations of international ventures.

He currently holds the position of Chief Geoscientist, the highest technical position in PETRONAS, Malaysia's national petroleum company, and acts as Head of CO<sub>2</sub> Storage Department. He is also leading a technical team to conduct CO<sub>2</sub> Sequestration studies for natural gas fields in offshore Malaysia.

He also serves as Head for Research Geology in PETRONAS' Geoscience Skills Group Committee, which oversees and advises on matters related to geoscience skills development and career progression for geoscientists in the company.

Dr Madon has participated in various international conferences and authored many technical papers on geology, sedimentology, and petroleum geology in national and international journals. He is also the main author in Petronas' publication on "Petroleum Geology and Resources of Malaysia" published in 1999, which has become a major source of reference for petroleum geologists in the country.

### **Other Relevant Experiences**

In 1987, Dr Madon participated as an onboard geoscientist on the RV SONNE in the BGR cruise SO-49 in the South China Sea, exploring the Dangerous Grounds and NW Borneo Trough.

In 2008-2009, Dr Madon was involved in the Malaysian Continental Shelf Project as PETRONAS' geological expert, who was tasked to review and provide

geological/geophysical inputs to the Malaysia-Vietnam joint submission to the UN Commission on the Limits of the Continental Shelf (CLCS).

In 2008-2010, he served as the Editor-in-Chief of the PETRONAS Technology Journal. He has also served in the Petronas Research Publications Committee.

Between 2006 and 2009, Dr Madon served as adjunct lecturer and supervisor for undergraduate and postgraduate students at the PETRONAS University of Technology, University of Science, Malaysia and University of Malaya.

In 2010, Dr Madon was appointed as a member of the Board of Study to the University of Malaya's MSc Petroleum Geoscience Programme and in 2011 in the Industry Panel for PETRONAS University of Technology's MSc in Petroleum Geoscience programme.

He has been a team leader in designing and delivering in-house courses in PETRONAS on basin analysis (levels 1, 2 and 3) and sedimentology, including geological field trips in Malaysia.

In 2011, Dr Madon was awarded the Best Trainer — Role Model for Geoscience by the Petronas Geoscience Committee.

### **Affiliations**

#### **1. Geological Society of Malaysia (GSM)**

Life member since 1992

Vice President (2010/11)

Council Member (1991/92, 1998/99, 2009/10-present)

Chairman of Stratigraphy and Sedimentology Working Group (1991/92)

GSM Editorial Advisory Board Member (1993-present)

Assistant Secretary (1998/99)

#### **2. Institute of Geology Malaysia (IGM)**

Member since 1997

Council Member (1997/98, 1998/99)

Chairman of Oil & Gas Technical Committee (1997/98, 1998/99)

#### **3. American Association of Petroleum Geologists (AAPG)**

Active Member

Alternate member, House of Delegates (2010-2012)

### **Publications**

Main author and co-editor of book, "The Petroleum Geology and Resources of Malaysia", published in 1999, by PETRONAS. (contributed 14 out of 27 chapters).

Madon, M., 1992. Depositional setting and origin of berthierine oolitic ironstones in the Lower Miocene Terengganu Shale, offshore Peninsular Malaysia. *Jour. Sed. Petrology*, 62, 899-916.

- Madon, M., 1992. Note on dolerite, rhyolite, and granophyre in the basement of the Tenggol Arch, offshore Terengganu. *Geol. Soc. Malaysia Bull.*, 31, 133-143.
- Madon, M., 1994. The stratigraphy of northern Labuan, NW Sabah Basin, East Malaysia. *Geol. Soc. Malaysia Bull.*, 36, 19-30.
- Madon, M., 1994. Depositional and diagenetic histories of reservoir sandstones in the Jerneh Field, central Malay Basin. *Malaysia. Geol. Soc. Malaysia Bull.*, 36, 31-53.
- Ngah, K., Madon, M., and Tjia, H.D., 1996. Role of pre-Tertiary basement faults in the formation of Malay and Penyu Basins, offshore Peninsular Malaysia. In: Hall, R. & Blundell, D.J., eds., *Tectonic Evolution of Southeast Asia*. *Geol. Soc. London Spec. Publ. No.*, 62, 281-289.
- Madon, M., Azlina Anuar and Wong, R., 1997. Structural evolution, maturation history and hydrocarbon potential of the Penyu Basin, offshore Peninsular Malaysia. In: Howes, J.V.C and Noble, R.A, eds., *Proc. IPA Petroleum Systems of SE Asia and Australasia, Jakarta 21-23 May 1997, Indonesian Pet. Assoc., Jakarta*, 403-424.
- Madon, M., 1997. Analysis of tectonic subsidence and heat flow in the Malay Basin (offshore Peninsular Malaysia). *Geol. Soc. Malaysia Bull.*, 41, 95-108.
- Madon, M., 1997. Sedimentological aspects of the Temburong and Belait Formations, Labuan (offshore west Sabah). *Geol. Soc. Malaysia Bull.*, 41, 61-84.
- Madon, M., 1997. The kinematics of extension and inversion in the Malay Basin, offshore Peninsular Malaysia. *Geol. Soc. Malaysia Bull.*, 41, 127-138.
- Madon, M. and Watts, A.B., 1998. Gravity anomalies, subsidence history, and the tectonic evolution of the Malay and Penyu Basins. *Basin Research*, 10, 375-392.
- Madon, M., 2006. Overpressure history of the Malay Basin, offshore Peninsular Malaysia. *Geol. Soc. Malaysia Bull.*, 49, 135-144.
- Madon, M., Jiu-Shan Yang, Abolins, P., Redzuan Abu Hassan, Azmi M. Yakzan & Saiful Bahari Zainal, 2006. Petroleum systems of the Northern Malay Basin. *Geol. Soc. Malaysia Bull.*, 49, 125-134.
- Madon, M., 2007. Overpressure development in rift basins: an example from the Malay Basin, offshore Peninsular Malaysia. *Petroleum Geoscience*, Vol. 13 2007, pp. 169-180.
- Madon, M. & Abdul Hadi Abd Rahman, 2007. Penecontemporaneous deformation in the Nyalau Formation (Oligo-Miocene), central Sarawak. *Geol. Soc. Malaysia, National Geoscience Conference 2007, 7-9th June, Kota Kinabalu*. *Geol. Soc. Malaysia Bull.*, 53, 67-73.
- Madon, M., 2010. Submarine mass-transport deposits in the Semantan Formation (Middle-Upper Triassic), central Peninsular Malaysia. *Geol. Soc. Malaysia Bull.* 56, 15-26.
- Madon, M., Zainol Affendi Abu Bakar & Hasnol Hady Ismail, 2010. Jurassic-Cretaceous fluvial channel and floodplain deposits along the Karak-Kuantan Highway, central Pahang (Peninsular Malaysia). *Geol. Soc. Malaysia Bull.*, 56, 9-14.

**Conference Presentations/Abstracts**

Madon, M. and Kamaludin Hassan, 1991. Quaternary deposits near Pantai Remis, NW Peninsular Malaysia, and significance of the Pleistocene-Holocene unconformity. 3rd Meeting of the IGCP Project 296, Phuket, Thailand, 20-21 October 1991.

Madon, M., 1992. Diagenesis and porosity reduction during burial of upper Miocene sandstones, Jerneh-3 well, Malay Basin. GSM Annual Conf., Kuantan, 9-10 May 1992.

Madon, M., 1993. Structural evolution of Penyu Basin, offshore Peninsular Malaysia. Geol. Soc. London Conf. "Tectonic evolution of SE Asia", London, 7-8 Dec 1993.

Madon, M., 1996. Gravity anomalies, isostasy, and the tectonic evolution of the Malay and Penyu Basins. Poster at Geol. Soc. Malaysia Petroleum Geol. Conf. 1996, 9-10 Dec, Kuala Lumpur. (abst.)

Madon, M., 1996. Sedimentological aspects of the Temburong and Belait Formations, Labuan (offshore west Sabah). Poster at Geol. Soc. Malaysia Petroleum Geol. Conf. 1996, 9-10 Dec, Kuala Lumpur.

Madon, M., Azlina Anuar and Wong, R., 1997. Structural evolution, maturation history and hydrocarbon potential of the Penyu Basin, offshore Peninsular Malaysia. IPA Symposium on Petroleum Systems of SE Asia and Australasia, Jakarta 21-23 May 1997, Indonesian Pet. Assoc., Jakarta.

Madon, M., 1998. An overview of the tectonic settings of Tertiary sedimentary basins of Malaysia. Poster at the Ninth Regional Congress on Geology, Mineral and Energy Resources of Southeast Asia — GEOSEA '98, 17-18 August 1998, Kuala Lumpur.

Madon, M., Abolins, P., Redzuan Abu Hassan, & Azmi M Yakzan, 2004. Petroleum systems of the North Malay Basin. Petronas Geoscience Conference 2004. 23-24 August 2004, Marriott Putrajaya, paper 16.

Madon, M., Abolins, P., Redzuan Abu Hassan, Azmi M Yakzan, Jiu-Shan Yang & Saiful Bahari Zainal, 2004. Petroleum systems of the North Malay Basin. GSM Petroleum Geology Conf. & Exhibition 2004, 15-16th Dec 2004, Istana Hotel, Kuala Lumpur, Poster No 9.

Madon, M., 2005. Overpressure development in rift basins: an example from the Malay Basin, offshore Peninsular Malaysia. International Conference "Return to Rifts — the next wave! Fresh Insights into the Petroleum Geology of Global Rift Basins, 5-7th April 2005, Geological Society of London, Burlington House.

Madon, M., Kim Cheng Ly, & R. Wong, 2007. The structure and stratigraphy of deepwater Sarawak: implications for the tectonic evolution of the NW Borneo continental margin. AAPG Annual Conv., Long Beach, Ca., 1-4 April, 2007.

Madon, M., Hasnol Hady Ismail, & Zainol Affendi Abu Bakar, 2008. Turbidites and mass transport deposits in the Semantan Formation (Middle-Upper Triassic), central Peninsular Malaysia. AAPG Annual Conv., San Antonio, Tx., April 20-23, 2008.

Madon, M, Abolins, P, & Abu Hassan, R., 2009. The Northern Malay Basin: Petroleum Systems and Remaining Potential. AAPG Annual Conv., Denver, Co., June 7-10.

Madon, M., Ku Rafidah Ku Shafie, Hasnol Hady Ismail, Zainol Affendi Abu Bakar, Redzuan Abu Hassan and Amita Mohd Ali, 2010. Facies and Bedding Styles in Basin-Floor Fan Deposits of the West Crocker Formation, West Sabah: Implications for Deepwater Reservoir Facies Distribution. GSM Petroleum Geology Conf. & Exhibition 2010, 29-30th March 2010, Kuala Lumpur Convention Centre.