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1918 dx.doi.org/10.1021/ef4016872
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1948 dx.doi.org/10.1021/ef402075e
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1956 dx.doi.org/10.1021/ef402163p
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1962 dx.doi.org/10.1021/ef402134d
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1970 dx.doi.org/10.1021/ef402293m
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1983 dx.doi.org/10.1021/ef402294v
Fe/Mg Silicate Mining Residues as Solid Oxygen Carriers for Chemical Looping Combustion of Torrefaction Volatiles
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1992 dx.doi.org/10.1021/ef402342e
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2003 5 dx.doi.org/10.1021/ef402234z
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2076 dx.doi.org/10.1021/ef4022009
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2129 dx.doi.org/10.1021/ef500201m

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2144 dx.doi.org/10.1021/ef401970q

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2152 dx.doi.org/10.1021/ef402021c

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2160 dx.doi.org/10.1021/ef4021069

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2170 dx.doi.org/10.1021/ef402116g

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2179 dx.doi.org/10.1021/ef402197y

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2199 dx.doi.org/10.1021/ef402271g

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2227 dx.doi.org/10.1021/ef402341p

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2248 dx.doi.org/10.1021/ef402528g

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2258 dx.doi.org/10.1021/ef4025382

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2267 dx.doi.org/10.1021/ef402569s

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2272 dx.doi.org/10.1021/ef4024004

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14th International Conference on Petroleum Phase Behavior and Fouling

Advances in the field of petroleum phase behavior and fouling are playing an essential role in the development of new efficient and eco-friendly petroleum technologies. This special issue of *Energy & Fuels* contains selected papers from the 14th International Conference on Petroleum Phase Behavior and Fouling (Petrophase 2013) that was organized by IFP Energies nouvelles and took place June 10–13, 2013, in Rueil-Malmaison, near Paris (France).

The Petrophase conference series has been meeting since 1999, alternating each year between Europe and the Americas. From that time, it has grown and evolved into a major annual international conference for the petroleum community. As one of the foremost petroleum conferences held annually, Petrophase attracts scientists and engineers from academia and national and private laboratories, students and researchers, and industrial participants, who can commercialize this research.

The 2013 conference allowed attendees to share new developments in the areas of physical properties of heavy oils, asphaltenes, waxes, and naphthenates, characterization of petroleum macromolecules, flow assurance, refining/upgrading, fouling, and oil–water emulsions. In 2013, wettability issues were also introduced as a specific session in the program. The program of the conference was structured to encourage interaction and stimulate the exchange of ideas between the players from the worlds of academic research, applied research, and industry. Full details of the program can be found on the Petrophase 2013 website at <http://petrophase2013.com>.

Petrophase 2013 at a glance: 230 participants from more than 30 countries, 6 keynote lectures, 36 oral presentations, 130 poster presentations, and 3.5 days of intensive and enjoyable work and debate!

The topics that were discussed extensively were divided into six sessions:

Session 1 on upgrading and fouling dealt with heavy oil conversion, high-temperature (HT) behavior, and fouling. The keynote lecturer was M. Gray (University of Alberta, Edmonton, Alberta, Canada) on “From black to gold in upgrading of residues: What we know, and what we need to know”.

Session 2 on characterization of petroleum macromolecules dealt with asphaltene, maltene, and naphthenic acid characterization. The keynote lecturer was J. F. Shabron [Western Research Institute (WRI), Laramie, WY] on “New characterization techniques and key findings from 14 years of WRI heavy oil research consortium”.

Session 3 on wettability dealt with the influence of oil composition, solid/liquid interfacial properties, and wettability alteration. The keynote lecturer was J. Buckley [Petroleum Recovery Research Center (PRRC), Socorro, NM] on “Wettability alteration and the role of asphaltenes”.

Session 4 on emulsion dealt with oil/water separation, interfacial properties, and topside processes. The keynote lecturer was J. Sjöblom [Norwegian University of Science and

Technology (NTNU), Trondheim, Norway] on “Synthetic model compounds mimicking functionality of asphaltenes”.

Session 5 on flow assurance dealt with wax, asphaltene, naphthenates, and hydrates. The keynote lecturer was J. Creek (Chevron Energy Technology Company, Houston, TX) on “Asphaltene: Then and now”.

Session 6 on physical properties of heavy oils, asphaltenes, and waxes dealt with phase behavior, viscosity, and compatibility. The keynote lecturer was J. Shaw (University of Alberta, Edmonton, Alberta, Canada) on “Hydrocarbon thermophysical properties—Unexpected frontiers”.

I acknowledge all those who have contributed to the success of Petrophase 2013. In particular, I am deeply grateful to the members of the organizing committee, B. Caruso, L. Barré, A. Quignard, and I. Wiehe, and the technical committee for their tremendous help organizing the conference and setting up the program: S. Andersen, E. Boek, J.-L. Daridon, D. Espinat, H. Freund, G. Gonzales, P. Kilpatrick, D. Merino-Garcia, F. Morel, N. Passade, R. Rodgers, P. Seidl, J. M. Shaw, F. Van den Berg, and H. Yarranton. I am also grateful to the sponsors of the conference that made this event possible: Total, Shell, Baker Hughes, Chevron, Nalco Champion, ExxonMobil, Cordouan, Teclis, Schlumberger, Biolin Scientific, Formulation, and Solvay. I also thank all of the session chairs, presenters, and attendees who made this conference such an enriching and enjoyable event.

The next conference, 15th International Conference on Petroleum Phase Behavior and Fouling, will be organized by Baker Hughes and Rice University on June 8–12, 2014, in Galveston, TX.

Finally, with J. M. Shaw and M. T. Klein, we are grateful to the authors whose contributed papers comprise this special issue of *Energy & Fuels*. Needless to say, this collection of papers is far from a comprehensive overview of the whole field of petroleum phase behavior and fouling. However, it provides an excellent indication of where efforts are currently focusing.

I wish you a very good and interesting reading.

Jean-François Argillier, Conference Chair

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■ AUTHOR INFORMATION

Notes

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