

## Proud Moment for Team MRPL

# MRPL gets its third Patent

Oil spillages have a detrimental effect on the environment and living organisms. This spillage includes any spill of crude oil, gasoline, diesel fuel, jet fuel, kerosene, hydraulic oil, lubricating oil, etc. In case the spillage takes place, then the clean-up action has to contain the spread of the oil spill and has to recover or remove the floating oil from the water surface. One of the removal methods is to convert the oil film on the water surface into a semi-solid gel and contain the spread. Then remove the jellified oil by using some mechanical exercise.

MRPL R&D has now developed a new oil gelators chemical for the purpose. In this invention, new organic gel-forming molecules derived from simple and cheaper chemicals have been synthesized and characterized. These molecules exhibit good gelation behaviour when they are exposed to oil spillages. Due to this behaviour, they get solidified quickly. These solidified gels can be easily recovered from the surface of the land or water bodies. It is an effective method to mitigate oil pollution from the environment. About 3-4% of the chemical is required to form a gel on the oil layer.

The Patent gives MRPL the exclusive right to exclude others from copying, manufacturing, selling or importing our invention without our permission. We are authorized to mark the product with Patent no. 375827.

This is the 3<sup>rd</sup> Patent awarded to MRPL. We have two patents in our name already; they are (i) the Patent for 'Process Distillation of Petroleum Fractions – by using Fuel Gas / Hydrocarbon vapours instead of steam' and (ii) Oxidative Treatment of Refinery Spent Caustic.

The Patent Certificate issued to MRPL by Controller of Patent, The Patent Office, Govt. of India for MRPL's invention entitled '**Organic Gelators**' is enclosed below for reference.



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सत्यमेव जयते

भारत सरकार  
GOVERNMENT OF INDIA

पेटेंट कार्यालय  
THE PATENT OFFICE

पेटेंट प्रमाणपत्र  
PATENT CERTIFICATE  
(Rule 74 Of The Patents Rules)

क्रमांक : 044133370  
SL No :



पेटेंट सं. / Patent No. : 375827  
आवेदन सं. / Application No. : 201841029860  
फाइल करने की तारीख / Date of Filing : 08/08/2018  
पेटेंटी / Patentee : MANGALORE REFINERY & PETROCHEMICALS LTD.

प्रमाणित किया जाता है कि पेटेंटी को उपरोक्त आवेदन में व्यापकतः ORGANIC GELATORS नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आन तारीख 8th day of August 2018 से बीस वर्ष की अवधि के लिए पेटेंट अनुदान किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled ORGANIC GELATORS as disclosed in the above mentioned application for the term of 20 years from the 8th day of August 2018 in accordance with the provisions of the Patents Act, 1970.

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अनुदान की तारीख : 30/08/2021  
Date of Grant :

रिजिस्टर  
Controller of Patent

टिप्पणी - इस पेटेंट को नवीकरित करने के लिए वी.ए. जॉर्ज इसे लागू रख जाना है. 8th day of August 2020 को और उसके पश्चात प्रत्येक वर्ष में उसी दिन देना होगा।  
Note. - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 8th day of August 2020 and on the same day in every year thereafter.