

# Supplementary Materials: Catalytic conversion of palm oil to bio-hydrogenated diesel over novel N-doped activated carbon supported Pt nanoparticles

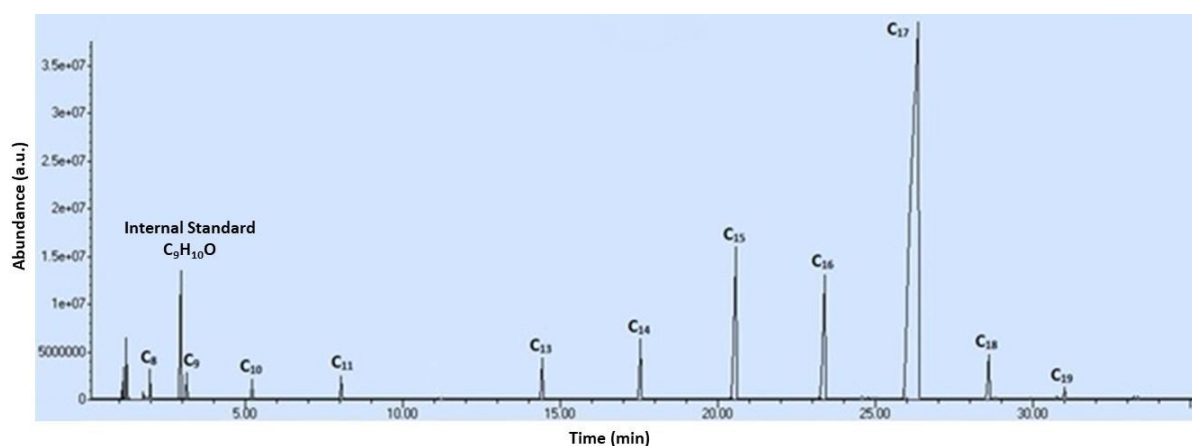
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**Table S1.** Composition of C<sub>8</sub>-C<sub>18</sub> liquid products (Reaction conditions: P = 30 bar, LHSV = 1.5h<sup>-1</sup>, H<sub>2</sub>/oil = 1000 cm<sup>3</sup>/cm<sup>3</sup>).

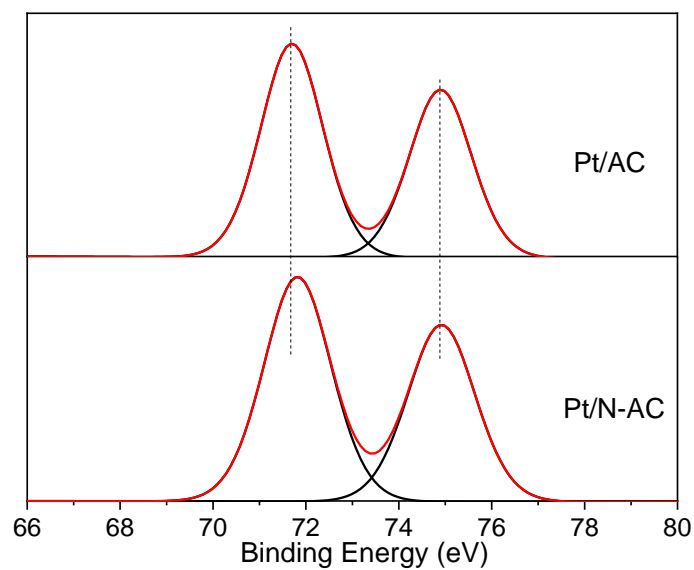
Temperature, °C	mol%									
	C <sub>8</sub>	C <sub>9</sub>	C <sub>10</sub>	C <sub>11</sub>	C <sub>13</sub>	C <sub>14</sub>	C <sub>15</sub>	C <sub>16</sub>	C <sub>17</sub>	C <sub>18</sub>
350	0.54	0.72	0.97	1.16	3.88	5.35	14.61	7.05	46.38	5.26
325	0.62	0.59	0.61	0.79	3.58	4.98	17.35	7.59	49.93	4.39
300	0.51	0.55	0.53	0.74	2.01	3.72	19.15	3.82	56.38	3.32
275	0.49	0.87	0.54	1.34	4.03	4.86	19.71	7.64	26.96	6.55
250	0.25	1.14	1.15	2.66	4.38	5.49	10.44	10.12	22.41	7.79

**Table S2.** Textural properties of the supports.

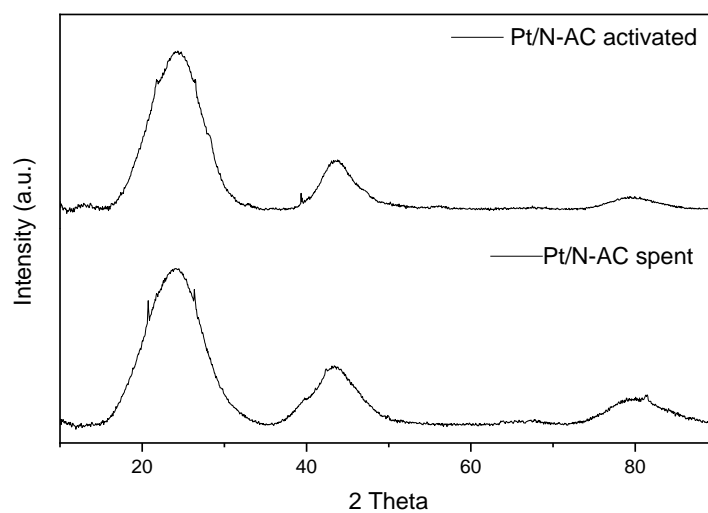
Support	V <sub>micro</sub> (cc/g)	V <sub>meso</sub> (cc/g)	S <sub>BET</sub> (m <sup>2</sup> /g)
AC	0.52	0.62	1487
NC	0.32	0.34	860



**Figure S1.** Representative GC/MS chromatogram identifying the production of liquid products (Reaction conditions: T = 325°C, P = 30 bar, LHSV = 1.2 h<sup>-1</sup>, H<sub>2</sub>/oil = 1000 cm<sup>3</sup>/cm<sup>3</sup>).



**Figure S2.** XPS Pt 4f spectra for Pt-based catalysts after reduction treatment.



**Figure S3.** XRD of activated and spent Pt/N-AC catalyst.



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