Supporting information

Enhancement of HDO Activity of MoP/SiO_2 Catalyst in Physical Mixture with Alumina or Zeolites

Ivan V. Shamanaev *, Irina V. Deliy, Evgeny Yu. Gerasimov, Vera P. Pakharukova and Galina A. Bukhtiyarova

Boreskov Institute of Catalysis, 630090, Lavrentiev Ave. 5, Novosibirsk, Russia; i.v.shamanaev@catalysis.ru (I.V.S.); gerasimov@catalysis.ru (E.Yu.G.); verapakharukova@yandex.ru (V.P.P.); gab@catalysis.ru (G.A.B.)

* Correspondence: i.v.shamanaev@catalysis.ru; Tel.: +7-383-326-9410; Fax: +7-383-330-8056

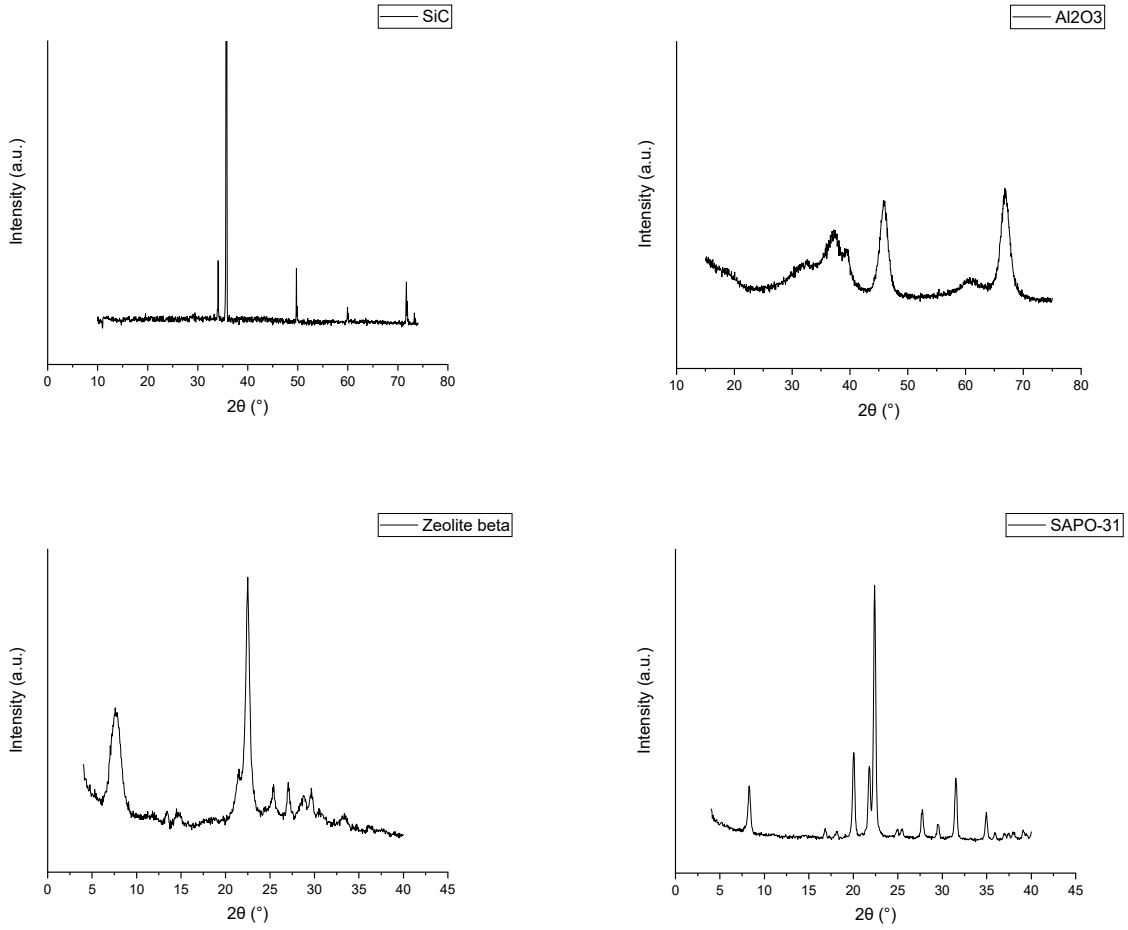

Figure 1. XRD patterns of materials used as catalyst diluters.

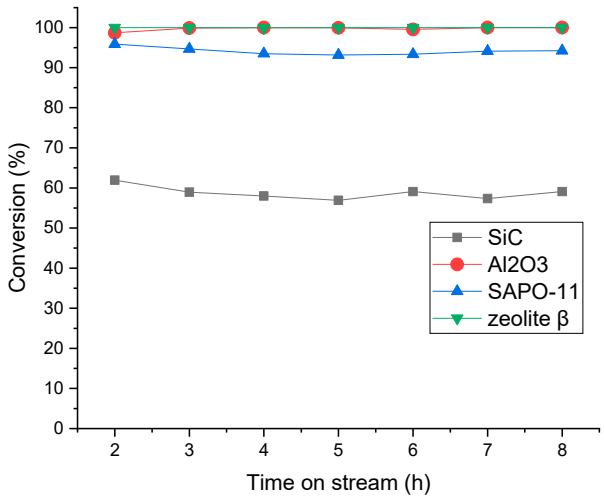

Figure 2. MP conversion vs time on stream for MoP/SiO_2 catalysts diluted with different materials. V_{cat} = 0.4 cm^3, LHSV = 60 h^{-1}, T = 290 °C, P_{H2} = 3 MPa, H_2/feed = 600 cm^3/cm^3.

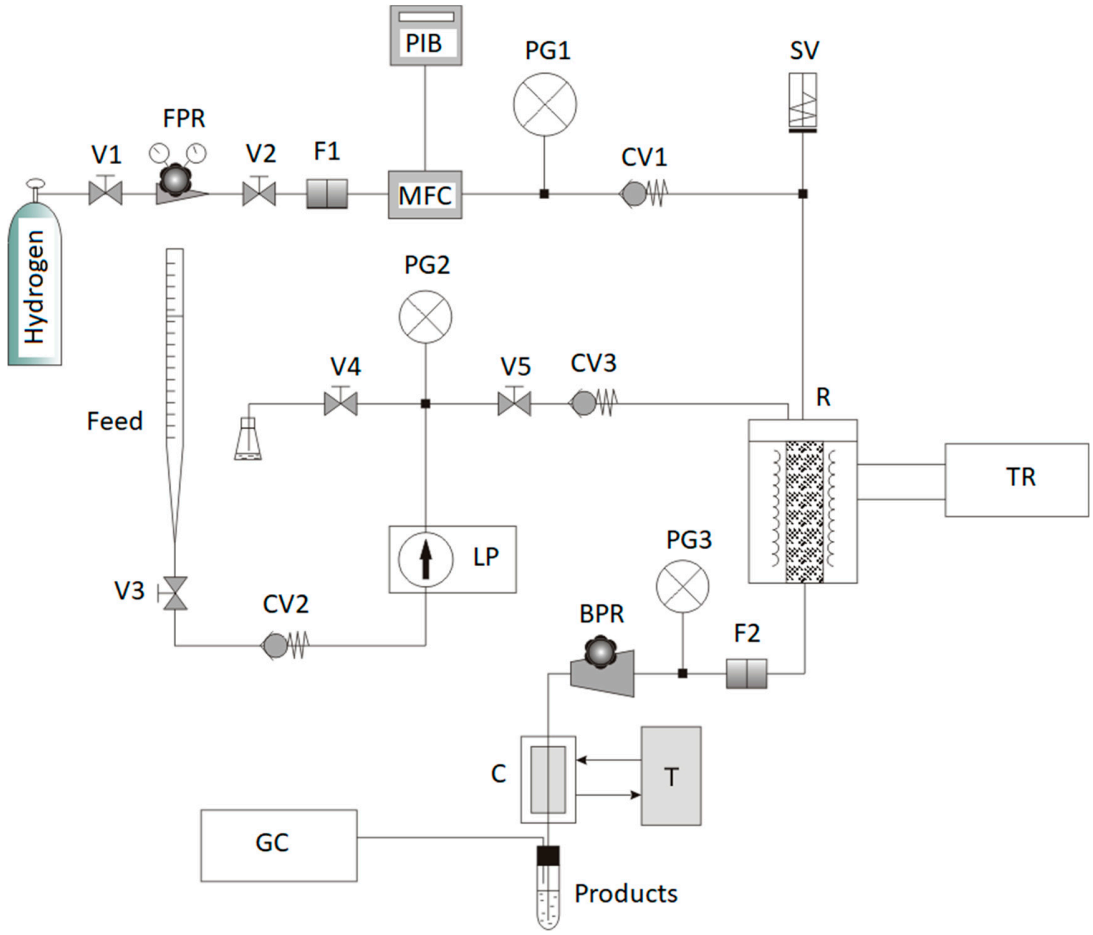

Figure S1. The scheme of the experimental setup. V1-V5 – valves, FPR – forward pressure regulator, F1, F2 – filters, PIB – power and indication block, MFC – mass flow controller, PG1-PG3 – pressure gauges, CV1-CV3 – check valves, SV – safety valve, LP – liquid pump, TR – temperature regulator, R – reactor and furnace, BPR – back pressure regulator, C – condenser, T – thermostat, GC – gas chromatograph.