



## Technical Talk

Co-Organised by

The Joint Branch of the RINA and IMarEST (Singapore)

The Society of Naval Architects and Marine Engineers Singapore

Singapore Maritime Academy

### Are You Ready for 2020 Fuel Requirement? - An Engine Operation Perspective

by



**Fabian Chew – Inalytics Pte Ltd**

**Date :** 12<sup>th</sup> September 2019, Tuesday.  
**Time :** 6:30 pm to 7:00 pm Registration & Refreshment  
The talk begins at 7:00 pm and ends at 8:30 pm  
**Venue:** LT18A, Singapore Polytechnic  
500 Dover Rd, 139651

To register your attendance, please click the web-link as follows,



<https://www.eventbrite.sg/e/are-you-ready-for-2020-fuel-requirement-an-engine-operation-perspective-tickets-69882003955>



## Abstract

The 2020 global Sulphur cap requirement is just around the corner and there have been many discussions about the fuel to use, availability of fuel supply, storage management, cost justification, consideration for scrubbers and more. However, not enough is being discussed about the issues that are likely to develop in engines when burning low Sulphur fuel and how they may be managed. In fact, these issues were already developing since ships started to use low Sulphur fuel, even for short period, when they are operating in ECA.

Fabian, who originated and championed the process of using cylinder drain oil analysis as a 2-stroke engine condition monitoring and diagnostic tool in 1998, has worked closely with engine makers in the study and management of corrosive wear since the issue first surfaced. He will discuss various issues relating to burning fuel with low Sulphur content and the new challenges in the operation of engines. Corrosive wear may no longer be considered such a great issue with low Sulphur fuel, it is not the end of an operator's problem. Other issues, which may be more difficult to manage, lurks around the corner.

## About the Speaker

Fabian Chew started his Marine Engineering career with Neptune Orient Lines (NOL) as a cadet engineer in 1980 and obtained his Marine Engineering Diploma from Singapore Polytechnic in 1981. He continued to sail with NOL after completing 2.5 years of national service in 1984 and rose through the ranks to become Chief Engineer by 1989 and Superintendent engineer by 1990.

At the end of 1996, he left NOL to pursue other interest which saw him involved in ship management software and ISO/ISM system implementation, as well as more in-depth study of combustion characteristic and engine performance of 2-stroke marine engines.

While working independently as consultant to Bycosin Marine, he originated and pioneered the idea of combining cylinder drain oil analysis with other available engine performance information to create a unique and powerful engine conditioning monitoring tool for 2-stroke marine engine.

Fabian, together with the late Terence McGeary, who was Bycosin Marine's Managing Director then, improved the concept and eventually became the founding partners of Flame Marine Limited in 2000 and global leaders in this field.

This concept became an essential tool for monitoring combustion and wear condition of 2-stroke engines and was adopted globally by engine makers, oil suppliers and ship operators. This helped the industry to lower the cylinder oil feed rates at the beginning of 2000 and was also used to evaluate performance of new lubricant as well as new lubricator systems. When corrosive wear issues surfaced due to low load operation, MAN Diesel worked very closely with Fabian and Terence to study the issue and develop suitable solutions.

In 2017, Fabian left Flame Marine but continued to work closely with engine makers and shipping companies to study these rising issues in engines that are related to the use of low Sulphur fuel.



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## Location Map



**SINGAPORE POLYTECHNIC** | **SP** | 500 Dover Road, Singapore 139651 | [www.sp.edu.sg](http://www.sp.edu.sg) |

***Nearest MRT Station: Dover (Green Line).***

***Bus 14, 74, 105, 106, 147, 166, 185.***

***Closest Bus Stops in Commonwealth Ave W: Dover Stn.***

***See the map for the location of the car parks.***

***All members are welcome, and admission is free, but early registration is necessary.***

***No filming or walk-in guest is allowed for this event.***

***Dress code: business casual.***

***Photos taken by official photographers may be used by the organizers in their published material.***