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List of published / accepted / communicated papers

1. Shear stability and viscosity index improver properties of dodecyl acrylate and its copolymer with styrene and 1-decene. Pranab Ghosh and Sujit Talukdar, **Research Journal of Chemistry and Environment**, 2014, 18(7), 22-27.
2. Acrylate based homo and copolymers as potential additives for lubricating oil. Pranab Ghosh and Sujit Talukdar, **Journal of Indian Chemical Society**, 2014, 91, 1-5.
3. Studies on thermal and microwave assisted synthesis of poly myristyl acrylate and its evaluation as viscosity modifier in lubricating oil. Sujit Talukdar and Pranab Ghosh, **Journal of Scientific & Industrial Research**, 2014, 73, 656-660.
4. Multifunctional Additive Performance of Acrylate-Styrene Copolymers. Pranab Ghosh, Sujit Talukdar, Mahua Upadhyay and T. das, **Journal of Scientific & Industrial Research**, 2016, 75, 420-426.
5. Biodegradable vegetable oil polymer as a multifunctional lubricating oil additive. Pranab Ghosh and Sujit Talukdar. Communicated to **Journal of Scientific & Industrial Research**, MS ID: 8341, dated 30.06.2017.
6. Ionic liquid as a multifunctional lubricating oil additive Sujit Talukdar and Pranab Ghosh. Communicated to **ACS Sustainable Chemistry and Engineering**, MS ID: sc-2017-0244d, dated 22.09.2017.
7. Synthesis and performance evaluation of Vegetable oil polymer as a multifunctional lube oil additive. Sujit Talukdar and Pranab Ghosh. Communicated to **Journal of Polymer Research**, dated 25.10.2017.

1. Acrylate based lube oil additives: Synthesis, Characterisation and Performance evaluation. Sujit Talukdar, Gobinda Karmakar and Pranab Ghosh; A poster presentation in the national seminar on “ 5th Asian Conference on Colloid and Interface Science”, organized by The Asian Society for Colloid and Surface Science and Department of Chemistry, University of North Bengal, on November 20-23, 2013.
2. Vegetable oil based biodegradable polymer as a multifunctional lubricating oil additive. Sujit Talukdar and Pranab Ghosh; A poster presentation in the national seminar on “Frontiers in Chemistry 2017-2018”, organized by Department of Chemistry, University of North Bengal on 14th September, 2017.

Abbreviations

1. AIBN –Azobisisobutyronitrile
2. ASTM- American Society for Testing and Materials
3. AW - Anti-wear
4. BO1- Base Oil 1
5. BO2- Base Oil 2
6. BPCL – Bharat Petroleum Corporation Limited
7. BZP – Benzoyl peroxide
8. DDA- Dodecyl acrylate
9. DA- Decyl acrylate
10. EOAN-Ethanolammonium nitrate
11. FBWT – Four Ball Wear Test
12. GPC- Gel permeation chromatography
13. HDDA- Homo poly dodecyl acrylate
14. HDA- Homo poly decyl acrylate
15. HIDA- Homo poly isodecyl acrylate
16. HIOA- Homo poly isooctyl acrylate
17. HPLC – High Performance Liquid Chromatography
18. IDA- Isodecyl acrylate
19. IL- Ionic Liquid
20. IOA- Isooctyl acrylate
21. IOCL- Indian Oil Corporation Limited
22. IR- Infra red
23. KV – Kinematic viscosity

24. MA- Myristyl acrylate
25. M_n - Number average molecular weight
26. M_w - Weight average molecular weight
27. MW- Microwave
28. MHS- Mark-Houwink-Sakurada
29. NMR – Nuclear magnetic resonance
30. OCP - Olefin copolymers
31. OEM- Original equipment manufacturer
32. PIB – Polyisobutylene
33. PMA- Polymethacrylate
34. PMI- Photomicrigraphic image
35. PPD- Pour point depressant
36. PO- Palm oil
37. PSSI - Permanent shear stability index
38. PVL- Permanent Viscosity Loss
39. RBO- Rice bran oil
40. RTIL- Room temperature ionic liquid
41. SBT – Soil burial test
42. TGA – Thermo gravimetric analysis
43. THK- Thickening
44. TMS –Tetramethylsilane
45. TVL – Temporary viscosity loss
46. VI – Viscosity index
47. VII – Viscosity index improver
48. VM – Viscosity modifier

- 49. WSD – Wear scar diameter
- 50. ZDDP- Zinc dialkyldithiophosphate