

Списък на всички научни трудове на проф. д-н Дичо Стратиев

1. **D. Stratiev**, “Influence of vacuum gas oil properties on the yield distribution of fluid catalytic cracking” Petroleum & Coal 39 (3), 1997, 12-15
2. **D. Stratiev**, D. Minkov, A. Haas, “Removal of coke precursors – influence on FCC yield distribution ” Erdol Erdgas Kohle 113 (10), 1997, 436-439
3. **D. Stratiev**, D. Minkov, “Effect of feedstock hydrocarbon composition on FCC yield distribution” Proc.39 Int.Petroleum Conf., Bratislava, Sept. 20-23, 1999, F91-F9-11
4. **D. Stratiev**, D. Minkov, “Effect of Improved Feed and Catalyst Contact on FCC Unit Performance” in ‘Heterogeneous Catalysis’ Proc. 9 Int.Symp. Varna, 2000, 793-798
5. **D. Stratiev**, D. Minkov, “Investigation of the influence of basic nitrogen compounds on yield distribution in fluid catalytic cracking” Bulg.Chem.Com., 30, 1-4, 1998, 536-542-
6. **D. Stratiev**, D. Minkov, “Prediction of fcc yields from feedstock quality characterized by empirical methods” Oil Gas European Magazine, 1, 2000, 27-32 (Web of Science Q4, IF=0.193).
7. **Д. Стратиев**, “Разпределение на продуктите от каталитичен крекинг тип флуид в зависимост от параметрите на процеса”, дисертационен труд защитен на 28.01.2002г.
8. Ж. Бъчварова, М. Желязкова, **Д. Стратиев**, “Катализаторите за каталитичен крекинг ключ към подобряване на ефективността на процеса” , Нефт и Химия, 3, 1994, 3-7
9. **D. Stratiev**, M. Jelyaskova, J. Bachvarova, “Introducing of high aromatics additive into FCC feed” Petroleum & Coal 37 (2), 1995, 38-40

10. **Д. Стратиев**, Ж. Бъчварова, М. Желязкова, “Влияние на свойствата на суровината – вакуум газьол върху разпределението на продуктите при процеса каталитичен крекинг тип флуид”, Нефт и Химия, 30, 4, 1997, 3 – 6
11. **D. Stratiev**, A. Sokourov, J. Bachvarova, “Matching fluid cracking catalyst properties to feed properties to optimize FCC unit performance” Bulg.Chem.Com., 30, 1-4, 1998, 528-535
12. **Д. Стратиев**, М.Желязкова, Ив. Апостолов, “Изследвания върху зависимостта на октановото число на бензина от работните условия в инсталация Каталитичен крекинг”, Нефт и Химия, 1, 1999, 8-13
13. **D. Stratiev**, D. Minkov, G.Stratiev, “Exploiting the synergy between fluid catalytic cracking and visbreaking to increase the high-value product yields”, Oil Gas European Magazine, September, 3/2003, 141-144 (Web of Science Q4, IF=0.193).
14. S. Petrov, **D. Stratiev**, M. Jeljaskova, T. Tzingov, “APPROACH FOR ULTRA LOW SULPHUR DIESEL PRODUCTION”, Proc. International Petroleum Conference, Bratislava, October 6th – 8th, 2003
15. S. Petrov, **D. Stratiev**, N. Popov, D Minkov, A, Donovan, “ LOW SULFUR AND LOW AROMATIC DIESEL FUEL OIL PRODUCTION AT LUKOIL NEFTOCHIM BOURGAS”, Proc. International Petroleum Conference, Bratislava, October 6th – 8th, 2003
16. G. Andonov, **D. Stratiev**, M. Jelyaskova, N.Popov, “INVESTIGATION ON THE INFLUENCE OF FCC FEED HYDROTREATMENT ON FCC GASOLINE SULPHUR CONTENT”, Proc. International Petroleum Conference, Bratislava, October 6th – 8th, 2003
17. G. Andonov, **D. Stratiev**, D. Minkov, S. Ivanov, “Bulgarian refiner evaluates effect of FCC feed pretreatment catalysts on gasoline quality”, Oil&Gas Journal, Nov.24, 2003, 64-72 (Web of Science Q4, IF=0.085).

18. S. Petrov, **D. Stratiev**, G. Stratiev, D.Minkov, "Production of environmental friendly fuels in Lukoil Neftochim Bourgas", Oxidation Communication", 28, No 1, 2005 , 47 – 55 (Web of Science Q4, IF=0.274).
19. St. Petrov, A. Donovan, **D. Stratiev**, "Challenges facing European refiners today", Journal of International Research Publications, www.eJournalnet.comIssue3-2002/03
20. St. Petrov, A. Donovan, **D. Stratiev**, "Organization the production of fuels in Lukoil Neftochim Bourgas AD in accordance of the European environmental standards", Journal of International Research Publications, www.eJournalnet.comIssue3-2002/03
21. **D. Stratiev**, I. Shishkova G. Stratiev "Investigation on the origin of aromatics formation in fluid catalytic cracking gasoline" "Oxidation Communication", 28, No 1, 2005, 56 – 66 (Web of Science Q4, IF=0.274).
22. **D. Stratiev**, A. Ivanov and M. Jelyaskova, "Effect of feedstock end boiling point on product sulphur during ultra deep diesel hydrodesulphurization" Oil Gas European Magazine, 4, 2004, 188 –192 (Web of Science Q3, IF=0.193).
23. P. Petkov, J. Tasheva, **D. Stratiev**, "EXTRACTION APPROACH FOR DESULPHURIZATION AND DEAROMATIZATION OF MIDDLE DISTILLATES " Petroleum & Coal 42 (2), 2004, 13-18
24. S. Petrov, **D. Stratiev**, A. Ivanov, M. Jeljaskova, M. Chomakov, "Opportunities of feed potential for production of ultra low sulphur diesel feedstock by hydrodesulphurisation of conversion gas oils", Oxidation Communication", 28, No 1, 2005, 36 – 46 (Web of Science Q4, IF=0.274).
25. S. Petrov, At. Ivanov, K. Stanulov, **D. Stratiev**, "Investigation of the effect of anti-wear additives on the properties of ultra low sulphur diesel" Bulgarian Chemistry and Industry, 75, No 3 – 4, 2004, 83 – 86.

26. S. Petrov, At. Ivanov, K. Stanulov, **D. Stratiev**, "Influence of depressant, lubricity and cetane number improver additives applied in low sulfur diesel fuels " Journal of the Balkan Tribological Association, Vol.10, No 4, 2004, 602 – 610.
27. S. G. Petrov, K. Stanulov, A. S. Ivanov, **D. S. Stratiev**, "Oxidation stability of diesel fuels produced at LUKOIL Neftochim Bourgas" "Oxidation Communication", 27, No3, 2004, 548-561 (Web of Science Q4, IF=0.241).
28. Г. Андонов, **Д. Стратиев**, Сл. Иванов, "Технология за редуциране съдържанието на сяра в бензини, произвеждани в Лукойл Нефтохим Бургас АД", Сборник с доклади от национален семинар "Качество на бензините, дизеловите горива и опазване на природната среда", София 10-11 юни 2004, издателство Съюз на специалистите по качеството в България (СККБ), София – 1000, ПК 431, ул. Раковски №108, 55-61
29. **Д. Стратиев**, "Екологически аспекти при производството на съвременни дизелови горива" Сборник с доклади от национален семинар "Качество на бензините, дизеловите горива и опазване на природната среда", София 10-11 юни 2004, издателство Съюз на специалистите по качеството в България (СККБ), София – 1000, ПК 431, ул. Раковски №108, 79-90
30. Г. Андонов, **Д. Стратиев**, Сл. Иванов, Ат. Иванов, Л. Петков "Технологии за производство на безоловни бензини в Лукойл Нефтохим Бургас АД", Сборник с доклади от национален семинар "Качество на бензините, дизеловите горива и опазване на природната среда", София 10-11 юни 2004, издателство Съюз на специалистите по качеството в България (СККБ), София – 1000, ПК 431, ул. Раковски №108, 91-96
31. **D. Stratiev**, G. Argirov and M. Jelyaskova, "Effect of lukoil neftochim bourgas fluid catalytic cracking unit revamp to vortex separation system riser on the unit performance", Oil Gas European Magazine, 1, 2005, 7-10. (Web of Science Q4, IF=0.130).

32. **D. Stratiev**, M.Chomakov, I. Shishkova, G. Stratiev “Removal of basic nitrogen compounds from the fluid catalytic cracking feedstock: influence on gasoline composition”, “Oxidation Communication”, 28, No 2, 2005, 297-305 (Web of Science Q4, IF=0.274).
33. **D. Stratiev**, A. Donovan and G. Stratiev, “Evaluation of LUKOIL Neftochim Bourgas fluid catalytic cracking feed hydrotreater performance in a mild hydrocracking mode”, Oil Gas European Magazine, 2, 2005, 87 – 91. (Web of Science Q4, IF=0.130).
34. P. Petkov, J. Tasheva, D. Jordanov, **D. Stratiev**, “EXTRACTION APPROACH FOR DESULPHURIZATION OF FUEL OIL”, ErdoelErdgasKohle, 121 (10), 2005, 345-347
35. **D. Stratiev**, V. Galkin, T. Tzingov, “Investigation on the effect of heavy diesel fraction properties on product sulphur during ultra deep diesel hydrodesulphurization”, ErdoelErdgasKohle, Februar 2006, Heft 2, 59-63.
36. **D. Stratiev**, I. Shishkova G. Argirov, and T. Tzingov, “Alternative upgrading of C₄ ethylene plant stream”, Oil Gas European Magazine, 2, 2006, 74-76. (Web of Science Q3, IF=0.186)
37. St. Petrov, At. Ivanov, K. Stanulov, **D. Stratiev**, S. K. Ivanov, “ Influence of depressant, Lubricity and cetane number improver additives applied in low sulphur diesel fuels”, Balkan Trib’05, 15-18 June 2005, Kragujevac, Serbia – doklad
38. **D. Stratiev**, I. Shishkova, M. Chomakov, “Effect of basic nitrogen compounds in the fluid catalytic cracking feed on gasoline composition”, 42nd International Petroleum Conference, October 11th-12th, 2005, Bratislava, Slovak Republic.
39. G. Argirov, **D. Stratiev**, T. Tzingov, “Lukoil Neftochim Bourgas Refinery semiregenerative reformer revamping to hybrid platforming unit”, Proc. 42nd

International Petroleum Conference, October 11th-12th, 2005, Bratislava, Slovak Republic

40. G. Argirov, K. Petkov, **D. Stratiev**, "Evaluation of LPG desulphurization extraction device performance", Proc. 42nd International Petroleum Conference, October 11th-12th, 2005, Bratislava, Slovak Republic.
41. S. Petrov, **D. Stratiev**, G. Argirov, R. Dinkov, "Management of refinery's diesel streams for production of ultra low sulphur diesel", Proc. 42nd International Petroleum Conference, October 11th-12th, 2005, Bratislava, Slovak Republic.
42. G. Andonov, S. Petrov, **D. Stratiev**, P. Zeuthen "MHC MODE VS HDS MODE IN AN FCC UNIT IN RELATION TO EURO IV FUELS SPECIFICATIONS", European Refining Technology Conference (ERTC) 10th Annual Meeting, 14-16 November 2005, Vienna, Austria
43. **D. Stratiev**, "Impact of catalyst and diesel properties on production of ultra low sulphur diesel", Oxidation Communications 29, No 1, 2006, 19-30 (Web of Science Q4, IF=0.262).
44. G. Andonov, S. Petrov, **D. Stratiev**, P. Zeuthen, "Meeting Euro IV fuel specifications", Petroleum Technology Quarterly, 2006, Q1, 59-65
45. **D. Stratiev**, V. Galkin, K. Stanulov, "Study: Most-active catalyst improves ULSD economics", Oil&Gas Journal, Aug.14, 2006, 53-56. (Web of Science Q4, IF=0.034).
46. **D. Stratiev**, G. Argirov, T. Tzingov, D.Minkov, "Upgrading of Visbreaker Naphtha", Erdoel Erdgas Kohle, Oktober 2006, Heft 10, 335-337
47. P. Ivanova, **D. Stratiev**, A. Pavlova, "Verification of a Method for Microcoulometric Determination of Adsorbable Organic Halide Pollutants in Natural, Drinking, Waste and Treated Waters", Journal of AOAC International, vol.89, Nr.3, 2006 (Web of Science Q2; IF=1.572)

48. **D. Stratiev**, V. Galkin, I. Shishkova, D. Minkov, K. Stanulov “Yield of the Vacuum Gasoil Catctacking Products” , Chemistry and Technology of Fuels and Oils Nr 4, 2007, 31-34 (Web of Science Q4, IF=0.039).
49. Iv. Shishkova, **D. Stratiev**, T. Tsingov, G. Argirov, „Alternatives of increasing of FCC unit profitability at the process conversion rising», Oil Refining and Petrochemistry, Nr. 2, 2007, 10-13.
50. D. Dobrev, **D. Stratiev**, G. Argirov, T. Tzingov, A. Ivanov, “Investigation on middle distillates ultra low hydrodesulphurization at Lukoil Neftochim Bourgas”, “Oxidation Communication”, 30, No3, 2007, 668-677 (Web of Science Q4, IF=0.286).
51. D. Dobrev, **D. Stratiev**, K.Kirilov, A. Ivanov, “Effect of bio-ethanol quality on gasoline / bio-ethanol mixture properties”, “Oxidation Communication”, 30, No3, 2007, 701-707 (Web of Science Q4, IF=0.286).
52. D. Dobrev, **D. Stratiev**, K. Kirilov, S. Ivanov, A. Ivanov, “On the feasibility of production of transport diesel fuels containing bio-compounds in Lukoil Neftochim Bourgas”, “Oxidation Communication”, 30, No3, 2007, 691-700 (Web of Science Q4, IF=0.286).
53. **D. Stratiev**, I. Shishkova, P. Zeuthen, P. Vistisen, “Fluid Catalytic Cracking Unit Performance Improvement by Application of the Topsoe Aroshift Technology”, Ind.Eng.Chem.Res., 2007,46, 7691-7694 (Web of Science Q1, IF=1.96).
54. **D. Stratiev**, Z. Belchev, P. Petkov, K. Kirilov, “A new correlation predicts viscosity of blends containing heavy residual oils”, Oil Gas European Magazine, 1/2008, 31-33 (Web of Science Q4, IF=0.196).
55. **D. Stratiev**, R.Dinkov, K. Kirilov, Z.Belchev, P.Petkov, “Viscosity prediction of blends of residual oils and gas oils”, Proc. 43th International Petroleum Conference, Bratislava, September 25th – 26th, 2007

56. **D. Stratiev**, R.Dinkov, K. Kirilov, "Evaluation of crude oil data", Proc. 43th International Petroleum Conference, Bratislava, September 25th – 26th, 2007
57. D.Dobrev, **D. Stratiev**, T.Tzingov, G. Argirov, V.Dyakov, P.Petkov, "Effect of unreliable diesel hydrodesulphurization unit equipment operation on the production of ultra low sulphur diesel", Proc. 43th International Petroleum Conference, Bratislava, September 25th – 26th, 2007
58. D.Dobrev, **D. Stratiev**, K. Kirilov, P.Petkov, "Effect of gasoline hydrocarbon composition on the properties of the blend gasoline/bioethanol", Proc. 43th International Petroleum Conference, Bratislava, September 25th – 26th, 2007
59. D. Dobrev, **D. Stratiev**, P.Petkov, T.Tzingov, G. Argirov, "Fluid catalytic cracking Feed pretreatment a way for production of ultra clean fuels", Proc. 43th International Petroleum Conference, Bratislava, September 25th – 26th, 2007
60. **D. Stratiev**, T. Tzingov, G. Argirov, P. Dermatova, "Ultra deep diesel hydrodesulphurization of middle distillates. Part 1: Ultra deep diesel hydrodesulphurization of straight run gas oils", Proc. 43th International Petroleum Conference, Bratislava, September 25th – 26th, 2007
61. **D. Stratiev**, T. Tzingov, G. Argirov, P. Dermatova, "Ultra deep diesel hydrodesulphurization of middle distillates. Part 2: Ultra deep diesel hydrodesulphurization of conversion gas oils", Proc. 43th International Petroleum Conference, Bratislava, September 25th – 26th, 2007
62. **D. Stratiev**, Iv. Shishkova, "Conversion of pyrolysis pitch and cycle oils in the fluid catalytic cracking", Proc. 43th International Petroleum Conference, Bratislava, September 25th – 26th, 2007
63. **Д. Стратиев**, К. Петков, К. Кирилов, «Предсказание кривой итк нефти в зависимости от ее плотности», » Нефтепереработка и нефтехимия №1, 2009, 8-12

64. **D. Stratiev**, Z. Belchev, K. Kirilov, P. Petkov, "How do feedstocks affect visbreaker operations?", Hydrocarbon Processing June 2008, 105-112 (Web of Science Q4, IF=0.231).
65. **D. Stratiev**, R. Dinkov, "Evaluation of FCC Unit process variables impact on yield distribution and product quality. Part I Evaluation of FCC Unit variables impact on yield distribution", Petroleum & Coal 49 (3), 71-77, 2007
66. **D. Stratiev**, R. Dinkov, "Evaluation of FCC Unit process variables impact on yield distribution and product quality. Part II. Evaluation of the impact of FCC Unit operating conditions on gasoline hydrocarbon composition and octane number", Petroleum & Coal 50 (1), 39-44, 2008
67. V. Georgiev, **D. Stratiev**, K. Kirilov, K. Petkov, and D. Minkov, "Reasons for low heavy vacuum gas oil yield in vacuum distillation of residual fuel oil" *Khimiya i Tekhnologiya Topliv i Masel*, No.3, pp. 19 – 22, May – June, 2009. (*Chemistry and Technology of Fuels and Oils*, Vol. 45, No. 3, 2009) (Web of Science Q4, IF=0.057).
68. **D. Stratiev**, R. Dinkov, K. Kirilov, K. Petkov, "Method calculates crude properties", Oil&Gas Journal, Jan 7, 2008, 48-52 (Web of Science Q4; IF = 0.055).
69. G. Argirov, **D. Stratiev**, I. Shishkova, T. Tzingov, "Improve refinery reformat yields", Hydrocarbon Processing, October 2008, 99-108. (Web of Science Q4, IF=0.231).
70. **D. Stratiev**, Z. Belchev, P. Petkov, K. Kirilov, "Investigation on residual fuel oil stability" Oil Gas European Magazine 4 //2008, 199-203 (Web of Science Q4, IF=0.196).
71. **D. Stratiev**, T. Tzingov, G. Argirov, I. Shishkova, "Study examines production of near-zero sulfur FCC gasoline", Oil&Gas Journal, Apr.14, 2008, 54-61 (Web of Science Q4, IF=0.055).

72. R. Dinkov, **D. Stratiev**, M. Chomakov, K. Kirilov, "Prefractionation of high benzene precursors' feed for hybrid reformer unit" *Petroleum & Coal* 50 (1), 39-44, 2008.
73. **D. Stratiev**, R. Dinkov, K. Petkov, K. Kirilov, "Study predicts viscosity of gas oils, heavy blends" *Oil&Gas Journal*, Sept.8, 2008, 48-52 (Web of Science Q4, IF=0.055).
74. K. Petkov, **D. Stratiev**, "Long term prognosis of crude oil price variation", *Petroleum & Coal* 50 (3), 62-66, (2008)
75. **D. Stratiev**, K. Petkov, "Residue upgrading – challenges and perspectives" *Hydrocarbon Processing*, Sept. 2009, 93-97. (Web of Science Q4, IF=0.185).
76. **D. Stratiev**, "Effect of middle distillates properties on their reactivity in the ultra low hydrodesulfurization, *OIL GAS EUROPEAN MAGAZINE* 2/ 2009, 90-93. (Web of Science Q4, IF=0.175).
77. **D. Stratiev**, "Investigate processing near-zero-sulfur gasoline", *Hydrocarbon Processing*, Sept. 2011, 97-102. (Web of Science Q4, IF = 0.123).
78. **D. Stratiev**, I. Vergov, D. Minkov, "Study examines effect of cetane improvers", *Oil & Gas Journal*, January 5, 2009, 49-51.
79. I. Shishkova, **D. Stratiev**, D. Minkov, "Impact of catalyst properties and operating conditions on gasoline yield and quality in the fluid catalytic cracking" *ERDÖL ERDGAS KOHLE* 125. Jg. 2009, Heft 5, 1-3
80. R. Dinkov, G. Hristov, **D. Stratiev**, V. Boinova, "Effect of commercially available antioxidants over biodiesel/diesel blends stability", *Fuel* 88 (2009) 732–737, (Web of Science Q1, IF=2.4)
81. **D. Stratiev**, N. Nikolaev, "Dependence of Visbreaker residue properties on unit operation severity and the residual fuel oil specification" *Petroleum and Coal* 2009, 51 (2) 140-145.

82. **D. Stratiev**, I. Shishkova, T. Tzingov, P. Zeuthen, "Industrial investigation on the origin of sulfur in the fluid catalytic cracking gasoline" Ind. Eng. Chem. Res., 48 (2009) 10253-10261. (Web of Science Q1, IF = 2.0).
83. **D. Stratiev**, K. Kirilov, Opportunities for gasoline octane increase by use of iron containing octane booster, Petroleum and Coal ,51 (4), 2009, 244-248
84. **D. Stratiev**, T.Tzingov, Iv. Shishkova, A.Pavlova, P. Ivanova, "Evaluation of feasible ways for refinery naphtha streams processing, Proc. 44th International Petroleum Conference, Bratislava, September 22 Sept. 2009
85. S. Vasilev, **D. Stratiev**, Iv. Shishkova, "Simulation of Visbreaker Fractionator Column – Step by Step procedures", Proc. 44th International Petroleum Conference, Bratislava, September 22 Sept. 2009
86. **D. Stratiev**, Iv. Shishkova, P. Dermatova, "Heat balance of the vacuum distillation column – key for identification of the reason for low heavy vacuum gas oil yield", Proc. 44th International Petroleum Conference, Bratislava, September 22 Sept. 2009
87. **D. Stratiev**, T. Tzingov, Iv. Shishkova, P. Dermatova, "Hydrotreating units chemical hydrogen consumption analysis a tool for improving refinery hydrogen management", Proc. 44th International Petroleum Conference, Bratislava, September 22 Sept. 2009
88. **D. Stratiev**, I. Vergov, T. Tzingov, I. Shishkova, "Diesel hydrotreaters revamp a way for increasing production of near zero sulphur diesel and improving energy efficiency", Proc. 44th International Petroleum Conference, Bratislava, September 22 Sept. 2009
89. **D. Stratiev**, "Poor hydrotreater reliability can reduce ULSD production", Oil & Gas Journal, October 12, 2009, 50-55.

90. **D. Stratiev**, “Hydrotreatment of Fluid catalytic cracking Feed a way to increase heavy vacuum gas oil conversion and produce near zero sulphur gasoline.”, Oil Gas European Magazine, 2009 No.4, 187-190. (Web of Science Q4, IF=0.175)
91. **D. Stratiev**, R. Dinkov, K. Petkov, K. Stanulov “Evaluation of Crude oil quality ” Petroleum and Coal, 52 (1), 2010, 35-43
92. **D. Stratiev**, A. Pavlova, R. Dinkov, K. Stanulov, Characterization of refinery naphtha streams and defining their feasible processing, Oxidation communications, 2011, 34, No 2, 469-482. (Web of Science Q4, IF=0.123)
93. **D. Stratiev**, “Effect of gasoline hydrocarbon composition on the properties of the blend gasoline/bioethanol”, Oxidation communications 2011, 34, No1, 183-192. (Web of Science Q4, IF=0.123)
94. **D. Stratiev**, “Investigation on Visbreaking-Residue and Finished Fuel Oil Product Closed Cup Flash Point” Petroleum and Coal, 51(4) 277-281, 2009
95. **Д. С. Стратиев**, Ив. К. Шишкова, “Каталитический крекинг ароматических газойлей”, Нефтепереработка и Нефтехимия, №1, 9-12, 2010
96. **D. Stratiev**, “Development in hydrotreating catalysts and their role in production of environmental friendly automotive fuels in Lukoil Neftochim Bourgas” Oxidation communications 2011, 34, No1, 193-207. (Web of Science Q4, IF=0.123).
97. И. Шишкова, **Д. Стратиев**, К. Станулов, Влияние азотсодержащих соединений в сырье каталитического крекинга на состав бензина” Химия Технология Топлив Массел, 2011, №1, 26-31. (Web of Science Q4, IF=0.073).
98. **Д. Стратиев**, И. Шишкова, А. Обрывалина, Р.Теляшев, Ультраглубокое гидрообессеривание прямогонных дизельных фракций”, Мир нефтепродуктов, 2/2011, 12-15
99. **Д. Стратиев**, И. Шишкова, А. Обрывалина, Р.Теляшев, Ультраглубокое гидрообессеривание вторичных дизельных фракций”, Мир нефтепродуктов, 5/2011,
100. D. Pehlivanov, **D. Stratiev**, S. Ivanov, “Effect of Styrene Addition to Automotive Gasoline on Gasoline Properties”, OIL GAS EUROPEAN MAGAZINE 3/2010, vol. 36, 148-150. (Web of Science Q4, IF=0.153).

101. **D. Stratiev**, R. Dinkov, N. Nikolaev, K. Stanulov, "Evaluation of impact of crude oil quality on refinery profit", *Erdoel Erdgas Kohle*, 2010, Januar, Heft 1, 2010, 126 Jahrgang, 17
102. **D. Stratiev**, I. Shishkova, A. Obryvalina, R. Telyashev, "Feed properties impact on the Fluid Catalytic Cracking Unit - key issues in a diesel market" *OIL GAS EUROPEAN MAGAZINE* 1/2011, vol.36, 25-28. (Web of Science Q4, IF=0.246).
103. I. Shishkova, **D. Stratiev**, D. Pechlivanov, "Industrial and Laboratory INVESTIGATION on dependence of FCC catalyst selectivity on feed hydrotreatment", *Proceedings 45 IPC*, Bratislava 13.06-14.06.2011
104. V. Yankov, **D. Stratiev**, A. Yalamov, "INTEGRATION OF THE PROCESSES FCC FEED HYDROTREATMENT AND FCC GASOLINE POSTTREATMENT THROUGH THE PRIME G PROCESS – OPPORTUNITY FOR PRODUCTION OF EURO V GASOLINES AT INCREASED PROFITABILITY", *Proceedings 45 IPC*, Bratislava 13.06-14.06.2011
105. **D. Stratiev**, A. Nedelchev, A. Bachvarov, R. Dinkov, "Investigation on variation of visbreaking residue viscosity", *Oil Gas European Magazine*, March, 1/2012, vol.38, 34-37 (Web of Science Q3; IF=0.417).
106. R. Dinkov, **D. Stratiev**, D. Penev, G. Cholakov, "INVESTIGATION ON DIESEL COLD FLOW PROPERTIES", *Proceedings 45 IPC*, Bratislava 13.06-14.06.2011
107. **D. Stratiev**, A. Nedelchev, R. Dinkov, A. Batchvarov, "It's possible to derive TBP from partial distillation data", *Oil & Gas Journal*, Oct. 3, 2011, 114 – 122. (Web of Science Q4, IF=0.147).
108. D S. Stratiev, I K. Shishkova, D S. Dobrev, "Fluid Catalytic Cracking feed hydrotreatment and its severity impact on product yields and quality", *Fuel Processing Technology* 2012, 94, 16–25, (Web of Science Q1, IF=2.816)
109. I. Sharafutdinov, **D. Stratiev**, I. Shishkova, R. Dinkov, A. Batchvarov, P. Petkov, N. Rudnev "Cold flow properties and oxidation stability of blends of near zero sulfur diesel from Ural crude oil and FAME from different origin", *Fuel* 96 (2012) 556–567, (Web of Science Q1, IF=3.57)

110. I. Sharafutdinov, **D. Stratiev**, R. Dinkov, A. Batchvarov, P. Petkov, "Evaluation of approaches for improving diesel cold flow properties"—OIL GAS European Magazine June, 2/2012, vol.38, 94-102. (Web of Science Q3, IF=0.417)
111. I. Sharafutdinov, A. Pavlova, **D. Stratiev**, P. Petkov, I. Shishkova, R. Dinkov, An approach for biodiesel characterization, Oxidation Communications, 2012, 35, No 3, 2012, 591-598. (Web of Science Q4, IF=0.146).
112. I. Sharafutdinov, R. Dinkov, **D. Stratiev**, K. Kirilov, I. Shishkova, P. Petkov, N. Rudnev, "Storage period potential of premium near zero sulphur gasoline and the effect of anhydrous bioethanol addition", Oxidation Communications, 2012, 35, No 2, 245-256. (Web of Science Q4, IF=0.146).
113. I. Sharafutdinov, **D. Stratiev**, I. Shishkova, R. Dinkov, A. Pavlova, P. Petkov, N. Rudnev, "Dependence of cetane index on aromatic content in diesel fuels", OIL GAS EUROPEAN MAGAZINE 3/2012, 38, 148-152. (Web of Science Q3, IF=0.417).
114. I. Sharafutdinov, **D. Stratiev**, I. Shishkova, R. Dinkov, P. Petkov, "Industrial investigation on feasibility to raise near zero sulfur diesel production by increasing fluid catalytic cracking light cycle oil production", Fuel Processing Technology 104 (2012) 211–218, (Web of Science Q1, IF=2.816)
115. N. Benova Petkova, K. Lepidis, A. Nedelchev, C. Russell, R. Sharpe, S. Shestopalov, **D. Stratiev**, "Enhanced Performance in Thermal Conversion Units Through Improved Understanding, Monitoring and Control of Fouling Phenomena", RRTC 2012 - Russia & CIS Refining Technology Conference 20/21 September 2012, Moscow
116. **D. Stratiev**, I. Marinov, T. Pencheva, K. Atanassov, "Generalized net model of an oil refinery" Proceedings of the 12th International Workshop on Generalized Nets, 17 June 2012, Burgas, Bulgaria
117. N. Novachev, I. Marinov, **D. Stratiev**, T. Pencheva, K. Atanassov, "Generalized net model of the process of evaluation of the environmental impact of refinery activity", Proceedings of the 13th International Workshop on Generalized Nets, 29 October 2012, London, UK

118. T. Pencheva, N. Novachev, **D. Stratiev**, K. Atanasov, "Generalized net model of the process of evaluation of the environmental impact of refinery activity using intuitionistic fuzzy estimations", Notes on INTUITIONISTIC FUZZY SETS, volume 18, 2012, Number 4, Proceedings of the 8th International Workshop on Intuitionistic Fuzzy sets, 9 October 2012, Banska Bystrica, Slovakia
119. A. Ivanov, **D. Stratiev**, I. Marinov, "Improvement of energy efficiency in oil refining a question of survival", Proceedings of the 46th International Petroleum Conference, 07.06.2013, Bratislava, Slovakia
120. A. Nedelchev, **D. Stratiev**, G. Stoilov, R. Dinkov, K. Lepidis, R. Sharpe, C. A. Russell, N. Petkova, P. Petkov, "Improvement of the LUKOIL Neftohim Burgas Visbreaker unit performance by optimisation of process conditions and application of chemical additive treatment programme", Proceedings of the 46th International Petroleum Conference, 07.06.2013, Bratislava, Slovakia
121. M. Angelova, **D. Stratiev**, N. Petkova, M. Yanev, "Behavior of Water Cooling Systems with Automated Corrosion Control and Monitoring Application", Proceedings of the 46th International Petroleum Conference, 07.06.2013, Bratislava, Slovakia
122. R. Dinkov, **D. Stratiev**, M. Mitkova, A. Veli, "Dependence of aromatic constituents' content on physicochemical properties of heavy oils", Proceedings of the 46th International Petroleum Conference, 07.06.2013, Bratislava, Slovakia
123. I. Marinov, **D. Stratiev**, I. Shishkova, R. Dinkov, K. Georgiev, P. Petkov, "Composition-property relationships for characterization of commercial FAMES from different origin", Proceedings of the 46th International Petroleum Conference, 07.06.2013, Bratislava, Slovakia
124. I. Marinov, **D. Stratiev**, P. Petkov, "Assessment of empirical correlations for viscosity prediction of oil fractions", Proceedings of the 46th International Petroleum Conference, 07.06.2013, Bratislava, Slovakia
125. **D. S. Stratiev**, I. Shishkova, M. Mitkova, R. Dinkov, D. Yordanov R. Nikolova, D. D. Stratiev, "A comparison between prediction of residue fluid catalytic cracking product yields from feedstock SARA analysis data and data of

- molecular weight, specific gravity, and empirical correlations”, Proceedings of the 46th International Petroleum Conference, 07.06.2013, Bratislava, Slovakia
126. **D. S. Stratiev**, I. M. Marinov, I. K. Shishkova, R. K. Dinkov, D. D. Stratiev, P. Petkov, “Prediction of the content of saturate plus mono-nuclear aromatic hydrocarbons in vacuum gas oils from bulk properties and empirical correlations”, Proceedings of the 46th International Petroleum Conference, 07.06.2013, Bratislava, Slovakia
127. G. Andonov, **D. Stratiev**, I. Shishkova, A. Pavlova, M. Mitkova, M. Skumov, T. Tzaneva, “Characterization of the spent tire catalytic pyrolysis products: gasoline and the fraction boiling above 200°C”, Proceedings of the 46th International Petroleum Conference, 07.06.2013, Bratislava, Slovakia
128. I. Chavdarov, **D. Stratiev**, I. Shishkova, R. Dinkov, P. Petkov, “IMPROVEMENT OF FLUID CATALYTIC CRACKING UNIT PERFORMANCE BY APPLICATION OF HIGH MOTOR OCTANE NUMBER CATALYST AND OPTIMIZATION OF THE GASOLINE REID VAPOUR PRESSURE”, Proceedings of the 46th International Petroleum Conference, 07.06.2013, Bratislava, Slovakia
129. D. Dobrev, V. Yankov, **D. Stratiev**, “CATALYTIC HYDROTREATMENT OF LPG – A SUCCESSFUL APPROACH FOR EXPLOITATION OF ISOMERIZATION OF N-BUTANE UNIT IN LUKOIL NEFTOHIM BURGAS REFINERY”, Proceedings of the 46th International Petroleum Conference, 07.06.2013, Bratislava, Slovakia
130. I. Shishkova, **D. Stratiev**, I. Chavdarov, P. Petkov, S. Tashev, V. Toteva, “INDUSTRIAL INVESTIGATION ON IMPACT OF PROCESSING OF PRIMARY AND SECONDARY GAS OILS AND A RESIDUAL OIL ON THE FLUID CATALYTIC CRACKING UNIT PERFORMANCE”, Proceedings of the 46th International Petroleum Conference, 07.06.2013, Bratislava, Slovakia
131. I. Sharafutdinov, R. Dinkov, **D. Stratiev**, I. Shishkova, I. Marinov N. Rudnev, “Evaluation of available in literature correlations for prediction of diesel fuel cetane number from physical properties”, OIL GAS EUROPEAN MAGAZINE, June 2/2013, 92-97. (Web of Science Q4, IF=0.230).

132. A. Pavlova, **D. Stratiev**, I. Shishkova, M. Mitkova, M. Skumov, T. Tzaneva, "Gas chromatographic investigations of composition of spent tyre pyrolysis gasoline", GLOBAL JOURNAL OF MEDICAL RESEARCH INTERDISCIPLINARY Volume 13 Issue 4 Version 1.0 Year 2013
133. A. Nedelchev, **D. Stratiev**, G. Stoilov, R. Dinkov, K. Lepidis, R. Sharpe, C. A. Russell, N. Petkova, P. Petkov, "Visbreaker performance improvement by optimisation of process conditions and application of chemical additive treatment program", OIL GAS EUROPEAN MAGAZINE, September, 3/2013, 147-153. (Web of Science Q4, IF=0.230).
134. I. Marinov, **D. Stratiev**, I. Shishkova, R. Dinkov, K. Georgiev, "Recommended composition-property relationships for the characterization of commercial biodiesels before their application in production of automotive diesel fuels in a refinery", Erdoel Erdgas Kohle, October 2013, Heft 10, 338-343
135. **D. S. Stratiev**, I. Shishkova, M. Mitkova, R. Dinkov, D. Yordanov R. Nikolova, D.D. Stratiev, "Method provides alternative for predicting RFCC yields", Oil & Gas Journal, October 7, 2013, 22-28.
136. **D. Stratiev** V. Yankov, I. Shishkova, I. Chavdarov, P. Petkov, T. Palichev, "Opportunity to produce near zero sulphur gasoline and improve refining profitability by combination of the processes fluid catalytic cracking feed hydrotreatment and gasoline post treatment", OIL GAS EUROPEAN MAGAZINE, December, 4/2013, 200-206. (Web of Science Q4, IF=0.230).
137. **D. Stratiev**, I. Shishkova, A. Pavlova, K.Stanulov, M. Mitkova, M. Skumov, T. Tzaneva, "CHARACTERIZATION OF THE SPENT TYRE CATALYTIC PYROLYSIS LIQUID PRODUCTS: GASOLINE AND THE REMAINING FRACTION BOILING ABOVE 200⁰C", Petroleum & Coal 55 (4) 283-290, 2013 (SJR = 0.153; Q4 of Scopus).
138. I. Chavdarov, **D. Stratiev**, I. Shishkova, R. Dinkov, V. Jegorov, P. Petkov, "Role of FCC catalyst in refinery profitability", Petroleum Technology Quarterly, PTQ Q1 2014, 87-91
139. I. Chavdarov, **D. Stratiev**, A. Ivanov, I. Shishkova, P. Petkov, T. Palichev, "Application of High Motor Octane Number Catalyst and Optimization of the

- Gasoline Reid Vapour Pressure”, ERDÖL ERDGAS KOHLE 130. Jg. 2014, Heft 2, 74-78.
140. I. Rangelov, N. Petkova, **D. Stratiev**, Iv. Shishkova, T. Tsonev, P. Petkov, “How feedstock quality affects the fouling processes in HDS installations”, , Oxidation Communications, 36, No 3, 811-819 (2013) (Web of Science Q4, IF=0.507).
141. **D. Stratiev**, I.Shishkova, R.Dinkov R. Nikolova, M.Mitkova, K.Stanulov, R.Sharpe, C. A. Russell, A.Obryvalina, R. Telyashev, “Reactivity and stability of vacuum residual oils in their thermal conversion”, Fuel 123 (2014) 133–142, (Web of Science Q1, IF=3.52).
142. **Д. С. Стратиев**, И.К. Шишкова, И.Р. Бончев, А.Н. Обрывалина, Р. Теляшев, “ Лабораторная установка гидропереработки – инструмент оптимизации производства топлив с ультранизким содержанием серы”, НЕФТЕГАЗОХИМИЯ № 2 2013, 28-37.
143. I. Shishkova, R. Dinkov, **D. Stratiev**, K. Atanasov, “Generalized Net Model of Vacuum Residue Processing in a Refinery”, Issues in Intuitionistic fuzzy sets and Generalized Nets, volume 10, Warszawa 2013, 118-124
144. **D. S. Stratiev**, I. M. Marinov, I. K. Shishkova, R. K. Dinkov, D. D. Stratiev, “Investigation on feasibility to predict the content of saturate plus mono-nuclear aromatic hydrocarbons in vacuum gas oils from bulk properties and empirical correlations”, Fuel 129 (2014) 156–162, (Web of Science Q1, IF=3.52)
145. R. Dinkov, **D. Stratiev**, K. Stanulov, M. Mitkova, K. Georgiev, A. Veli, “Investigation on relationship between physicochemical properties of vacuum residual oils and their content of aromatic constituents; Abhängigkeit des Gehaltes an aromatischen Bestandteilen von den physikalisch-chemischen Eigenschaften schwerer Erdölfraktionen”, Erdöl Erdgas Kohle, Mai, Heft 5, 2014, 195-199.
146. A. Pavlova, **D. Stratiev**, M.Mitkova, K.Stanulov, N.Dishovsky, K.Georgiev, “Gas chromatography-mass spectrometry for characterization of liquid products from pyrolysis of municipal waste and spent tyres” Acta Chromatographica DOI: 10.1556/AChrom.27.2015.4.5, 0231–2522 © 2014 Akadémiai Kiadó, Budapest.

147. **D. Stratiev**, V. Yankov, I. Petrov, I. Shishkova, A. Pavlova, P. Ivanova, A. Surleva, K. Hristov, E. Todorova, A. Obryvalina, R. Telyashev, “Study on the origin of sediment formation in a high pressure near zero sulfur diesel hydrotreater”, Fuel Processing Technology 126 (2014) 332–342, (Web of Science Q1, IF=3.352)
148. **Д. Стратиев**, И. Шишкова, Р. Динков, А. Неделчев, И. Маринов, И. Бончев, А. Обрывалина, Р. Теляшев, Р. Николова, М. Миткова, “Актуальные технологические решения в современном нефтеперерабатывающем бизнесе”, НЕФТЕГАЗОХИМИЯ № 1 2014, 3-24.
149. бизнесе”, НЕФТЕГАЗОХИМИЯ № 1 2014, 3-24.
150. I Shishkova, I. Chavdarov, **D. Stratiev**, A. Ivanov, V. Toteva, P. Petkov, T. Palichev, “Impact of refinery economics of processing residual oil and gas oils from different origin in a commercial FCC unit”, OIL GAS EUROPEAN MAGAZINE September, 3/2014, 154-158. (Web of Science Q4, IF=0.254).
151. I. Marinov, **D. Stratiev**, I. Sharafutdinov, N. Rudnev, P. Petkov, Evaluation of Available Empirical Correlations for Viscosity Prediction of Petroleum Fractions Originating from Different Crudes, OIL GAS EUROPEAN MAGAZINE, Sept.,3/2016,145-150. (Web of Science Q3, IF=0.487).
152. **D. Stratiev**, R. Dinkov, T. Tzoneva, S. Ivanov, M. Mitkova, “EVALUATION OF STORAGE TERMS OF BULGARIAN BIODIESEL AND SUCH SUBMITTED FROM OTHER EUROPEAN COUNTRIES, AS WELL AS THEIR BLENDS WITH CONVENTIONAL DIESEL FUELS BY USING KINETIC AND COMPUTATIONAL METHODS”, 22nd European Biomass Conference and Exhibition Setting the course for biobased economy CCVH – Congress Center – Hamburg – Germany, 23-26 June 2014 Presentation IBV.4.41
153. **D. S. Stratiev**, C. A. Russell, R. Sharpe, I. K. Shishkova, R. K. Dinkov, I. M. Marinov, N. B. Petkova, M. Mitkova, T. Botev, A. N. Obryvalina, R. G. Telyashev, K. Stanulov, Investigation on sediment formation in residue thermal conversion based processes, Fuel Processing Technology 128 (2014) 509–518, (Web of Science Q1, IF=3.352)

154. R. K. Dinkov , **D. S. Stratiev**, I. K. Shishkova, S. K. Ivanov, T. T. Tsaneva, M. Mitkova, M. Skumov, "Assessment of shelf life of Bulgarian industrial FAME by the use of modified ASTM D2274 as accelerated oxidation method", Fuel Processing Technology 130 (2015) 245–251, (Web of Science Q1, IF=3.847).
155. **D. Stratiev**, R. Sharpe, C. A. Russell, I. Shishkova, R. Dinkov, R. Nikolova, A. Obryvalina, R. Telyashev, Reactivity and stability of vacuum residual oils in their thermal conversion, IPRC 2014, Verona, Italy, 24-26 June 2014
156. **D. S. Stratiev**, I. Marinov, A. Nedelchev, I. Velkov, D. D. Stratiev, A. Veli, M. Mitkova, K. Stanulov, "Evaluation of approaches for conversion of ASTM into TBP distillation data of oil fractions", OIL GAS EUROPEAN MAGAZINE, December, 4/2014, 216-221. (Web of Science Q4, IF=0.254).
157. **D. Stratiev**, R. Dinkov, T. Tsoneva, S. K. Ivanov, J. Petrova, M. Mitkova, "Evaluation of storage terms of Bulgarian biodiesel and such submitted from other European countries, as well as their blends with conventional diesel fuels by using kinetic and computational methods", Oxidation Communications 37, No 4, 923–940 (2014). (Web of Science Q4, IF=0.451).
158. **D. Stratiev**, "Vacuum Residue Hydrocracking – an Opportunity to Survive and Prosper in Modern Oil Refining Business", Anniversary Scientific Conference with International Participation, 60 years UCTM, June 4-5, 2013
159. **D. Stratiev**, I. Shishkova, A. Obryvalina, R. Telyashev, "About fluid catalytic cracking feed hydrotreating and near zero sulfur gasoline", ISAHOF-2011, International Symposium on "Feeds and Processes for the Production of Clean Fuels, Ixtapa-Zihuatanejo, Guerrero, Mexico, June 12 – 17, 2011.
160. **D. Stratiev**, I. Shishkova, D. Dobrev, "Fluid catalytic cracking feed hydrotreatment and its severity impact on product yields and properties", ISAHOF-2011, International Symposium on "Feeds and Processes for the Production of Clean Fuels, Ixtapa-Zihuatanejo, Guerrero, Mexico, June 12 – 17, 2011.
161. **D. Stratiev**, I. Marinov, R. Dinkov, I. Shishkova, I. Velkov, I. Sharafutdinov, S. Nenov, T. Tsvetkov, S. Sotirov, M. Mitkova , N. Rudnev ,

- “Opportunity to improve diesel fuel cetane number prediction from easy available physical properties and application of the least squares method and the artificial neural networks”, *Energy Fuels*, 2015, 29 (3), pp 1520–1533, (Web of Science Q1, IF=2.835).
162. **D. Stratiev**, I. Marinov, R. Dinkov, I. Shishkova, I. Velkov, I. Sharafutdinov, S. Nenov, T. Tsvetkov, S. Sotirov, M. Mitkova, N. Rudnev, “Opportunity to improve diesel fuel cetane number prediction from easy available physical properties and application of the least squares method and the artificial neural networks”, *Energy Fuels*, 2015, 29 (3), pp 1520–1533, (Web of Science Q1, IF=2.835).
163. И. И. Шишкова, **Д. Стратиев**, И. Чавдаров, А. Обрывалина, Р. Теляшев, Магдалена Миткова, “Тридцать лет технологии каталитического крекинга в псевдоожиженном слое на предприятии «ЛУКОЙЛ Нефтохим Бургас» - анализ достигнутого прогресса”, *Нефтепереработка и Нефтехимия*, №3, 2015, 3-17.
164. **D. Stratiev**, R. Dinkov, I. Shishkova, E. Nikolaychuk, T. Tsaneva, M. Mitkova, S. Nenov, “Investigation on feasibility to simulate distribution of physicochemical properties and aromatics content of heavy oils employing probability distribution functions”, *Erdöl Erdgas Kohle*, Oktober Heft 10, 2015, 131 Jahrgang, 352-357.
165. **D. Stratiev**, D. E. Sherwood Jr., I. Sharafutdinov, G. Argirov, M. Mitkova, R. Nikolova, W. IJlstra, “Optimization of the feedstock blend for the new H-Oil-RC™ ebullated bed resid upgrading unit at LukOil Neftochim Burgas, to maximize the conversion and yields of the on-site FCC unit”, 13th International Bottom of the Barrel Technology Conference, 14-15 May, 2015, Istanbul
166. E. Nikolaychuk, **D. Stratiev**, I. Velkov, A. Veli, S. Sotirov, M. Mitkova, “Conversion of heavy oil distillation data from ASTM D-1160 to ASTM D-5236”, *Petroleum & Coal* 57(3) 266-279, 2015. (SJR = 0.179; Q4 of Scopus)

167. **D. Stratiev**, A. Nedelchev, I. Shishkova, A. Ivanov, I. Sharafutdinov, R. Nikolova, M. Mitkova, D. Yordanov, N. Rudnev, Z. Belchev, V. Atanassova, K. Atanassov, “Dependence of visbroken residue viscosity and vacuum residue conversion in a commercial visbreaker unit on feedstock quality”, Fuel Processing Technology 138 (2015) 595–604. (Web of Science Q1, IF= 3.847)
168. **D. Stratiev**, I. Shishkova, A. Nedelchev, K. Kirilov, E. Nikolaychuk, A. Ivanov, I. Sharafutdinov, A. Veli, M. Mitkova, T. Tsaneva, N. Petkova, R. Sharpe, D. Yordanov, Z. Belchev, S. Nenov, N. Rudnev, V. Atanassova, E. Sotirova, S. Sotirov, K. Atanassov, “Investigation of relationships between petroleum properties and their impact on crude oil compatibility”, Energy Fuels 2015, 29, 7836–7854. (Web of Science Q1, IF= 2.835)
169. T. Tsaneva, **D. Stratiev**, M. Mitkova, “Is it possible to upgrade the waste tyre pyrolysis oil to finished marketable fuels?” , Petroleum & Coal 57(6) 676-686, 2015. (SJIR = 0.179; Q4 of Scopus)
170. **D. Stratiev**, I. Shishkova, A. Nedelchev, E. Nikolaychuk, I. Sharafutdinov, R. Nikolova, M. Mitkova, D. Yordanov, Z. Belchev, N. Rudnev, “Impact of oil compatibility on quality of produced fuel oil during start-up operations of the new residue ebullated bed H-Oil hydrocracking unit in the LUKOIL Neftohim Burgas refinery”, Fuel Processing Technology 143 (2016) 213–218. (Web of Science Q1, IF=3.752)
171. 218. (Web of Science Q1, IF=3.752)
172. **D. Stratiev**, I. Shishkova, T. Tsaneva, M. Mitkova, D. Yordanov, “Investigation of relations between properties of vacuum residual oils from different origin, and of their deasphalted and asphaltene fractions”, Fuel 170 (2016) 115–129. (Web of Science Q1, IF=4.601)
173. A. Pavlova, I. Sharafutdinov, D. Dobrev, **D. Stratiev**, I. Shishkova, M. Mitkova & N. Rudnev (2016): Determination of Benzene and Oxygenates in Petroleum by Heart-Cutting Gas Chromatography, Analytical Letters, 2016, VOL. 49, NO. 12, 1816–1823 (Web of Science Q3, IF=1.15)

174. **D. Stratiev**, I. Shishkova, E. Nikolaychuk, I. Sharafutdinov, I. Chavdarov, R. Nikolova, M. Mitkova, D.Yordanov, N. Rudnev, "Impact of feed properties on gasoline olefin content in the fluid catalytic cracking" Petroleum Science and Technology, 2016, vol.34, No.7, 652-658. (Web of Science Q3, IF=0.655).
175. **D. Stratiev**, I. Shishkova, E. Nikolaychuk, I. Sharafutdinov, A. Veli, M. Mitkova, D. Yordanov, N. Rudnev, "Relationship of the aromatic structural types in vacuum gas oil to empirical correlations based on bulk properties" Petroleum Science and Technology 2016, 34, (9), 860-865. (Web of Science Q3, IF=0.655).
176. I. Chavdarov, **D. Stratiev**, I. Shishkova, M. Mitkova, P. Petkov, T. Palichev, "Issues on Comparing Fluid Catalytic Cracking Catalyst Performance in Laboratory ACE Unit and Commercial FCC Unit", Erdöl Erdgas Kohle Mai, Heft 5, 2016, 210-214.
177. **D. S. Stratiev**, S. Sotirov, I. Shishkova, A. Nedelchev, I. Sharafutdinov, A. Veli, M. Mitkova, D. Yordanov, E. Sotirova, V. Atanassova, K. Atanassov, D. D. Stratiev, N. Rudnev, S. Ribagin, "Investigation of relationships between bulk properties and fraction properties of crude oils by application of the Intercriteria Analysis" Petroleum Science and Technology, 2016, vol.34, No 13, 1113-1120. (Web of Science Q3, IF=0.655)
178. D. Stratiev, I. Shishkova, R. Nikolova, T. Tsaneva, M. Mitkova, D. Yordanov, "Investigation on precision of determination of sara analysis of vacuum residual oils from different origin", Pet Coal (2016); 58 (1): 109-119. (SJR = 0.186, Q4 of Scopus).
179. E. Nikolaychuk, D. Stratiev, I. Shishkova, A. Veli, M. Mitkova, D.Yordanov, "Investigation on feasibility to simulate crude oil true boiling point distillation by application of ASTM D-7169 simulated distillation and combination of ASTM D-86 and ASTM D-1160 physical distillation methods", Pet Coal (2016); 58 (2): 194-208. (SJR = 0.186, Q4 of Scopus).
180. E. Nikolaychuck, A. Veli, **D. Stratiev**, I. Shishkova, A. Burilkova, E. Tamahkiarova, M. Mitkova, D.Yordanov, "Physical Vacuum Distillation and High Temperature Simulated Distillation of Residual Oils from Different Origin",

- Int. J. Oil, Gas and Coal Technology 2018 17, (2), 208-221. (Web of Science Q4, IF=0.683).
181. A. Pavlova, D. Stratiev, R. Dinkov, I. Sharafutdinov, I. Shishkova, P. Chakarov, M. Mitkova, "Determination of organic nitrogen and phenolic compounds in sour waste water from ebullated bed hydrocracking unit", Pet Coal (2016); 58 (3): 339-348. (SJR = 0.186, Q4 of Scopus)
 182. **D.D. Stratiev**, R. Dinkov, I. Shishkova, I. Sharafutdinov, N. Ivanova, M. Mitkova, D. Yordanov, N. Rudnev, K. Stanulov, A. Artemiev, I. Barova, B. Chushkov, What is behind the high values of hot filtration test of the ebullated bed residue H-Oil hydrocracker residual oils?, Energy Fuels, 2016, 30 (9), 7037–7054. (Web of Science Q1, IF=3.091).
 183. **D. Stratiev**, I. Chavdarov, E. Nikolaychuk, I. Shishkova, I. Sharafutdinov, I. Tankov, M. Mitkova, "Investigation of the fluid catalytic cracking of different H-Oil vacuum gas oils and their blends with hydrotreated vacuum gas oil", Petroleum Science and Technology, 2016, 34, (24), 1939-1945, (Web of Science Q3, IF=0.655).
 184. K. Atanassov, V. Atanassova, P. Chountas, M. Mitkova, E. Sotirova, S. Sotirov, **D. Stratiev**, Intercriteria Analysis over Normalized Data, 2016 IEEE 8th International Conference on Intelligent Systems.
 185. T. Palichev, K. Zhekov I. Chavdarov, **D. Stratiev**, INVESTIGATION OF THE CATALYTIC NAPHTHA REFORMING 1 IN LUKOIL NEFTOCHIM FOR INTENSIFICATION OF THE PROCESS, Industrial Technologies, vol.1, 2014, 117-123.
 186. **D. Stratiev**, I. Shishkova, N. Ivanova, A. Veli, R. Nikolova, M. Mitkova, K. Stanulov, G. Argirov, D. Yordanov, E. Nikolaychuk, "Colloidal stability and hot filtration test of residual fuel oils based on visbreaking and ebullated bed residue H-Oil hydrocracking", Int. J. Oil, Gas and Coal Technology 2019, 20, (2), 169-188. (Web of Science Q4, IF=0.752).
 187. A. Pavlova, A. Nedelchev, I. Sharafutdinov, D. Dobrev, **D. Stratiev**, I. Shishkova, M. Mitkova, N. Rudnev, P. Vatkov, R. Karadzhov, "Gas

- chromatographic profiles of contaminants in the cooling water”, Oxidation Communications 40, No 1-II, 497–510 (2017). (SJR = 0.161; Q4 of Scopus)
188. I. Tankov, R. Yankova, S. Genieva, M. Mitkova, **D. Stratiev**, “Density functional theory study on the ionic liquid pyridinium hydrogen sulfate”, Journal Molecular Structure, Volume 1139, 5 July 2017, 400-406. (Web of Science Q1, IF= 3.2)
 189. Е. Николайчук, **Д. Стратиев**, И. Шишкова, М. Миткова, А. Нелюбин, П. Парамонов, А. Обрывалина, “Исследование соответствия измеренных и прогнозируемых программой RPMS октановых чисел бензиновых смесей, соответствующих стандарту Евро V”, Нефтепереработка и Нефтехимия, 2017, №1
 190. **D. Stratiev**, I. Shishkova, A. Veli, R. Nikolova, D.D. Stratiev, M. Mitkova, D. Yordanov, “Fluid catalytic cracking and thermal cracking of vacuum gas oils. Effect of feedstock properties on conversion and yields“, OIL GAS EUROPEAN MAGAZINE Juni, 2/2017, 84-89. (Web of Science Q4, IF=0.321).
 191. I. Tankov, M. Mitkova, R. Nikolova, A. Veli, **D. Stratiev**, “n-Butyl Acetate Synthesis in the Presence of Pyridinium-Based Acidic Ionic Liquids: Influence of the Anion Nature”, Catal Lett (2017) 147:2279–2289. (Web of Science Q1, IF= 2.9)
 192. **D. Stratiev**, E. Nikolaychuk, I. Shishkova, I. Bonchev, I. Marinov, R. Dinkov, D. Yordanov, I. Tankov, M. Mitkova, “Evaluation of accuracy of available in literature gasoline blending models to predict octane numbers of gasoline blends”, accepted for publication in Petroleum Science and Technology, 35:11, 1146-1153, DOI: 10.1080/10916466.2017.1312445. (Web of Science Q3, IF=0.655).
 193. **D. Stratiev**, R. Dinkov, I. Shishkova, E. Nikolaychuk, M. Mitkova, R. Nikolova, D. Yordanov, I. Tankov, W.l Ijlstra, D. McNamara, H. D. Nguyen, S. Chapot, “Laboratory and commercial investigation of ebullated bed residue hydrocracking performance during processing of Urals crude vacuum resid and its blends with vacuum gas oil and atmospheric residue” Int. J. Oil, Gas and Coal Technology 2019, 22, (1), 2019, (Web of Science Q4, IF=0.752).

194. S. Sotirov, E. Sotirova, **D. S. Stratiev**, D. D. Stratiev, Nikolay Sotirov, "An Application of Neural Network to Heavy Oil Distillation with recognitions with Intuitionistic Fuzzy Estimation", Conference Proceedings, 2017, Mexico.
195. I. Tankov , **D. Stratiev**, I. Shishkova , R. Dinkov, I. Sharafutdinov , R. Nikolova , A. Veli , M. Mitkova , D. Yordanov, N. Rudnev , K. Stanulov , V. Toteva," Reactivity of heavy oils in catalytic and thermal cracking. Part I: Reactivity and stability of individual hydrocarbons", Oxidation Communications 40, No 3, 1178–1190 (2017). (SJR = 0.161, Q4 of Scopus)
196. I. Tankov , **D. Stratiev**, I. Shishkova , R. Dinkov, I. Sharafutdinov , R. Nikolova , A. Veli , M. Mitkova , D. Yordanov, N. Rudnev , K. Stanulov , V. Toteva," Reactivity of heavy oils in catalytic and thermal cracking. Part II: SARA fractions and heavy oils", Oxidation Communications 40, No 3, 1191–1208 (2017). (SJR = 0.161, Q4 of Scopus)
197. **Д. С. Стратиев**, И.К.Шишкова, И.М.Маринов, Е.В.Николайчук, А.Д.Неделчев, Н.Т.Иванова, Д.Й.Йорданов, И.Г.Танков, М.С.Миткова, К.Г.Станулов, В.Б.Тотева, П.В.Парамонов, Е.А.Чернышова, А.Н.Обрывалина, "Влияние происхождения сырья на конверсию и выход продуктов процесса гидрокрекинг гудрона в псевдоожиженном слое", Нефтепереработка и нефтехимия, №10, 2017, 3-13.
198. R. Dinkov, K. Kirilov, **D. Stratiev**, I. Sharafutdinov, D.Dobrev, D. Nguyen-Hong, S. Chapot, Jean-François Le-coz, A. Burilkova, D. Bakalova, D. Yordanov, S. Smilkov, "Feasibility of Bitumen Production from Unconverted Vacuum Tower Bottom from H-Oil Ebullated Bed Residue Hydrocracking", Ind. Eng. Chem. Res., 2018, 57 (6), 2003–2013. (Web of Science Q1, IF=3.375).
199. I. Tankov, R. Yankova, M. Mitkova, **D. Stratiev**, "Non-isothermal decomposition kinetics of pyridinium nitrate under nitrogen atmosphere", Thermochimica Acta, Volume 665, 10 July 2018, Pages 85-91 (Web of Science Q1, IF= 2.9)
200. G. Argirov, P. Chakarov, A. Pavlova, **D. Stratiev**, "Improve removal of phenolic and amine compounds in a sour water stripper", Hydrocarbon Processing, Novembner 2017, 37-40.

201. A. Pavlova, **D. Stratiev**, I. Shishkova, A. Nedelchev, "CHARACTERIZATION OF ORGANIC MATTER IN PROCESS WATER ORIGINATING FROM CRUDE DISTILLATION UNITS OF LUKOIL NEFTOHIM BURGAS REFINERY", Pet Coal (2018); 60(6): 1257-1264. (SJR=0.213; Q4 of Scopus)
202. **D. Stratiev**, I. Shishkova, I. Tankov, A. Pavlova, "Challenges in characterization of residual oils. A review", Journal of Petroleum Science and Engineering 178 (2019) 227–250. (Web of Science Q1, IF=3.706).
203. **D. S. Stratiev**, I. K. Shishkova, E. Nikolaychuk, M. Anastasov, K. Stanulov, V. Toteva, "Effect of catalyst condition on sedimentation and conversion in the ebullated bed vacuum residue H-Oil hydrocracking", Petroleum Science and Technology, Volume 37, 2019 - Issue 12, 1463-1470, <https://doi.org/10.1080/10916466.2019.1590407>. (Web of Science Q3, IF=0.976).
204. **D. Stratiev**, I. Chavdarov, A. Ivanov, A. Popov, R. González, "Generating Value in the FCC through Innovative Catalyst Technologies and Technical Services", Catalagram Nr 123, Spring 2019, 17-21.
205. W. Ijlstra, G. Argirov, **D. Stratiev**, I. Shishkova, D. McNamara, Bottom of the Barrel Technology Conference, Sardinia, 27 May 2019.
206. **D. Stratiev**, I. Shishkova, E. Nikolaychuk, V. Atanasova, K. Atanassov, "Investigation of relations of properties of straight run and H-Oil unconverted vacuum residual oils", Pet Coal (2019); 61(4) 763-776. (SJR = 0.224; Q4 of Scopus).
207. **D. Stratiev**, I. Shishkova, E. Nikolaychuk, R. Dinkov, G. Stoilov, V. Yankov, M. Mitkova, "Impact of severity in the H-Oil vacuum residue hydrocracking on sediment formation", Pet Coal (2019); 61(5) 1166-1182. (SJR = 0.224; Q4 of Scopus)
208. **D. Stratiev**, R. Dinkov, G. Argirov, I. Shishkova, "H- Oil ebullated bed vacuum residue hydrocracker performance in LNB refinery. analysis of the

- progress achieved for one and a half years after unit start up”, Criterion-LUKOIL Workshop, 26.01-27.01.2017, Burgas, Bulgaria.
209. **D. Stratiev**, I. Shishkova, E. Nikolaychuk, I. Ilchev, D. Yordanov, “Investigation of the Effect of Severity Mode of Operation in the H-Oil Vacuum Residue Hydrocracking on Sediment Formation During Processing Different Feeds”, *Pet Coal* (2020); 62(1) 50-62. (SJR = 0.175; Q4 of Scopus).
 210. **D. Stratiev**, I. Chavdarov A. Ivanov, A. Popov, R. González, Generating value in the FCC, *Catalysis* 2019, digitalrefining.com/article/1002290Catalysis
 211. E. Nikolaychuk, **D. Stratiev**, I. Shishkova, M. Mitkova, D. Yordanov, “Industrial investigation on the feasibility of incorporating visbreaker naphtha in the production of near zero sulphur diesel at the Lukoil Neftochim Burgas refinery”, *Oil Gas European Magazine* Volume 45, Issue 3, September 2019, 144-147. (Web of Science Q2, IF=0.302).
 212. **D. Stratiev**, I. Shishkova, V. Yankov, I. Kolev, R. Dinkov, E. Nikolaychuk, M. Mitkova, “Feed Properties Relation to Reactivity and Sedimentation in Vacuum Residue Hydrocracking”, *Oxidation Communications* 42, No 4, 484–495 (2019). (SJR = 0.196; Q4 of Scopus)
 213. **D. Stratiev**, I. Shishkova, E. Nikolaychuk, W. Ijlstra, B. Holmes, M. Caillot, “Feed properties effect on the performance of vacuum residue ebullated bed H-Oil hydrocracking”, *Oil Gas European Magazine*, 2019, 45 edition, December, 4/2019, 194-200. (Web of Science Q4, IF=0.242).
 214. V. Toteva, K. Stanulov, I. Shishkova, D. Stratiev, OPTIMIZATION OF THE OXIDATIVE DESULPHURIZATION OF HEAVY GAS OIL, *Journal of Chemical Technology and Metallurgy*, 55, 4, 2020, 748-753 (SJR = 0.22; Q4 of Scopus)
 215. D. Stratiev, I. Shishkova, V. Yankov, I. Kolev, M. Mitkova, “Impact of H-Oil vacuum residue hydrocracking severity on fluid catalytic cracking unit performance”. *Petrol. Sci. Technol.* 2020, 38, No. 6, 565–573, <https://doi.org/10.1080/10916466.2020.1772821>. (Web of Science Q2, IF=1.268).
 216. **D. Stratiev**, I.Shishkova, R. Dinkov, D. Yordanov, “Studying of the Processing of Fluid Catalytic Cracking Slurry Oil in the H-Oil Ebullated Bed

- Vacuum Residue Hydrocracking and Its Effect on the H-Oil Vacuum Gas Oil Quality and Fluid Catalytic Cracking Performance”, *Pet Coal* (2020); 62(2) 542-556. (SJR = 0.172; Q4 of Scopus)
217. **D. Stratiev**, I. Shishkova, V. Yankov, D. Yordanov, I. Tankov, “Fluid catalytic cracking of H-Oil derived heavy oils”, *Oxidation Communications* 43, No 2, 289–301 (2020). (SJR = 0.196; Q4 of Scopus)
218. R. Dinkov, **D. Stratiev**, I. Shishkova, A. Veli, R. Nikolova, D. Yordanov, I. Ilchev, “Opportunity to increase the share of unconverted vacuum tower bottom from residue hydrocracking (H-Oil) in paving grade bitumen production”, *Oxidation Communications* 43, No 2, 302–320 (2020). (SJR = 0.196; Q4 of Scopus).
219. Suyunov R., Gaziev R., Dunin N., Lazer M., **Stratiev D.**, Shishkova I., Vasilev S., A method to produce road pavement bitumen from a residue, Russian Patent Nr. 2721118, 2020.
220. **D. Stratiev**, I. Shishkova, R. Dinkov, D. Yordanov, I. Ilchev, V. Toteva, “Effect of H-Oil hydrocracked vacuum residue quality variation on the feasibility to produce road asphalt thereof”, *Oxidation Communications* 43, No 3, 545–558 (2020). (SJR = 0.196; Q4 of Scopus)
221. **D. Stratiev**, I. Shishkova, M. Ivanov, I. Chavdarov, D. Yordanov, “Dependence of Fluid Catalytic Cracking Unit Performance on H-Oil Severity, Catalyst Activity, and Coke Selectivity”, *Chem. Eng. Technol.* 2020, 43, No. 11, 1–12, DOI: 10.1002/ceat.202000071, (Web of Science Q3, IF=1.728).
222. V. Toteva, **D. Stratiev**, I. Shishkova, E. Nikolaychuk, K. Stanulov, D. Yordanov, “Effect of commercial additives to reduce sediment formation in the ebullated bed vacuum residue H-Oil hydrocracking”, *Journal of Chemical Technology and Metallurgy*, 55, 6, 2020, 2040-2048. (SJR = 0.196; Q3 of Scopus)
223. **D. Stratiev**, S. Nenov, I. Shishkova, B. Georgiev, G. Argirov, R. Dinkov, D. Yordanov, V. Atanassova, P. Vassilev, K. Atanasov, “Commercial investigation of the ebullated bed vacuum residue hydrocracking in the

- conversion range 55-93%”, ACS Omega, 51 (5), 33290 (2020), <https://doi.org/10.1021/acsomega.0c05073>. (Web of Science Q2, IF=3.512).
224. **D. Stratiev**, R. Dinkov, I. Shishkova, I. Petrov, “Controlling sodium content in vacuum residue during its hydroprocessing”, Oxidation Communications 43, No 4, 819–828 (2020). (SJR = 0.196; Q4 of Scopus).
225. **D. Stratiev**, I. Shishkova, I. Petrov, D. Yordanov, V. Toteva, “Investigation of fluid catalytic cracking catalyst performance in a laboratory ACE FCC unit during processing gas oils containing H-Oil gas oils with a variable quality and a variable quantity”, Pet Coal (2020); 62(4): 1485-1496. (SJR = 0.172; Q4 of Scopus)
226. **D. Stratiev**, R. Dinkov, I. Shishkova and D. Yordanov, Can we manage the process of asphaltene precipitation during the production of IMO 2020 fuel oil?, Erdöl Erdgas Kohle, 2020, 136(12), 32-39.
227. **D. Stratiev**, I. Shishkova, R. Dinkov, K. Kirilov, D. Yordanov, R. Nikolova, A.Veli, M. Tavlieva, S. Vasilev, R. Suyunov, “Variation of oxidation reactivity of straight run and H-Oil hydrocracked vacuum residual oils in the process of road asphalt production”, Road Materials and Pavement Design, Volume 23, 2022 - Issue 6, 1415–1439, <https://doi.org/10.1080/14680629.2021.1893209>. (Web of Science Q2, IF=3.792).
228. **D. Stratiev**, I. Shishkova, M. Ivanov, R.Dinkov, B. Georgiev, G.Argirov, V. Atanassova, P. Vassilev, K. Atanassov, D. Yordanov, A. Popov, A. Padovani, U. Hartmann, S. Brandt, S. Nenov, S.Sotirov, E.Sotirova, “Role of Catalyst in Optimizing Fluid Catalytic Cracking Performance During Cracking of H-Oil-Derived Gas Oils”, ACS Omega 2021, 6, 11, 7626–7637. (Web of Science Q2, IF=3.512)
229. **D. Stratiev**, Shishkova, I.; Ivanov, M.; Dinkov, R.; Georgiev, B.; Argirov, ; Atanassova, V.; Vassilev, P.; Atanassov, K.; Yordanov, D.; Popov, A.; Padovani, A.; Hartmann, U.; Nenov, S. “Catalytic cracking of diverse vacuum residue hydrocracking gas oils”. Chem. Eng. Technol. 2021, 44, No. 6, 997–1008, DOI: 10.1002/ceat.202000577, (Web of Science Q3, IF=1.728)

230. **D. Stratiev**, I. Shishkova, I. Petrov, D. Yordanov, V. Toteva, Petroleum crude slate, catalyst properties and H-Oil VGO properties effects on a commercial FCC unit performance, Journal of Chemical Technology and Metallurgy, 56, 3, 2021, 488-498. (Q3 of Scopus; SJR = 0.196)
231. **D. S. Stratiev**, I. K. Shishkova, R. K. Dinkov, I. P. Petrov, I.V. Kolev, D. Yordanov, S. Sotirov., E.Sotirova V. Atanassova, S. Ribagin, K. Atanassov, D. D. Stratiev, S. Nenov, Crude Slate, FCC slurry oil, Recycle, and Operating Conditions Effects on H-Oil product quality, Processes 2021, 9, 952. <https://doi.org/10.3390/pr9060952>. (Web of Science Q3, IF=2.847).
232. A. Pavlova, I. Shishkova, **D. Stratiev**, V. Toteva, P. Batchvarov, How to manage smells in oil refining? Part 1, Journal of Environmental Protection and Ecology, 2021, 22(1), pp. 17–27 (Web of Science Q3, IF=2.847).
233. A. Pavlova, I. Shishkova, **D. Stratiev**, V. Toteva, P. Batchvarov, How to manage smells in oil refining? Part 2, Journal of Environmental Protection and Ecology, 2021, 22(1), pp. 28–38 (Web of Science Q3, IF=2.847).
234. **D. Stratiev**, S. Nenov, I. Shishkova, G. Argirov, B. Georgiev, D. Yordanov, V. Atanassova, K. Atanassov, V. Toteva, “Non-linear least-squares methods for modelling vacuum residue hydrocracking”, Oxidation Communications 44, No 2, 483–494 (2021). (Q4 of Scopus; SJR = 0.196)
235. **D.S. Stratiev**; Shishkova, I.K.; Dinkov, R.K.; Petrov, I.P.; Kolev, I.V.; Yordanov, D.; Sotirov, S.; Sotirova, E.; Ribagin, S.; Atanassov, K.; et al. “Empirical Models to Characterize the Structural and Physiochemical Properties of Vacuum Gas Oils with Different Saturate Contents”. Resources 2021, 10, 71. <https://doi.org/10.3390/resources10070071>. (Web of Science Q2; IF = 3.8)
236. I. K. Shishkova , **D. S. Stratiev**, M. P. Tavlieva , R. K. Dinkov, D. Yordanov, S. Sotirov, E. Sotirova, V. Atanassova, S. Ribagin, K. Atanassov, D. D. Stratiev, L. Todorova-Yankova, S. Nenov, “Evaluation of the Different Compatibility Indices to Model and Predict Oil Colloidal Stability and Its Relation to Crude Oil Desalting”, Resources 2021, 10, 75. <https://doi.org/10.3390/resources10080075>. (Web of Science Q2; IF=3.8)

237. **D. S. Stratiev**; Nenov, S.; Shishkova, I.K.; Dinkov, R.K.; Zlatanov, K.; Yordanov, D.; Sotirov, S.; Sotirova, E.; Atanassova, V.; Atanassov, K.; et al. Comparison of Empirical Models to Predict Viscosity of Secondary Vacuum Gas Oils. Resources 2021, 10, 82. <https://doi.org/10.3390/resources10080082>, (Web of Science Q2; IF=3.8).
238. R. Dinkov, **D. Stratiev**. Studying the Evolution of H-Oil Hydrocracked Residual Oil Properties in the Conversion Range 65-93%, and the Opportunity to Produce Road Asphalt from H-Oil VTB. Oxid Commun, 2021, Nr.1, 198-212. (Q4 of Scopus; SJR = 0.216)
239. **D. Stratiev**, I. Shishkova, I. Kolev, D. Yordanov, V. Toteva, "Petroleum crude slate effect on H-Oil performance", Int. J. Oil, Gas and Coal Technology, Vol. 28, No. 3, 2021, 259-286. (Web of Science Q4, IF=0.752).
240. **D. Stratiev**, I. Shishkova, G. Argirov, V. Yankov, D. Mountainland, B. Silverman, V. Toteva, "Improving H-Oil Ebullated Bed Vacuum Residue Hydrocracking Performance By The Use Of Molecularly Dispersed HCAT® Catalyst", Pet Coal (2021); 63(3): 655-667. (Q4 of Scopus; SJR = 0.204)
241. D. D. Stratiev, **D. S. Stratiev**; K. Atanassov, "Modelling the Process of Production of Diesel Fuels by the Use of Generalized Nets", Mathematics 2021, 9, 2351. <https://doi.org/10.3390/math9192351>. (Web of Science Q1, IF= 2.258).
242. **D. Stratiev**; Nenov, S.; Nedanovski, D.; Shishkova, I.; Dinkov, R.; Stratiev, D.D.; Stratiev, D.D.; Sotirov, S.; Sotirova, E.; Atanassova, V.; et al. Different Nonlinear Regression Techniques and Sensitivity Analysis as Tools to Optimize Oil Viscosity Modeling. Resources 2021, 10, 99. <https://doi.org/10.3390/resources10100099>. (Web of Science Q2; IF = 3.8).
243. **D. Stratiev**, R. Dinkov, I. Shishkova, K. Kirilov, D. Yordanov, I. Ilchev, V. Toteva, Laboratory and commercial investigation on the production of road asphalt from blends of straight run and hydrocracked vacuum residua in different ratios, Oxid Commun, 2021, vol.44, Nr.3, 652-663. (Q4 of Scopus; SJR = 0.164)
244. **D. Stratiev**, I. Shishkova, I. Petrov, R. Dinkov, V. Atanassova, S. Ribagin, D. Stratiev, K. Atanassov, "About H-Oil performance improvement and

- cetane number of finished refinery diesel”, Oil Gas European Magazine, 2021, 47, (3), 13-16 (Web of Science Q4, IF=0.242).
245. L. Todorova-Yankova, D. Yordanov, **D. Stratiev**, I. Shishkova, “Study of the group hydrocarbon composition of ultralight, light, medium, heavy and ultra heavy types of crude oil, crude oil sands and bitumen”, Industrial Technologies, vol. 8 (1) 2021, 38-50.
246. L. Todorova-Yankova, D. Yordanov, **D. Stratiev**, I. Shishkova, “Investigation of the group hydrocarbon composition of vacuum residues from different types of crude oil, crude oil sands and bitumens”, Industrial Technologies, vol. 8 (1) 2021, 51-64.
247. **D. Stratiev**, I. Shishkova, R. Dinkov, V. Atanassova, S. Ribagin, D. D. Stratiev, K. Atanassov, “Evaluation of crude slate and processing of recycle effects on H-Oil performance”, Int. J. Oil, Gas and Coal Technology, Vol. 30, No. 2, 2022, 130-156. (Web of Science Q4, IF=0.7).
248. **D. S. Stratiev**, M. Ivanov, I. Shishkova, R. Dinkov, and I. Petrov, “Commercial FCC experience with processing blends of straight run hydrotreated VGO and H-Oil VGO and employing different catalysts“, Oil Gas European Magazine, 2021, Nr.4 , 20-27, DOI 10.19225/211207. (Web of Science Q4, IF=0.242).
249. **D. Stratiev**, I. Shishkova, M. Tavlieva, K. Kirilov, R. Dinkov, D. Yordanov, L. Yankova, V. Toteva, R. Nikolova, “Inhibiting sediment formation in an extra light crude oil and in a hydrocracked atmospheric residue by commercial chemical additives”, Journal of Chemical Technology and Metallurgy, 2022, 57, 1, 63-75. (Q3 of Scopus; SJR = 0.196)
250. **D. Stratiev**, I. Shishkova, M. Ivanov, I. Petrov, V. Atanassova, S. Ribagin, K. Atanassov, V. Toteva, D. Stratiev, “Commercial and laboratory experience with catalytic cracking of straight run hydrotreated vacuum gas oil and H-Oil gas oils”, Journal of Chemical Technology and Metallurgy, 2022, 57, 2, 215-223. (Q3 of Scopus; SJR = 0.196).
251. **D. Stratiev**, S. Nenov, D. Nedanovski, I. Shishkova, R. Dinkov, D. D. Stratiev, D. D. Stratiev, S. Sotirov, E. Sotirova, V. Atanassova, S. Ribagin, K.

- Atanassov, D. Yordanov, N. A. Angelova, L. Todorova-Yankova, “Empirical Modeling of Viscosities and Softening Points of Straight-Run Vacuum Residues from Different Origins and of Hydrocracked Unconverted Vacuum Residues Obtained in Different Conversions”, *Energies* 2022, 15, 1755. <https://doi.org/10.3390/en15051755>. (Web of Science Q3, IF = 3.2)
252. I. Petrov, **D. Stratiev**, I. Shishkova and D. Yordanov, “A hybrid reformer performance analysis reveals the reason for reformat octane deterioration”, *Oil Gas European Magazine*, 47. Edition · Issue 2/2021, 14-20. (Web of Science Q4, IF=0.242).
253. **D. Stratiev**, S. Nenov, S. Sotirov, I. Shishkova, G. Palichev, E. Sotirova, V. Ivanov, K. Atanassov, S. Ribagin, N. Angelova, “Petroleum viscosity modeling using least squares and ANN methods”, *Journal of Petroleum Science and Engineering* 212 (2022) 110306, <https://doi.org/10.1016/j.petrol.2022.110306>. (Web of Science Q1, IF= 5.168)
254. D. D. Stratiev, D. Zoteva, **D. S. Stratiev**, K. Atanassov. (2022). “Modelling the Process of Production of Automotive Gasoline by the Use of Generalized Nets”, In: , et al. *Uncertainty and Imprecision in Decision Making and Decision Support: New Advances, Challenges, and Perspectives*. IWIFSGN BOS/SOR 2020 2020. Lecture Notes in Networks and Systems, vol 338. Springer, Cham. https://doi.org/10.1007/978-3-030-95929-6_27 (Scopus Q4, SJR = 0.170)
255. **D. Stratiev**, I. Shishkova, R. Dinkov, I. Kolev, G. Argirov, V. Ivanov, S. Ribagin, V. Atanassova, K. Atanassov, D. Stratiev, S. Nenov, D. Pilev, D. Yordanov, “Intercriteria analysis to diagnose the reasons for increased fouling in a commercial ebullated bed vacuum residue hydrocracker”, *ACS Omega* 2022, 7, 30462–30476, <https://doi.org/10.1021/acsomega.2c03876>. (Web of Science Q2, IF=4.132).
256. **D. Stratiev**, I. Shishkova, R. Dinkov, S. Nenov, S. Sotirov, E. Sotirova, I. Kolev, V. Ivanov, S. Ribagin, K. Atanassov, D. Stratiev, D. Yordanov, D. Nedanovski, “Prediction of petroleum viscosity from molecular weight and density”, *Fuel* 331 (2023) 125679. (Web of Science Q1, IF=8.035)

257. D. Mountainland, G. Argirov, **D. Stratiev**, I. Shishkova, LUKOIL Neftohim Burgas AD (LNB) Enhancing EB Flexibility with HCAT Technology, IDW 2022, 30 September, Dubrovnik.
258. **D. Stratiev**, I. Shishkova. Vacuum residue ebullated bed hydrocracking application in LUKOIL Neftohim Burgas refinery. Issues, Challenges, Solutions. Summary of seven years experience. 17th National conference of catalysis dedicated to 100 anniversary of academic Dimitar Shopov, founder of the Institute of catalysis, 15-16 Nov. 2022, Sofia – Institute of Catalysis, Bulgarian Academy of Science.
259. A. Qubian, A. S. Abbas, N. Al-Khedhair, J. Peres, O. Alomair, **D. Stratiev**, I. K. Shishkova, M. R. Riazi, Screening and investigation on inhibition of sediment formation in a Kuwait light crude oil by commercial additives with some guidelines for field applications. AIChE Annual Meeting, Phoenix, Arizona, Nov.13-18, 2022.(<https://www.aiche.org/academy/conferences/aiche-annual-meeting/2022/proceeding/paper/122h-screening-and-investigation-on-inhibition-sediment-formation-kuwait-light-crude-oil-commercial>)
260. **Д. Стратиев**, И. Шишкова, Применение гидрокрекинга с эбуллированным слоем вакуумного остатка на НПЗ "ЛУКОЙЛ Нефтохим Бургас". Вопросы, проблемы, решения. Обобщение семилетнего опыта. Международная научно-практическая конференция Глубокая переработка тяжелых нефтей и нефтяных остатков, 10-11 ноебря 2022, Казань.
261. I. Shishkova, **D. Stratiev**, I. Kolev, S. Nenov, D. Nedanovski, K. Atanassov, V. Ivanov, S. Ribagin. "Challenges in Petroleum Characterization. A Review". Energies 2022, 15, 7765. <https://doi.org/10.3390/en15207765>. (Web of Science Q3, IF=3.25).
262. Jeramie Joseph Adams, Joseph F. Rovani, Jean-Pascal Planche, **Dicho Stratiev**, Ivelina Shishkova, Iliyan Kolev, Krassimir Atanassov, Svetoslav Nenov, Simeon Ribagin, Danail Stratiev, Vitaly Ivanov, SAR-AD method to characterize vacuum residues from different origin as a tool to investigate a commercial ebullated bed vacuum residue hydrocracker performance,

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4252478, 58 Pages Posted:
19 Oct 2022.

263. **D. Stratiev**; Shishkova, I.; Ivanov, M.; Dinkov, R.; Argirov, G.; Vassilev, S.; Yordanov, D. “Validation of Diesel Fraction Content in Heavy Oils Measured by High Temperature Simulated Distillation and Physical Vacuum Distillation by Performance of Commercial Distillation and Process Simulation”. Appl. Sci. 2022, 12, 11824. <https://doi.org/10.3390/app122211824>. (Web of Science Q3, IF=2.7).
264. **D. Stratiev**; Shishkova, I.; Palichev, G.N.; Atanassov, K.; Ribagin, S.; Nenov, S.; Nedanovski, D.; Ivanov, V. “Study of Bulk Properties Relations to SARA Composition Data of Various Vacuum Residues Employing Intercriteria Analysis”. Energies 2022, 15, 9042. <https://doi.org/10.3390/en15239042>. (Web of Science Q3, IF=3.25).
265. **Д. Стратиев**, И. Шишкова, Е. Николайчук. “Применение гидрокрекинга вакуумного остатка в кипящем слое на предприятии «ЛУКОЙЛ Нефтохим Бургас»”. Химия и Технология Топлив и Масел 2023, №1, 30-35. (Web of Science Q4, IF=0.60).
266. **D. Stratiev**; Sotirov, S.; Sotirova, E.; Nenov, S.; Dinkov, R.; Shishkova, I.; Kolev, I.V.; Yordanov, D.; Vasilev, S.; Atanassov, K.; Simeonov, S.; Nikolov Palichev, G.N. “Prediction of Molecular Weight of Petroleum Fluids by Empirical Correlations and Artificial Neuron Networks”. Processes 2023, 11, 426. <https://doi.org/10.3390/pr11020426>. (Web of Science Q2, IF=3.5).
267. **D. Stratiev**; Dinkov, R.; Tavlieva, M.; Shishkova, I.; Palichev, G.N.; Ribagin, S.; Atanassov, K.; Stratiev, D.D.; Nenov, S.; Pilev, D.; Sotirov, S.; Sotirova, E.; Simeonov, S.; Boyadzhieva, V. “Correlations of HTSD to TBP and Bulk Properties to Saturate Content of a Wide Variety of Crude Oils”. Processes 2023, 11, 420. <https://doi.org/10.3390/pr11020>. (Web of Science Q2, IF=3.5).
268. **D. Stratiev**; Ivanov, M.; Chavdarov, I.; Argirov, G.; Strovegli, G. “Revamping Fluid Catalytic Cracking Unit, and Optimizing Catalyst to Process Heavier Feeds”. Appl. Sci. 2023, 13, 2017. <https://doi.org/10.3390/app13032017>. (Web of Science Q3, IF=2.7).

269. Qubian, A.; Abbas, A.S.; Al-Khedhair, N.; Peres, J.F.; **D. Stratiev**; Shishkova, I.; Nikolova, R.; Toteva, V.; Riazi, M.R. "Screening and Investigation on Inhibition of Sediment Formation in a Kuwait Light Crude Oil by Commercial Additives with Some Guidelines for Field Applications". *Processes* 2023, 11, 818. <https://doi.org/10.3390/pr11030818>. (Web of Science Q2, IF=3.5)
270. B.E. Georgiev; **D. S. Stratiev**; Argirov, G.S.; Nedelchev, A.; Dinkov, R.; Shishkova, I.K.; Ivanov, M.; Atanassov, K.; Ribagin, S.; Nikolov Palichev, G.; Nenov, S.; Sotirov, S.; Sotirova, E.; Pilev, D.; Stratiev, D.D. "Commercial Ebullated Bed Vacuum Residue Hydrocracking Performance Improvement during Processing Difficult Feeds". *Appl. Sci.* 2023, 13, 3755. <https://doi.org/10.3390/app13063755>. (Web of Science Q3, IF=2.7).
271. R. Dinkov, I. Andreev, **D. Stratiev**, I. Kolev, M. Atanasov, Katarzyna Grabowska, Cobbin Mackenzie, "Unrevealed additional WASA additive performance at European refinery". *PTQ Q2* 2023, 63-67.
272. I. Kolev; **D. Stratiev**; Shishkova, I.; Atanassov, K.; Ribagin, S.; Sotirov, S.; Sotirova, E.; Stratiev, D.D. "Effect of Crude Oil Quality on Properties of Hydrocracked Vacuum Residue and Its Blends with Cutter Stocks to Produce Fuel Oil". *Processes* 2023, 11, 1733. <https://doi.org/10.3390/pr11061733>. (Web of Science Q2, IF=3.5).
273. **D. Stratiev**; Shishkova, I.; Dinkov, R.; Sotirov, S.; Sotirova, E.; Atanassov, K.; Ribagin, S.; Nikolova, R.; Veli, A.; Palichev, G.; Stratiev, D.D.. "Do the True Boiling-Point Distillation Yields of Crude Oil Blends Obey the Additive Blending Rule?" *Processes* 2023, 11, 1879. <https://doi.org/10.3390/pr11071879>. (Web of Science Q2, IF=3.5).
274. G. N. Palichev, **D. Stratiev**, S. Sotirov, E. Sotirova, S. Nenov, I. Shishkova, R. Dinkov, K. Atanassov, S. Ribagin, D. D. Stratiev, D. Pilev, D. Yordanov. "Prediction of Refractive Index of Petroleum Fluids by Empirical Correlations and ANN". *Processes* 2023, 11, 2328. <https://doi.org/10.3390/pr11082328>. (Web of Science Q2, IF=3.5).
275. D. D. Stratiev; A. Dimitriev; **D. Stratiev**; K. Atanassov, "Modeling the Production Process of Fuel Gas, LPG, Propylene, and Polypropylene in a

- Petroleum Refinery Using Generalized Nets”. *Mathematics* 2023, 11, 3800. <https://doi.org/10.3390/math11173800>. (Web of Science Q1, IF = 2.4).
276. V. Bureva, K. Atanasov, Y. Mersinkova, **D. Stratiev**. Evaluating the performance of catalyst and feedstocks in the fluid catalytic cracking process: Application of InterCriteria Analysis with weight coefficients of the objects. *Notes on Intuitionistic Fuzzy Sets* Print ISSN 1310–4926, Online ISSN 2367–8283 2023, Volume 29, Number 2, 166–177 DOI: 10.7546/nifs.2023.29.2.166-177.
277. D. Mavrov, S. Popov, V. Nenov, **D. Stratiev**. Evaluating the performance of catalyst and feedstocks in the fluid catalytic cracking process: Application of InterCriteria Analysis with weight coefficients of the criteria. *Notes on Intuitionistic Fuzzy Sets* Print ISSN 1310–4926, Online ISSN 2367–8283 2023, Volume 29, Number 2, 178–196 DOI: 10.7546/nifs.2023.29.2.178-196.
278. **D. Stratiev**; Toteva, V.; Shishkova, I.; Nenov, S.; Pilev, D.; Atanasov, K.; Bureva, V.; Vasilev, S.; Stratiev, D.D. “Industrial Investigation of the Combined Action of Vacuum Residue Hydrocracking and Vacuum Gas Oil Catalytic Cracking While Processing Different Feeds and Operating under Distinct Conditions”. *Processes* 2023, 11, 3174. <https://doi.org/10.3390/pr11113174>. (Web of Science Q2, IF=3.5).
279. D. D. Stratiev; Dimitriev, A.; **D. S. Stratiev**; Atanasov, K. “Generalized Net Model of Heavy Oil Products’ Manufacturing in Petroleum Refinery”. *Mathematics* 2023, 11, 4753. <https://doi.org/10.3390/math11234753>. (Web of Science Q1, IF = 2.4).
280. **D. Stratiev**; Nenov, S.; Shishkova, I.; Sotirov, S.; Sotirova, E.; Dinkov, R.; Yordanov, D.; Pilev, D.; Atanasov, K.; Vasilev, S.; Stratiev, D.D. Prediction of Viscosity of Blends of Heavy Oils with Diluents by Empirical Correlations and Artificial Neural Network. *Ind. Eng. Chem. Res.* 2023, 62, 49, 21449–21463, <https://doi.org/10.1021/acs.iecr.3c02472>. (Web of Science Q1, IF= 4.2).
281. **D. Stratiev**; Nenov, S.; Shishkova, I.; Sotirov, S.; Sotirova, E.; Dinkov, R.; Yordanov, D.; Pilev, D.; Atanasov, K.; Vasilev, S.; Stratiev, D.D. Prediction of Viscosity of Blends of Heavy Oils with Diluents by Empirical Correlations and

- Artificial Neural Network. *Ind. Eng. Chem. Res.* 2023, 62, 49, 21449–21463, <https://doi.org/10.1021/acs.iecr.3c02472>. (Web of Science Q1, IF= 4.2).
282. I. Shiskova.; **D. Stratiev**; Tavlieva, M.; Nedelchev, A.; Dinkov, R.; Kolev, I.; van den Berg, F.; Ribagin, S.; Sotirov, S.; Nikolova, R.; Veli, A.; Georgiev, G.; Atanassov, K. Application of Intercriteria and Regression Analyses and Artificial Neural Network to Investigate the Relation of Crude Oil Assay Data to Oil Compatibility. *Processes* 2024, 12, 780. <https://doi.org/10.3390/pr12040780>. (Web of Science Q2, IF = 3.5)
283. R. Dinkov; **D. Stratiev**; Andreev, I.; Georgiev, G.; Angelova, M.; Dimitrova, R.Z.; Toteva, V. Relation of the Content of Sustainable Components (HEFAs) in Blends with Hydrotreated Straight-Run Kerosene to the Properties of Aviation Fuel. *Processes* 2024, 12, 1045. <https://doi.org/10.3390/pr12061045>. (Web of Science Q2, IF = 3.5).
284. M. Mitkova, **D. Stratiev**, I. Shishkova, D. Dobrev, Thermal and thermos-catalytic processes for heavy oil conversion. Professor Marin Drinov Publishing House of Bulgarian Academy of Sciences. (2017) ISBN 978-954-322-892-8
285. **D. Stratiev**, I. Shishkova, R. Dinkov, D. Dobrev, G. Argirov, D. Yordanov, The Synergy between Ebullated Bed Vacuum Residue Hydrocracking and Fluid Catalytic Cracking Processes in Modern Refining—Commercial Experience; Professor Marin Drinov Publishing House of Bulgarian Academy of Sciences: Sofia, Bulgaria, 2022; ISBN 978-619-245-234-6.