Transmission electron microscopy of detonation carbon.

Photoalbum.

Trotyl (TNT) Trotyl/hexogen (TNT/RDX 50/50) Triaminotrinitrobenzene (TATB) Benzotrifuroxan (BTF)

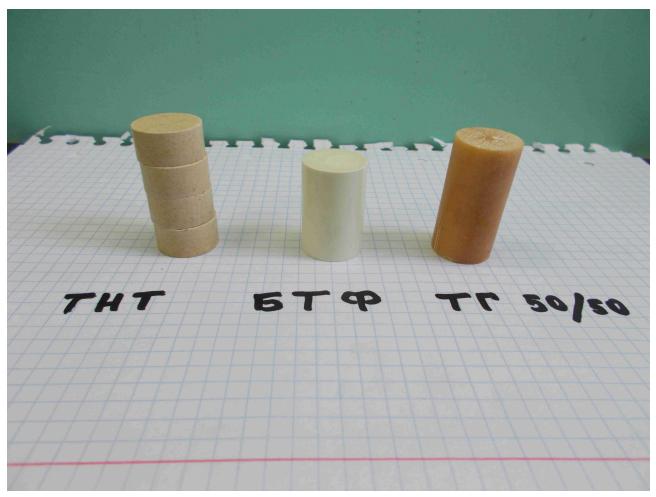
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Lavrentyev Institute of Hydrodynamics of SB RAS Syberian Branch of Russian Academy of Science

February 9, 2016

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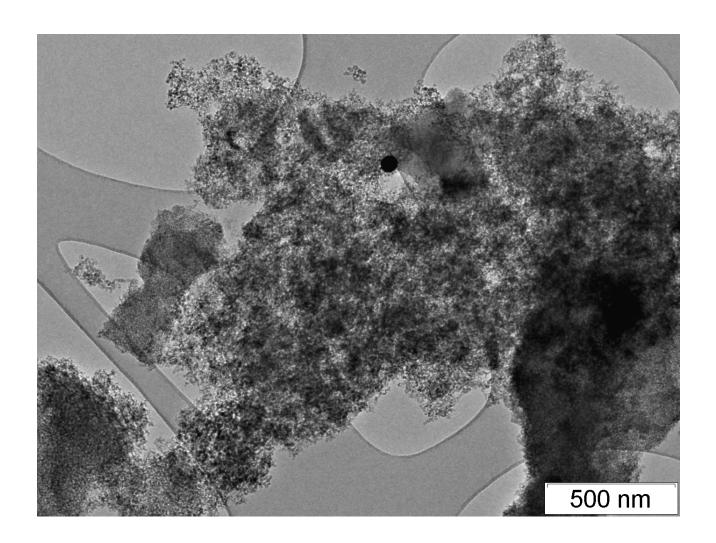


1 Trotyl

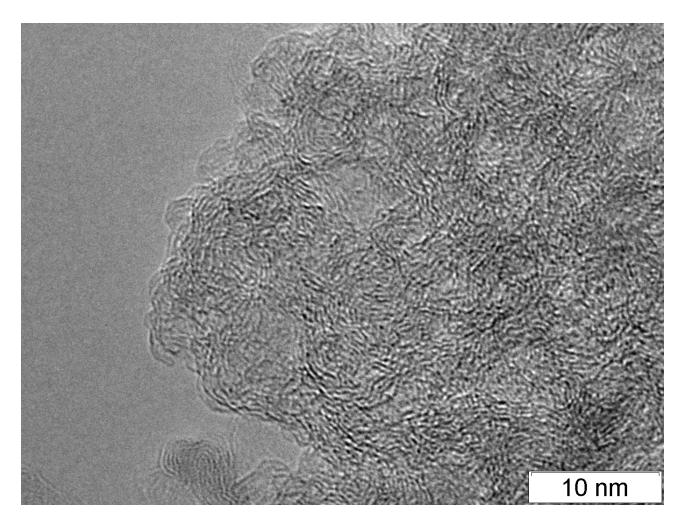
Cast charge

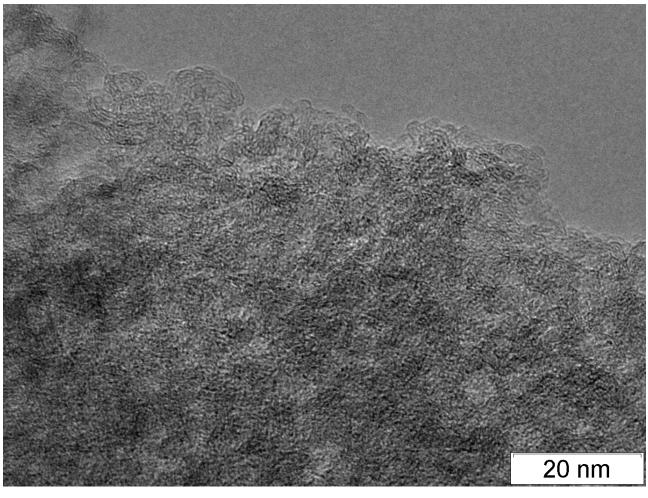
Diameter 20 mm

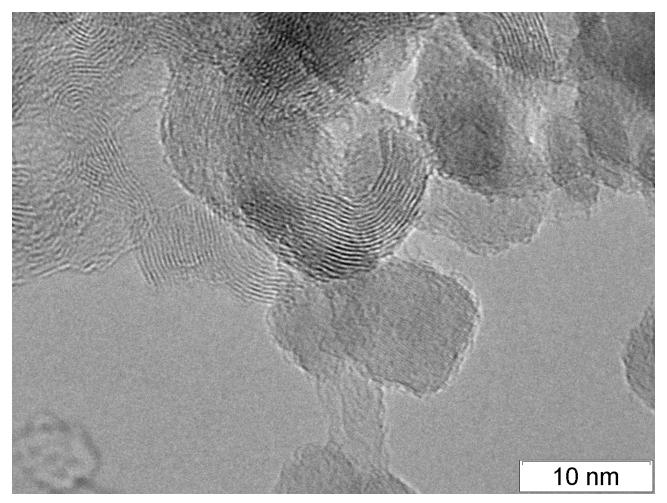
Mass: 20 g.

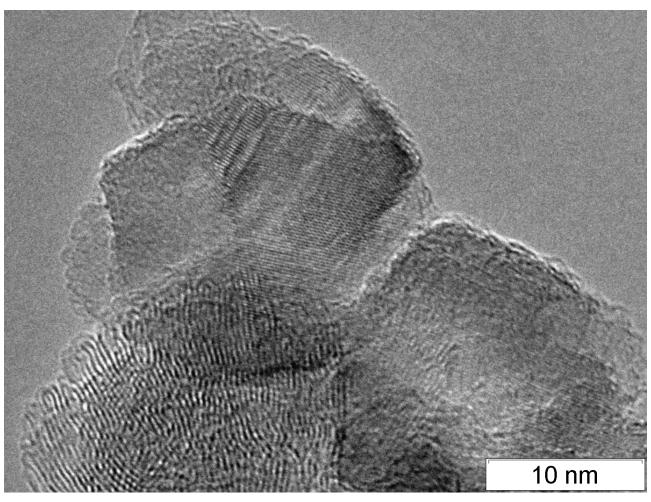


Trotyl 5

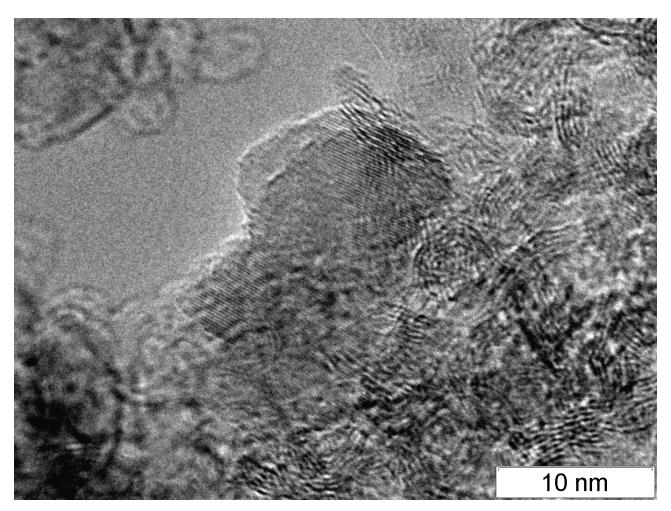


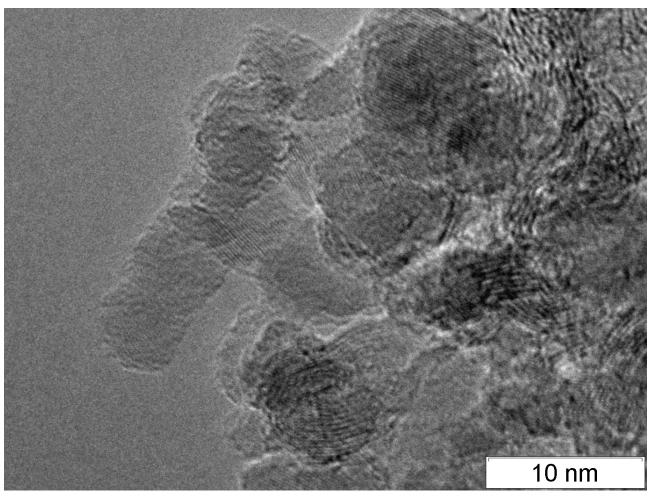






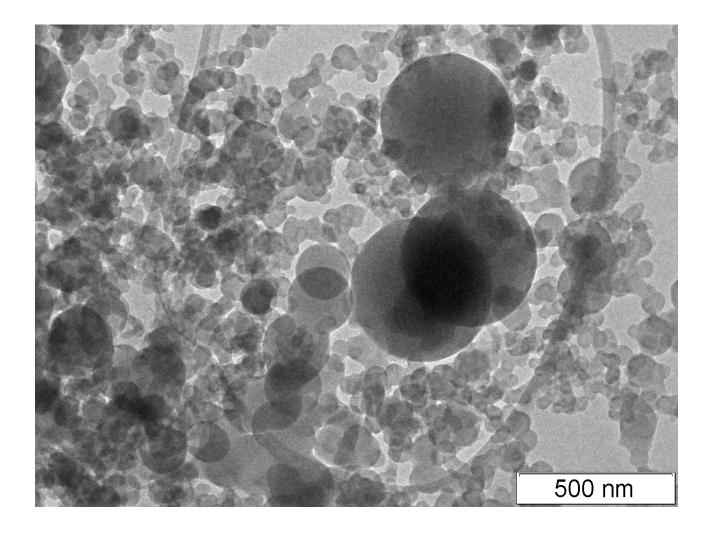
Trotyl 7

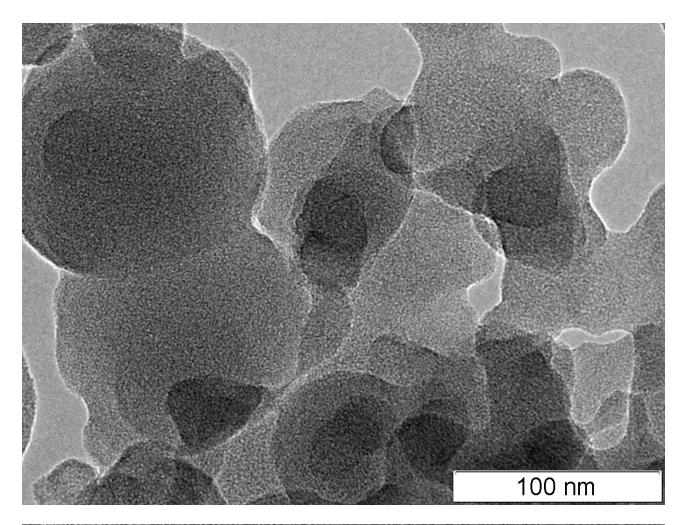


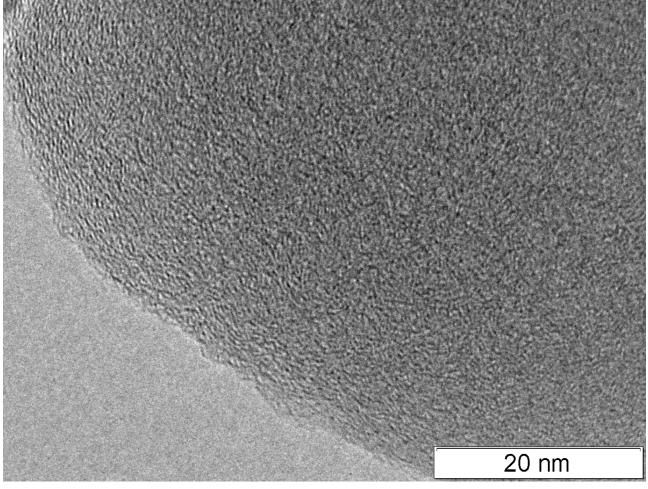


2 Trotyl. Combustion products.

Combustion products at atmospheric pressure.





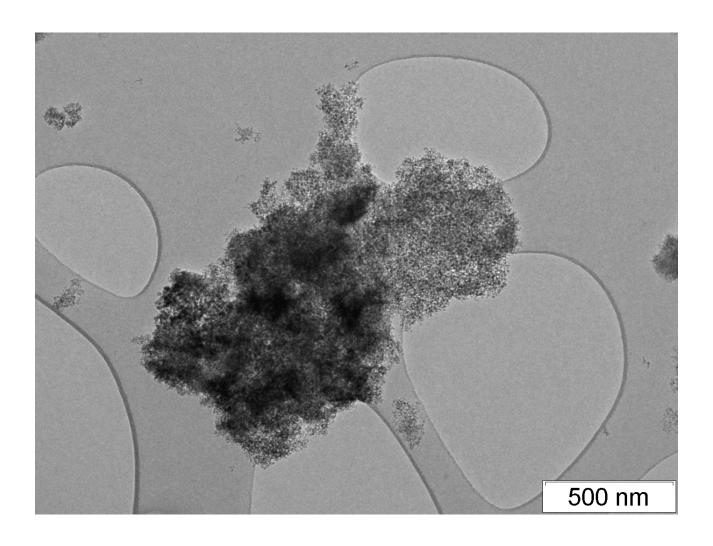


$3 \quad \text{TNT/RDX} (50/50)$

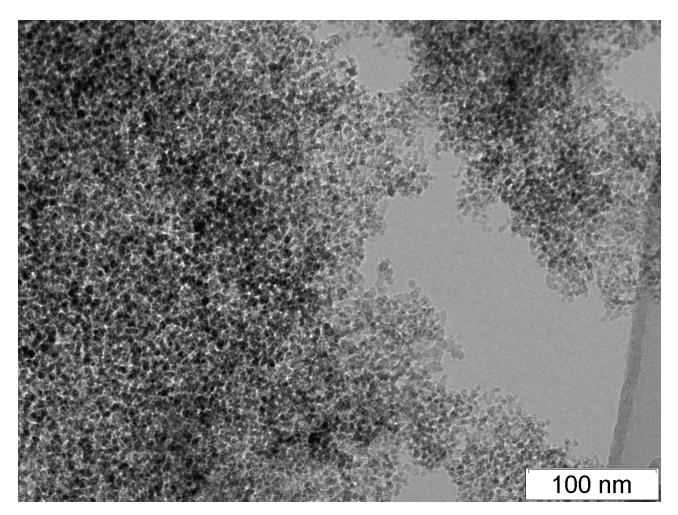
Cast charge

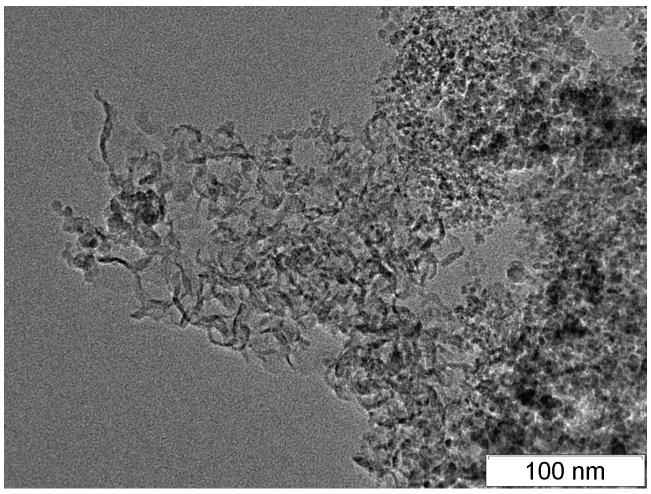
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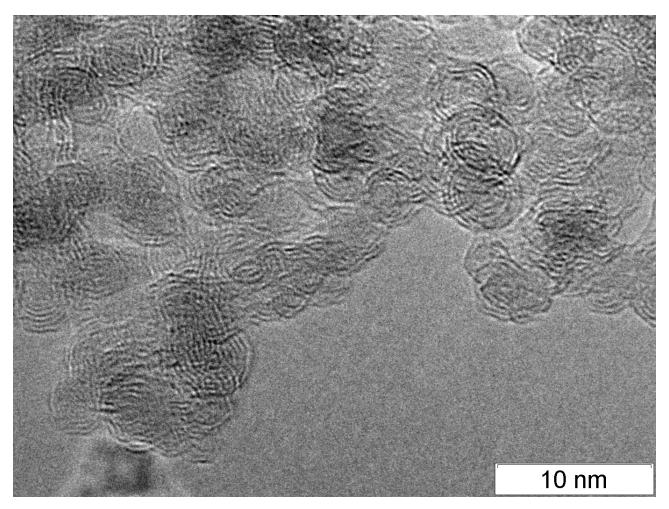
Mass: 15.5 g.

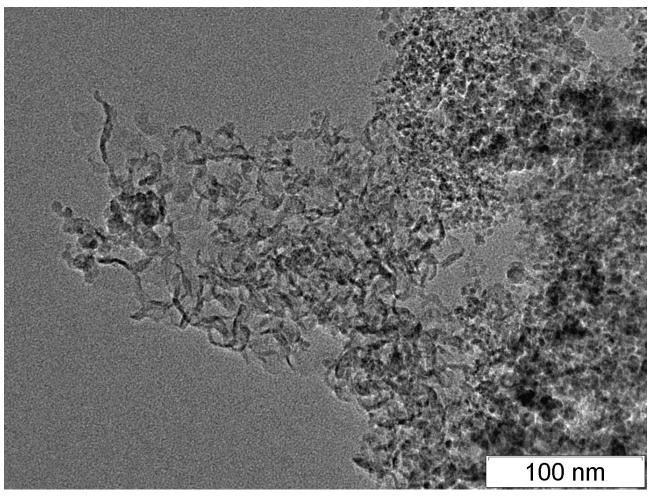


TNT/RDX (50/50) 11

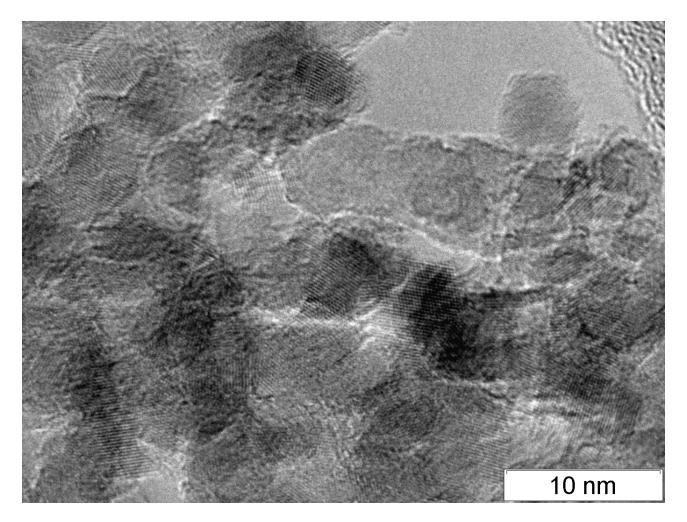


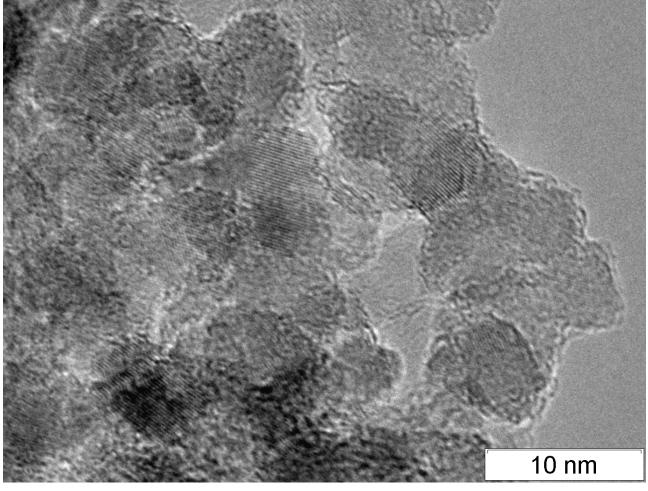


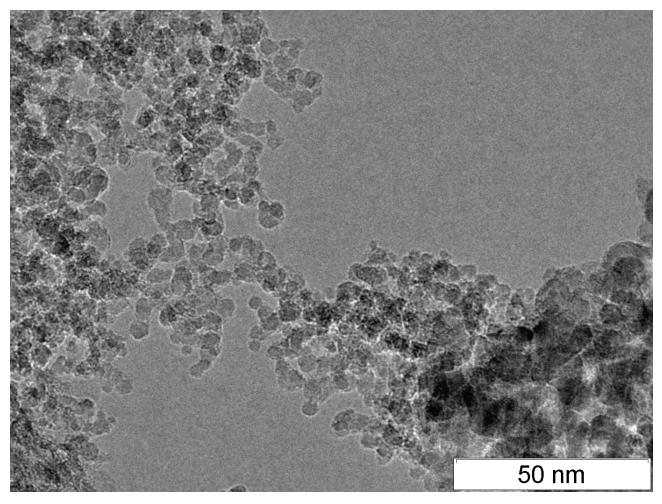


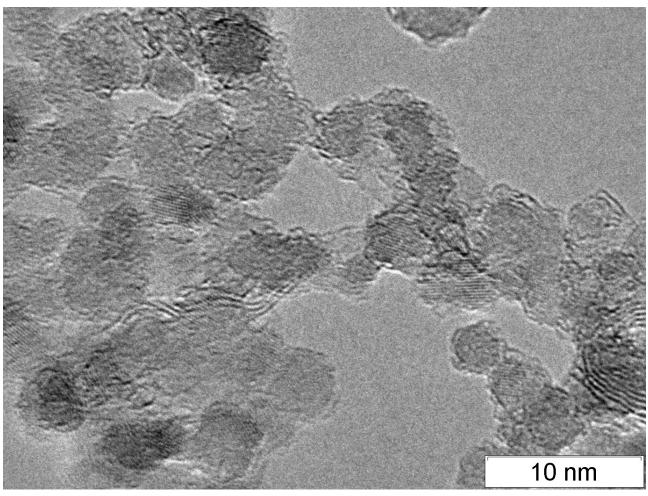


TNT/RDX (50/50) 13

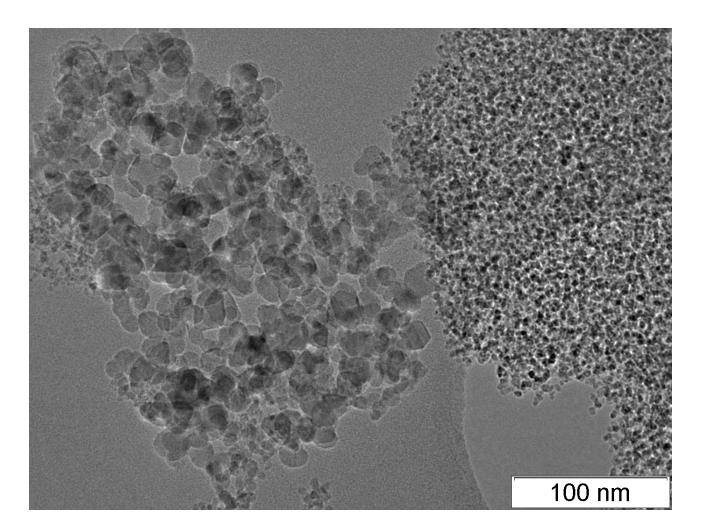






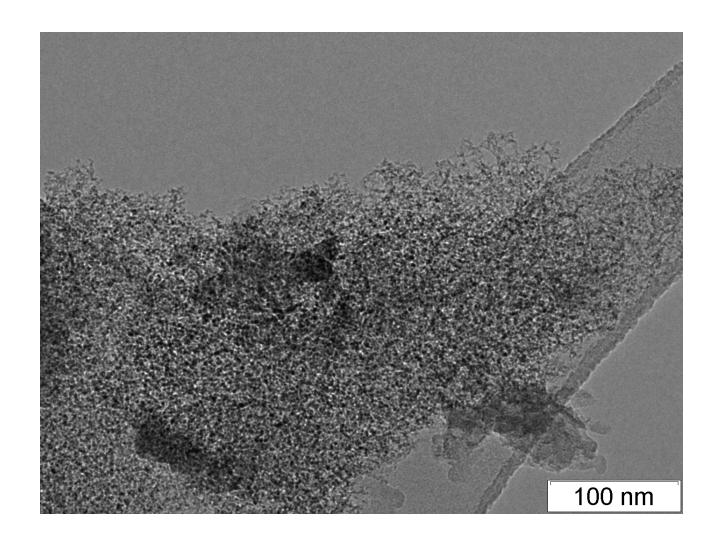


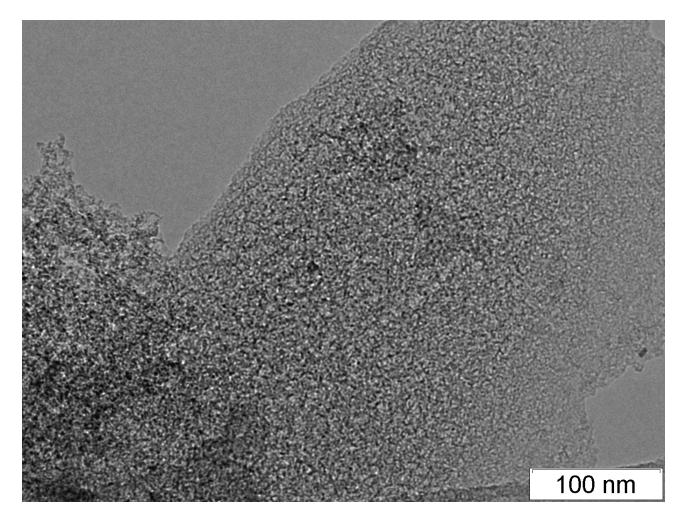
TNT/RDX (50/50) 15

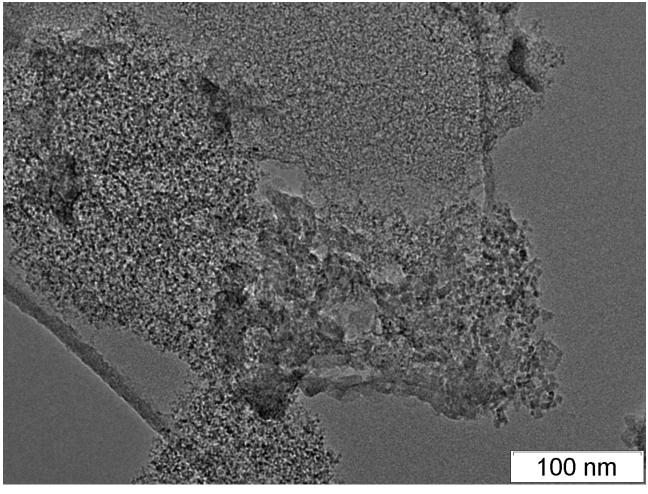


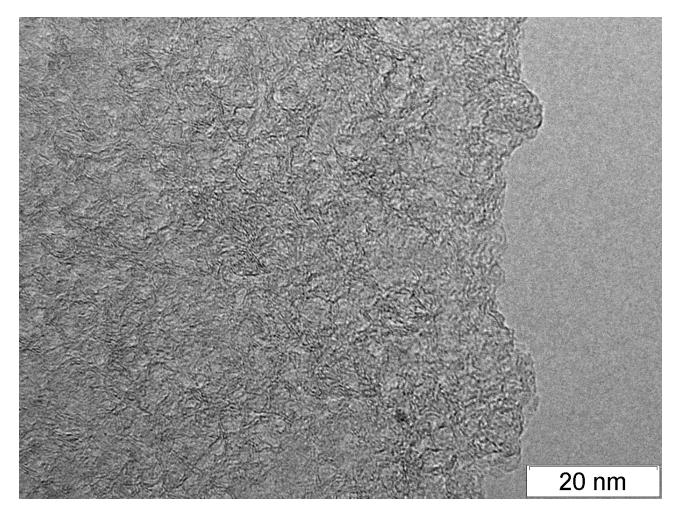
Diameter 20 mm.

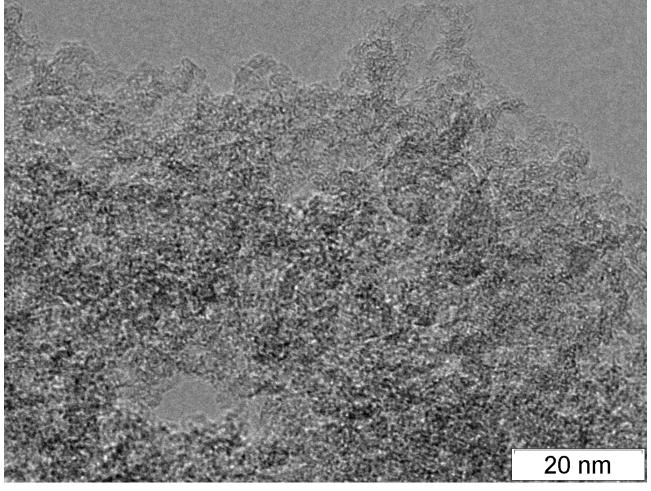
Mass: 22 g

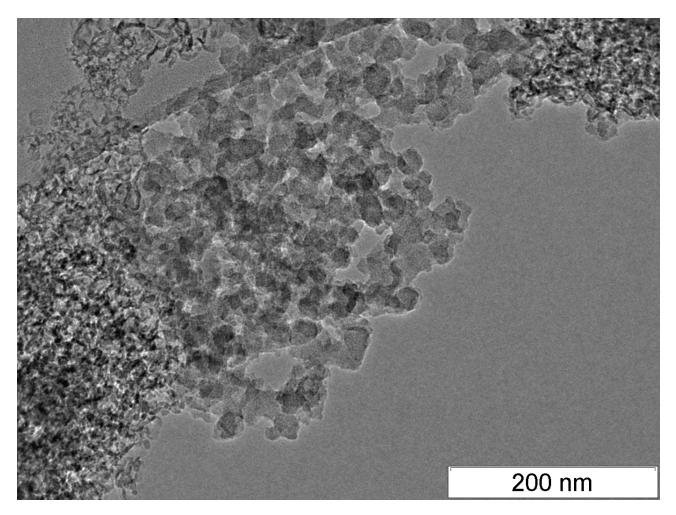


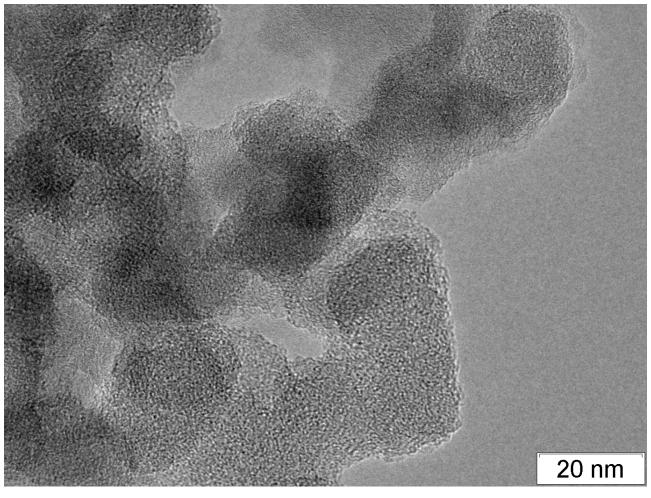


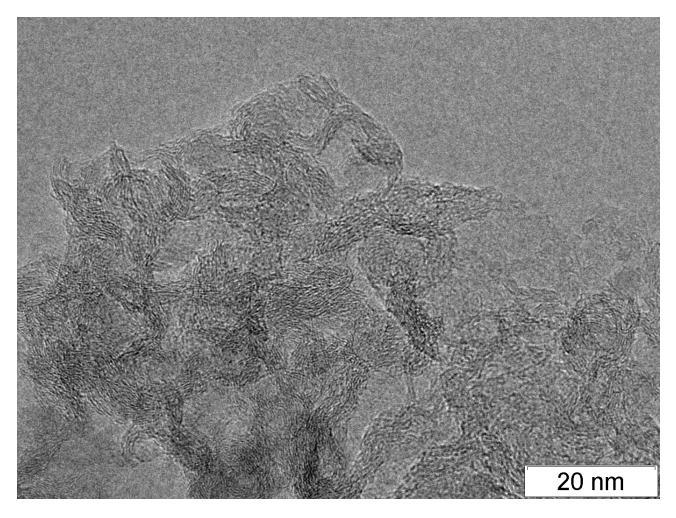


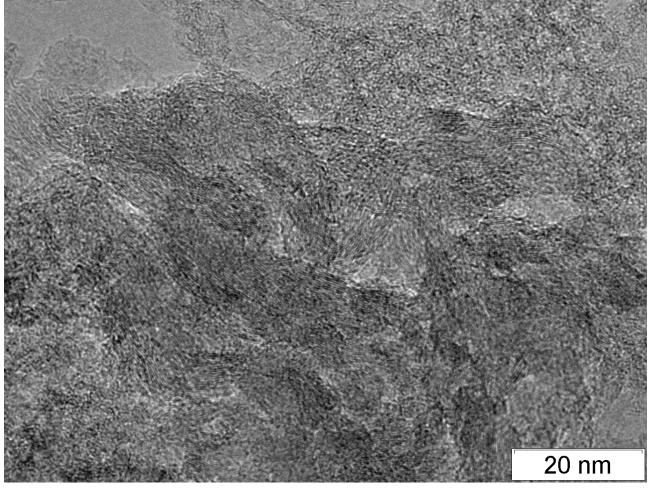


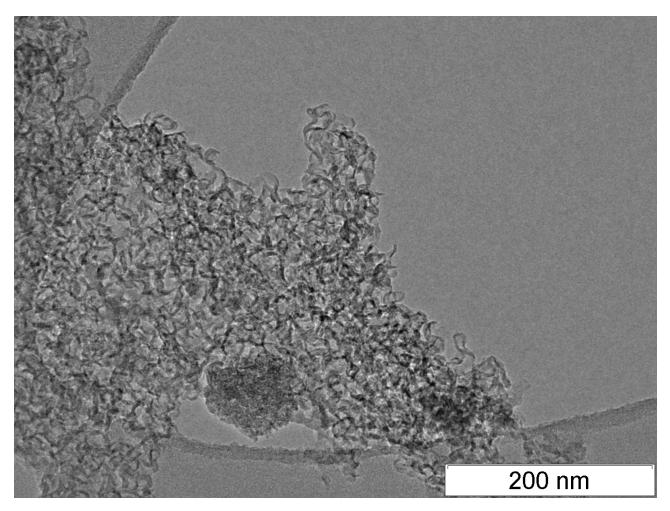


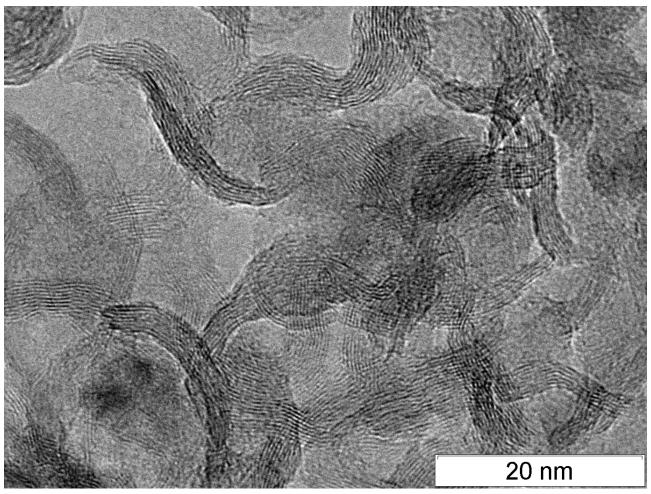








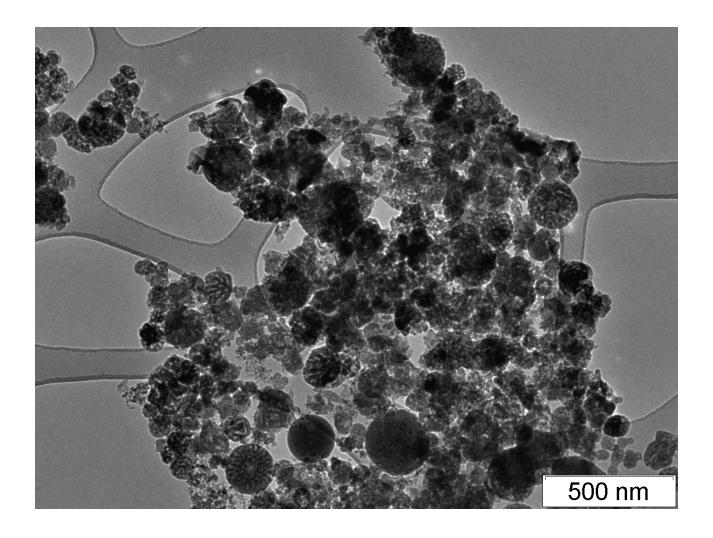


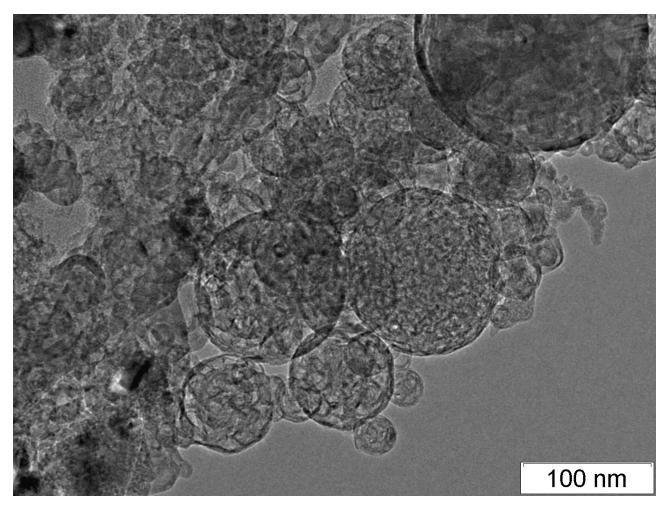


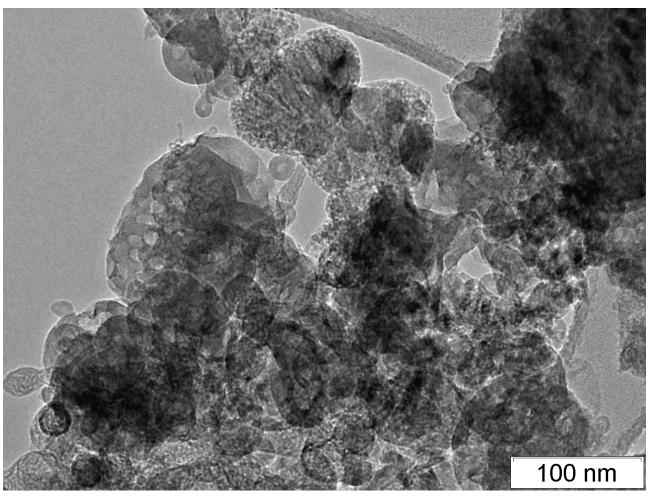
5 BTF pressed

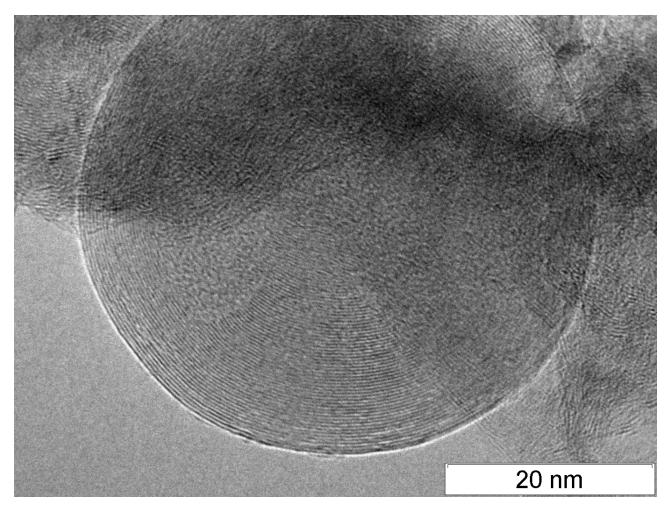
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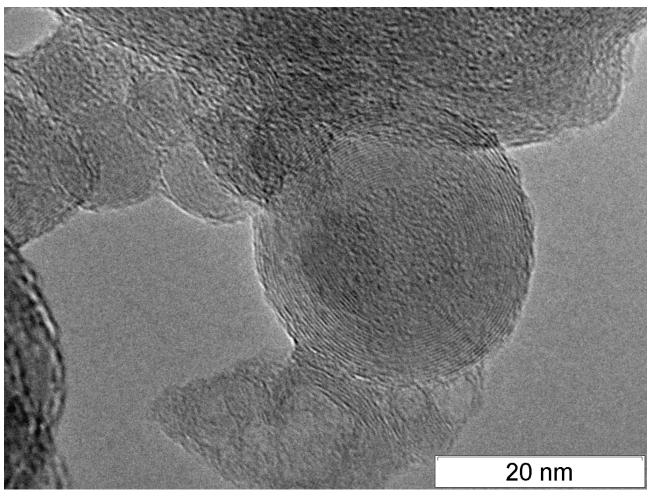
Mass: 17 g

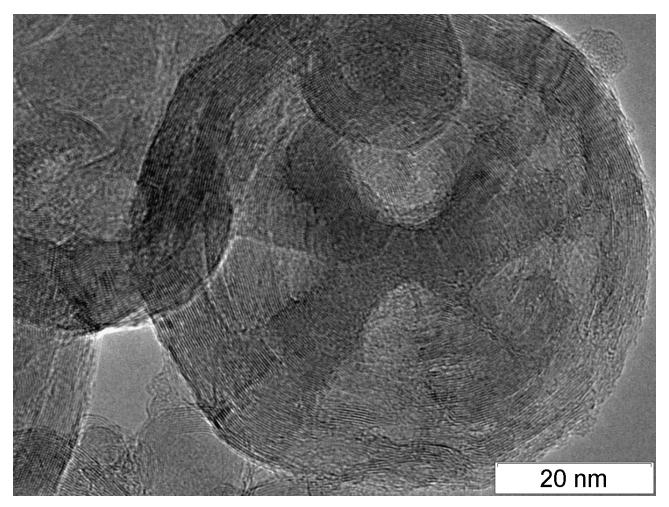


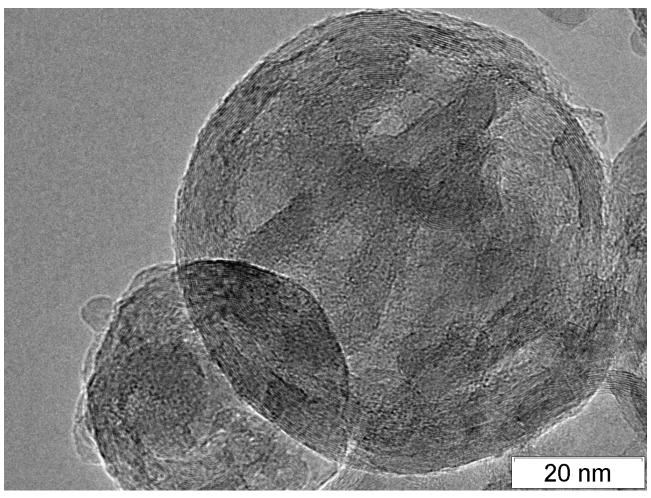


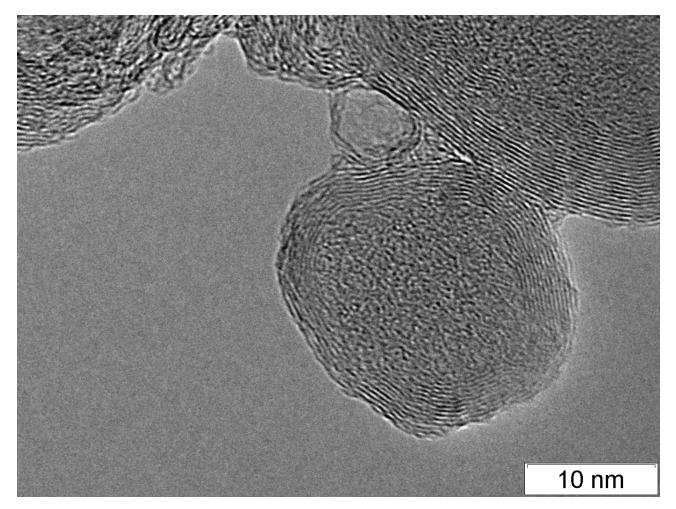


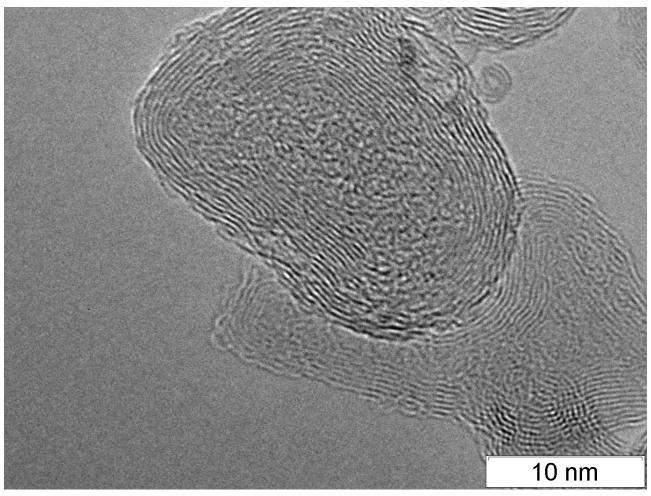


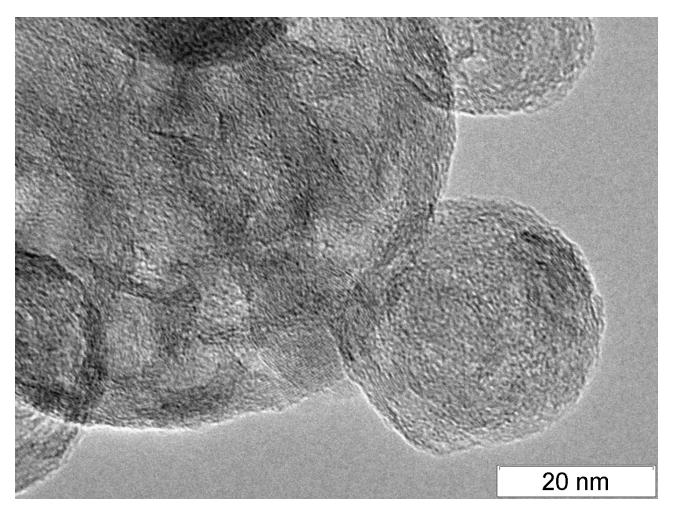


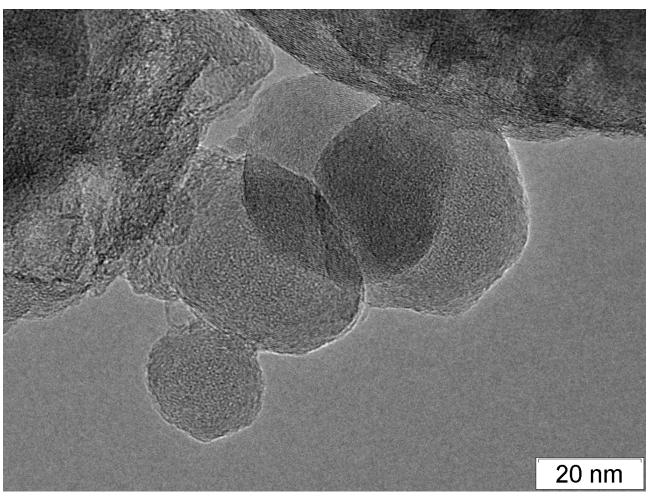


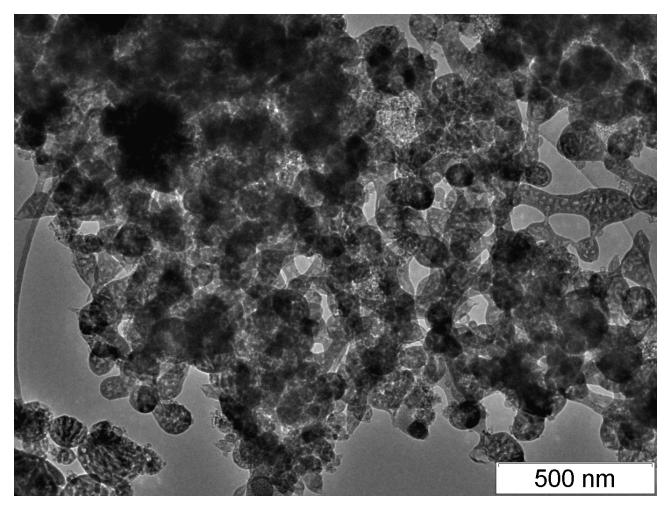


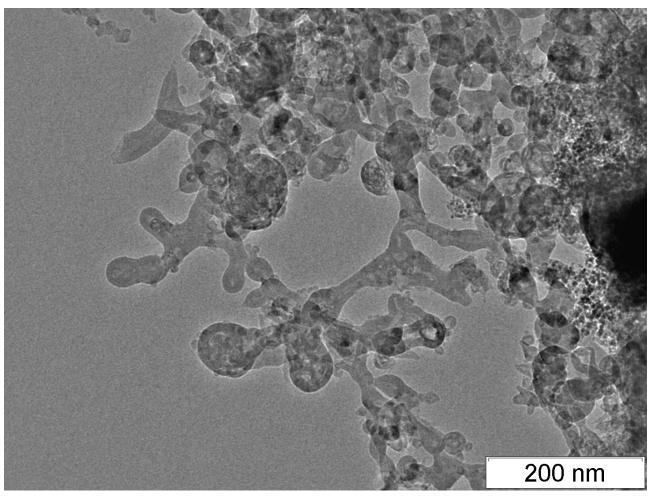


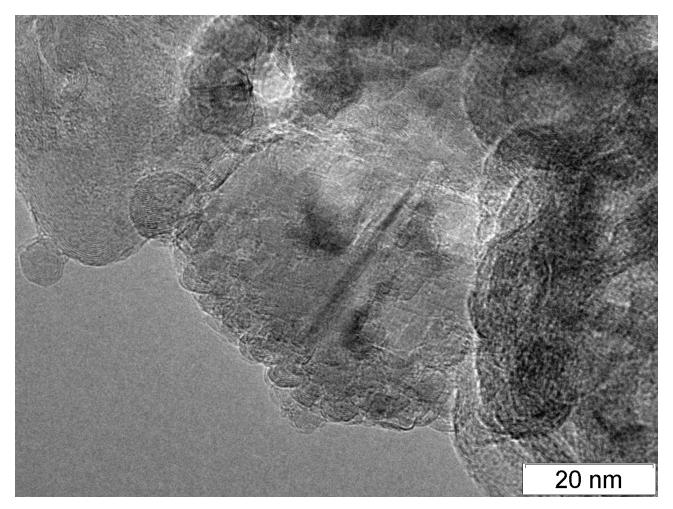


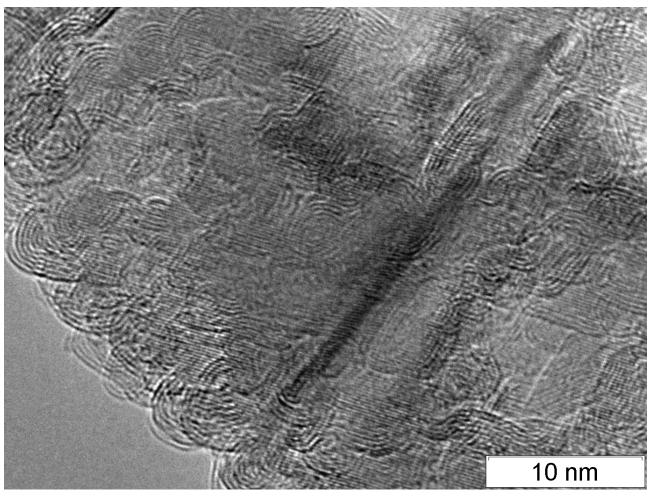








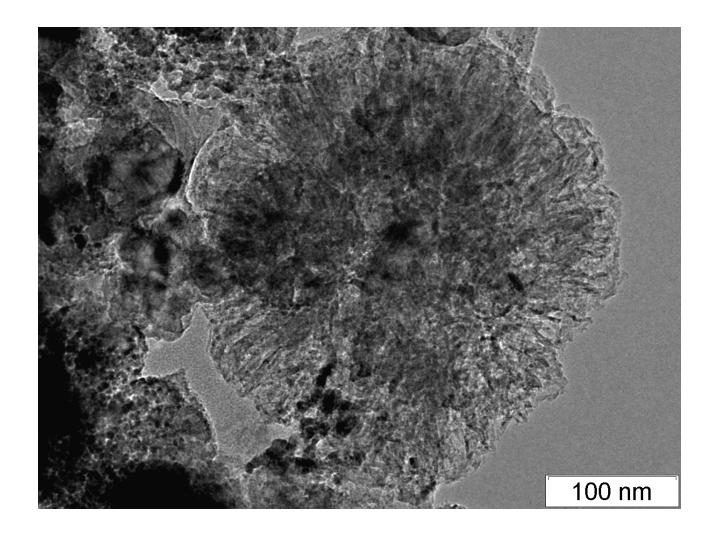


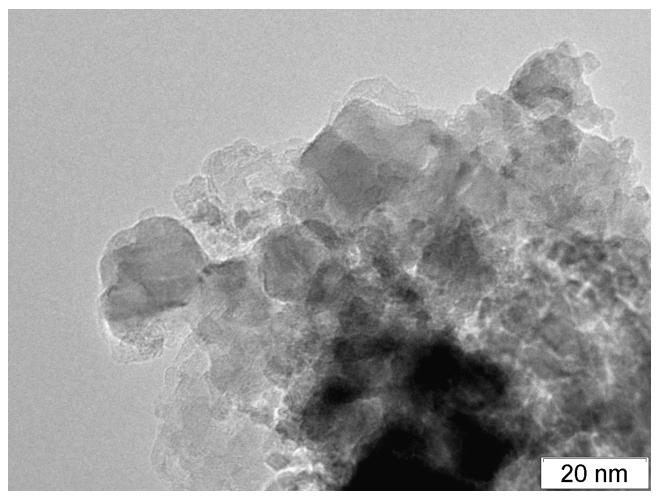


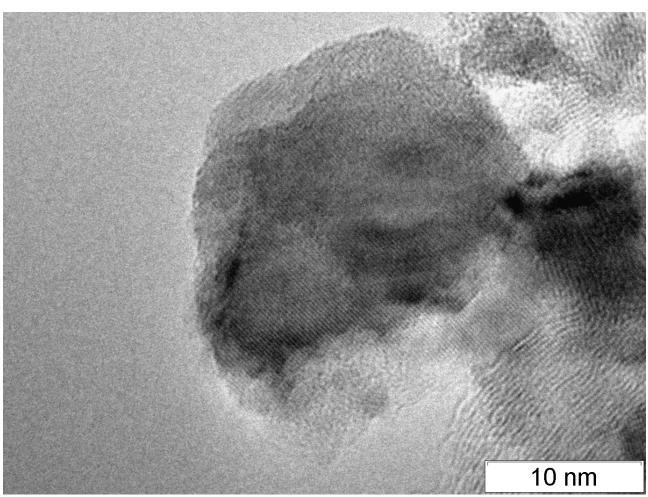
6~ BTF pressed. Annealed at a temperature of 460 $^{\circ}\mathrm{C}$

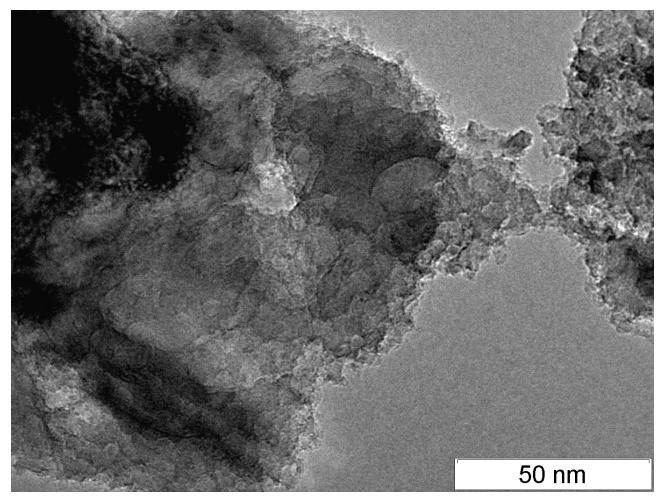
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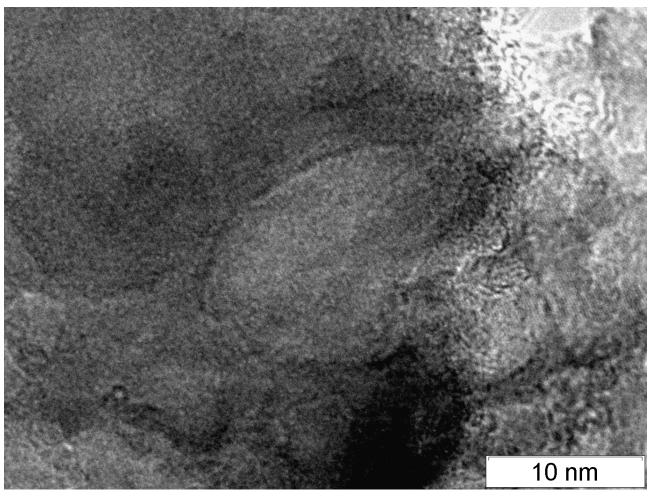
Mass: 17 g

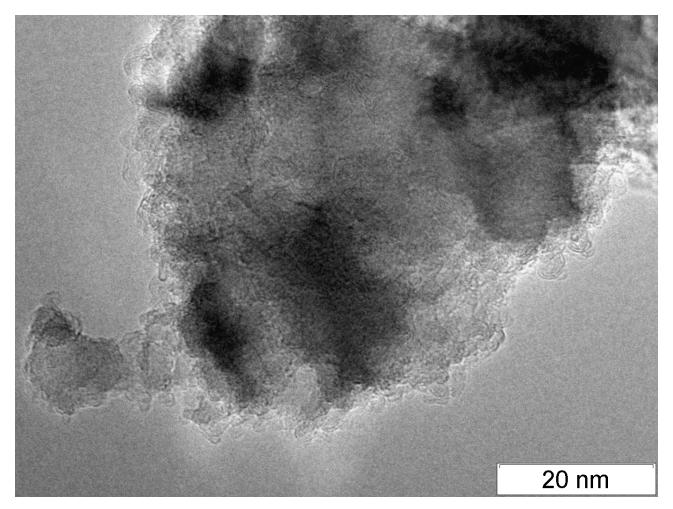


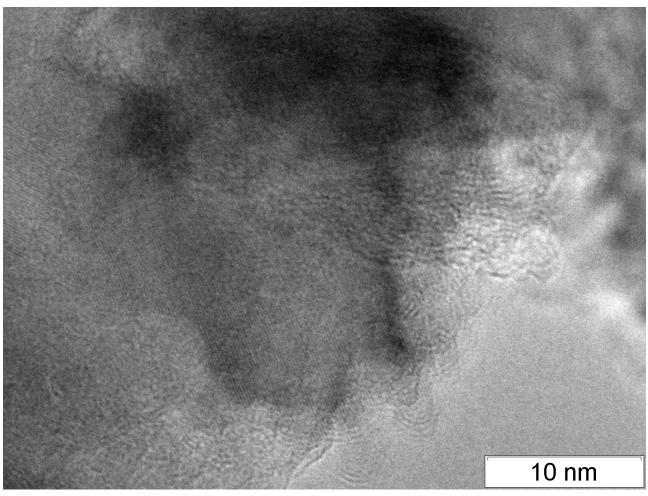








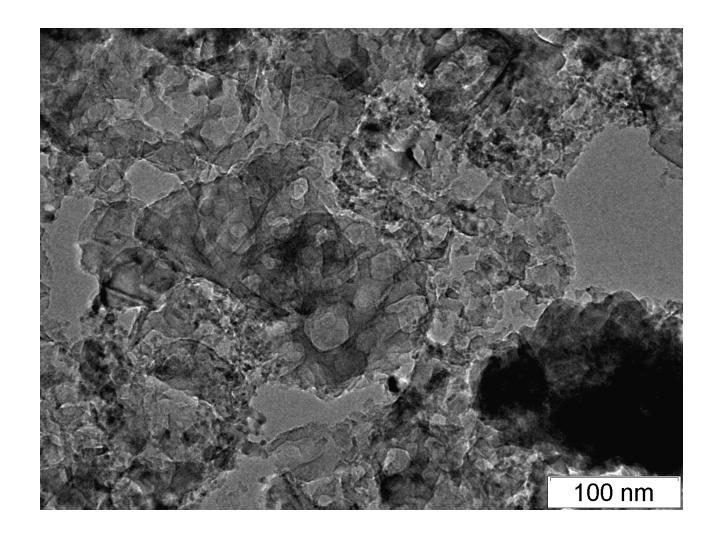


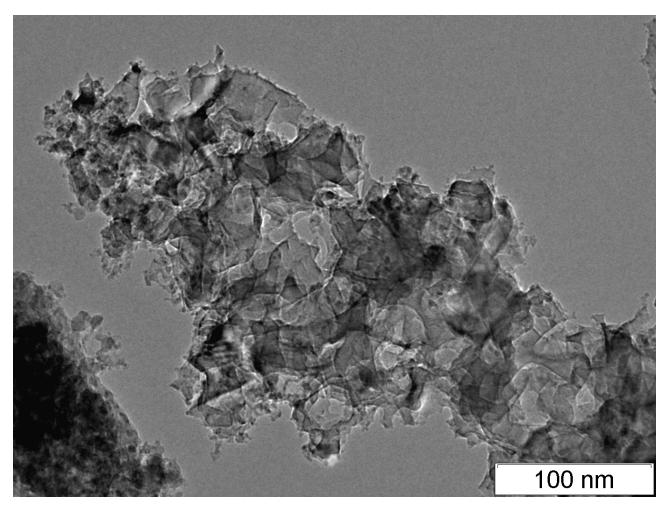


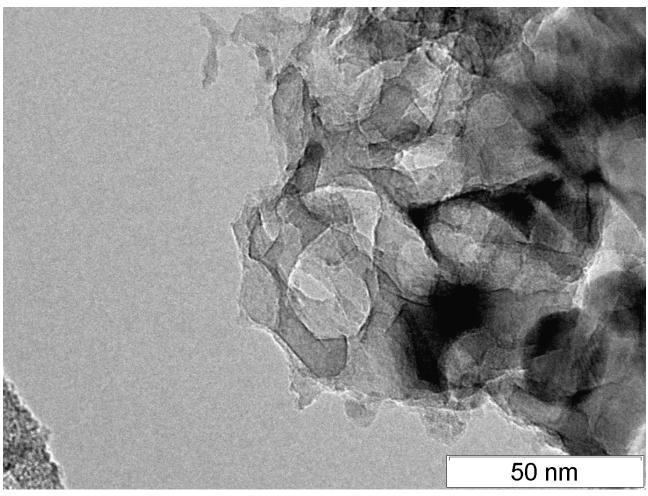
7 BTF pressed. Annealed at a temperature of 515 $^{\circ}\mathrm{C}$

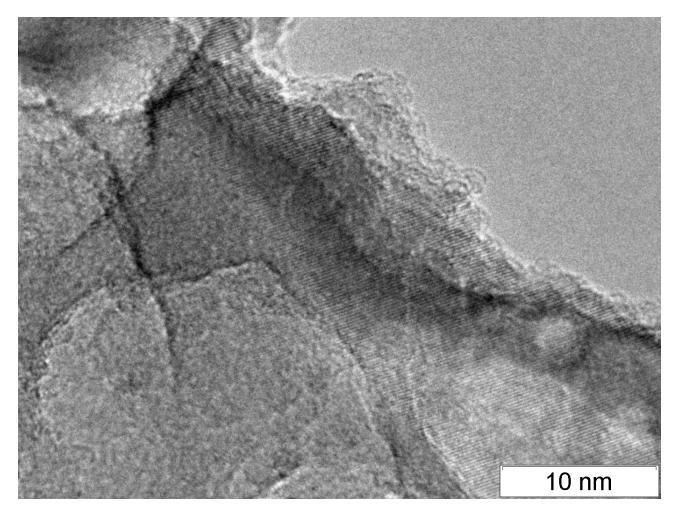
Density: 1.80 g/cc

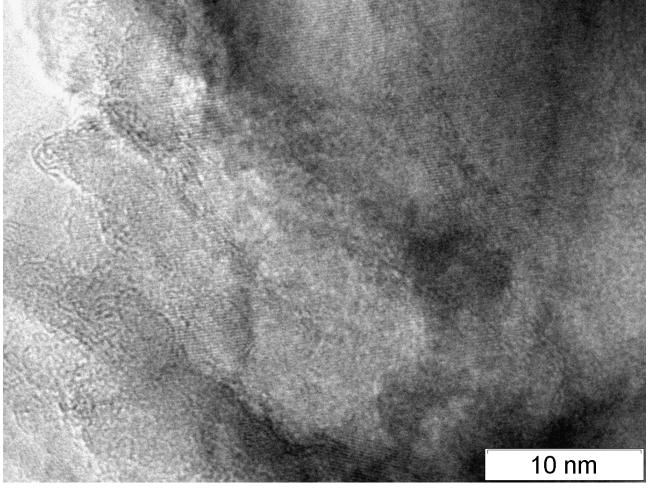
Mass: 17 g

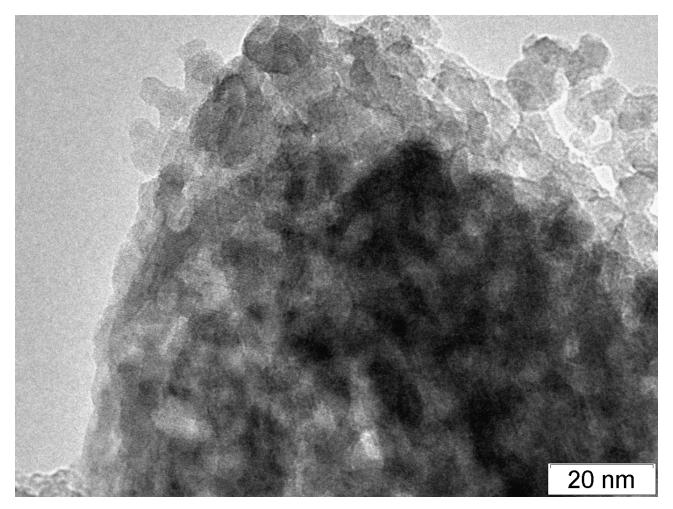


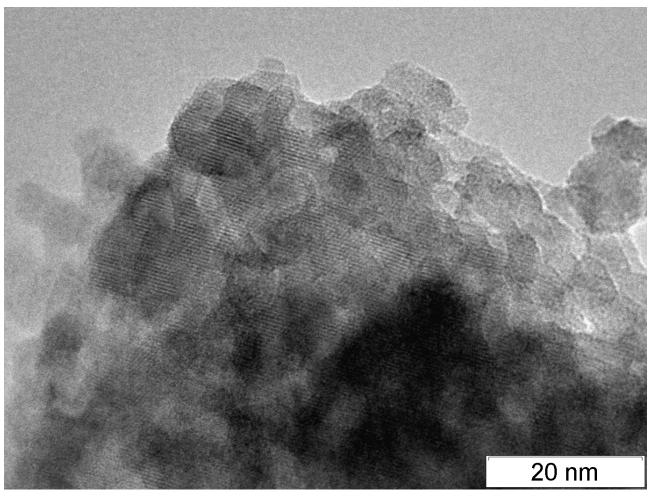






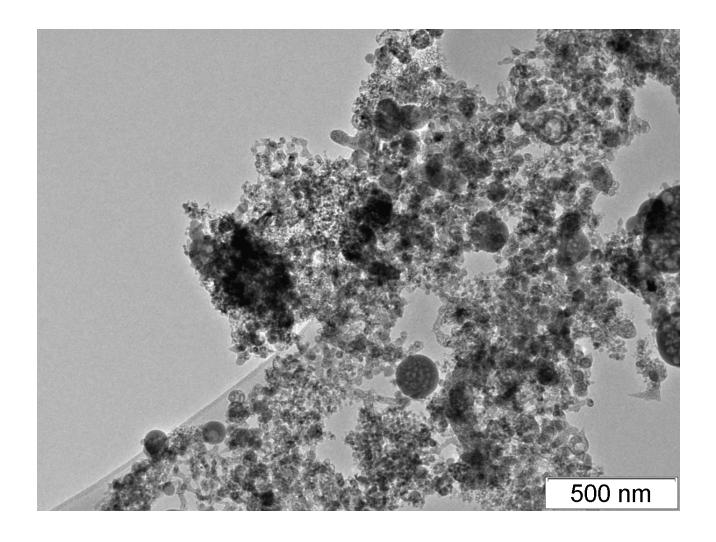


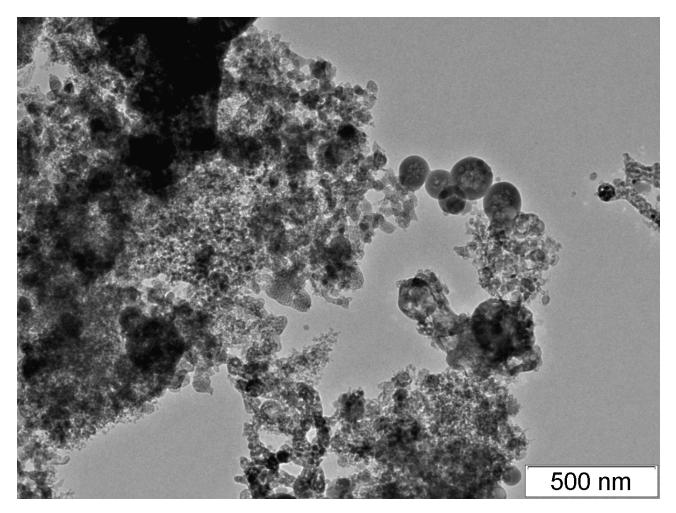


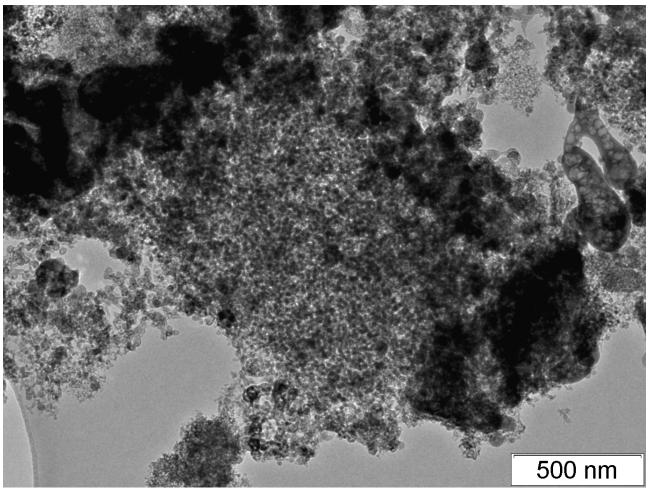


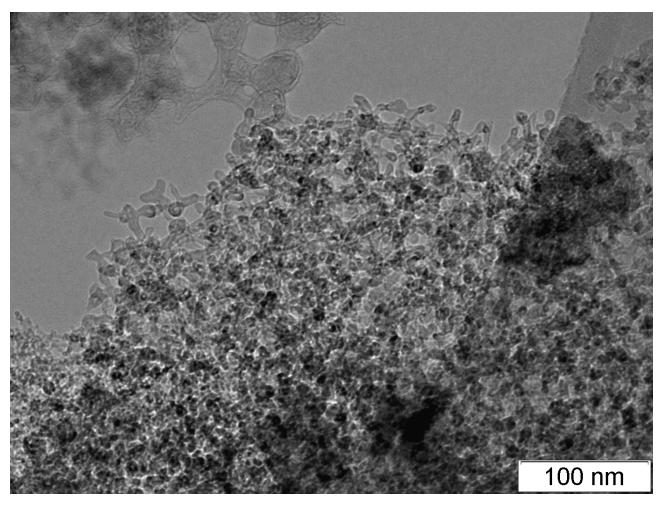
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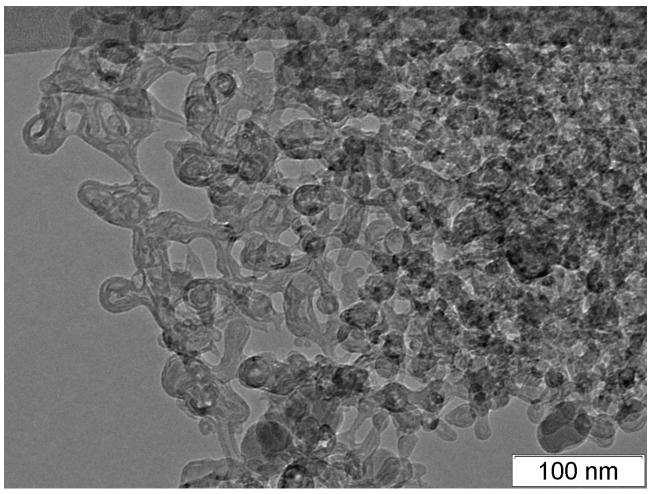
Mass: 17 g

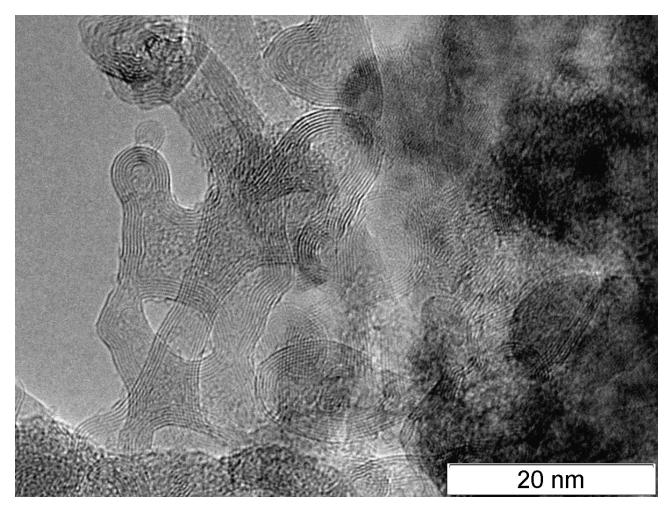


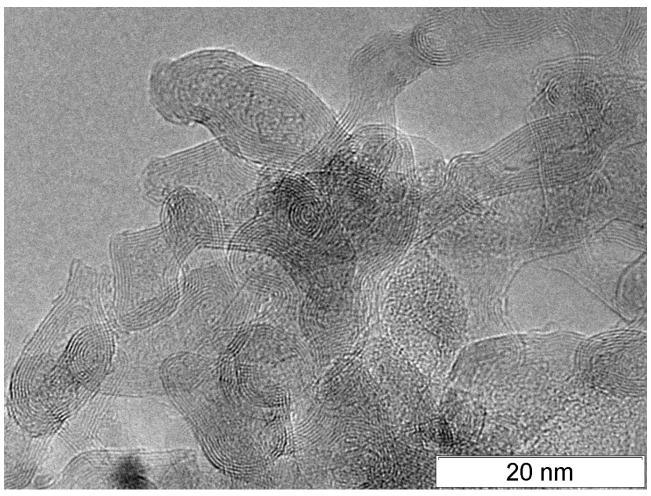


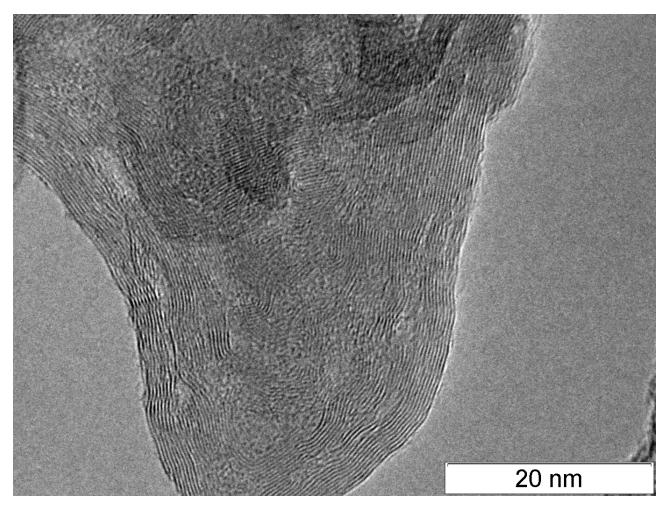


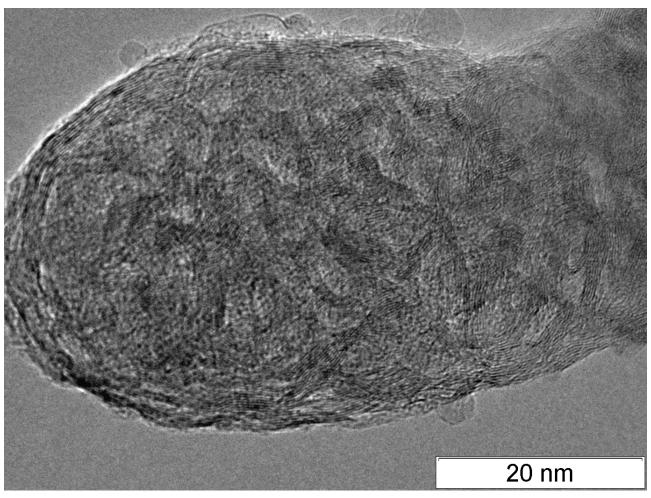


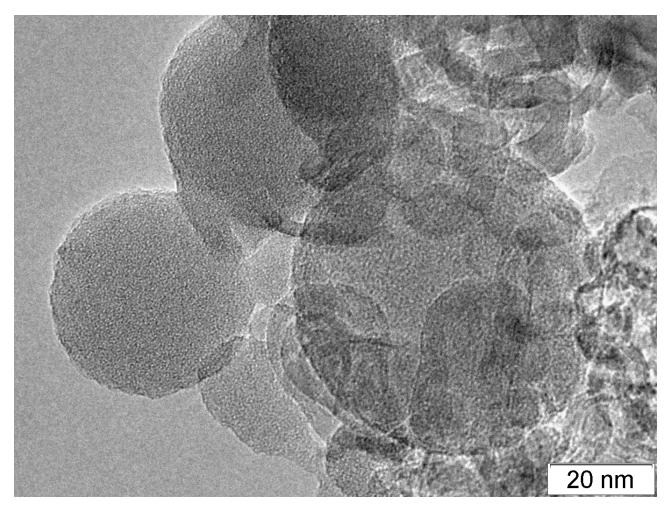


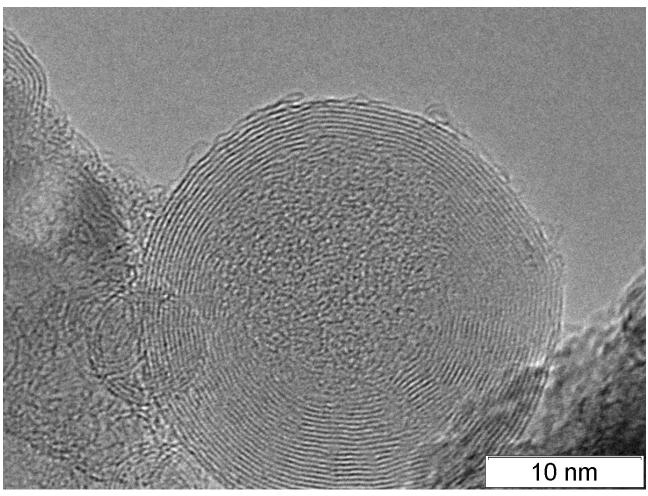


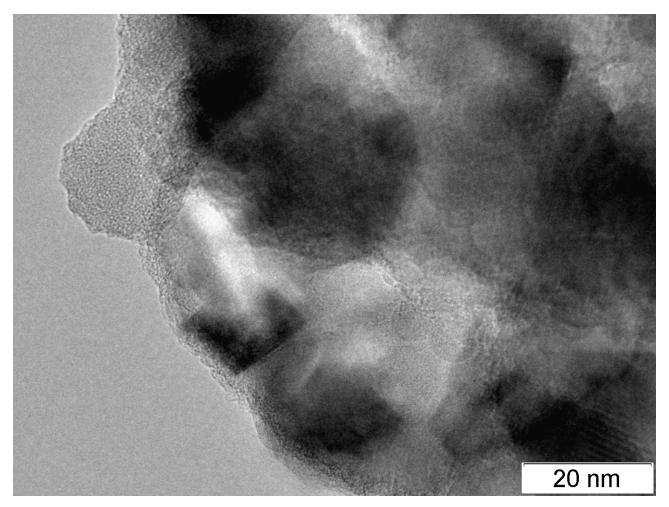


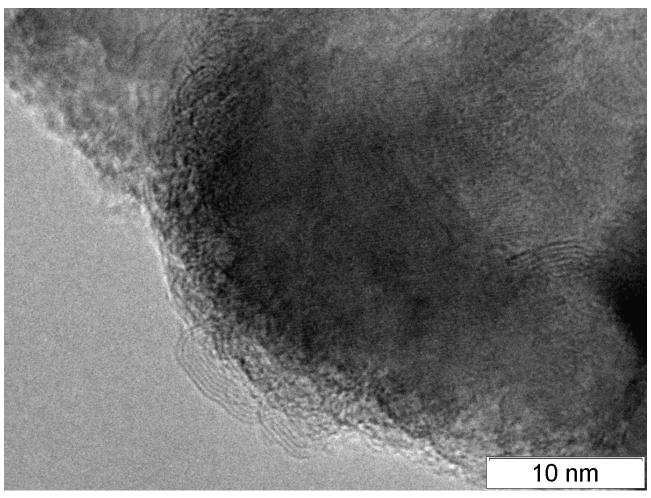


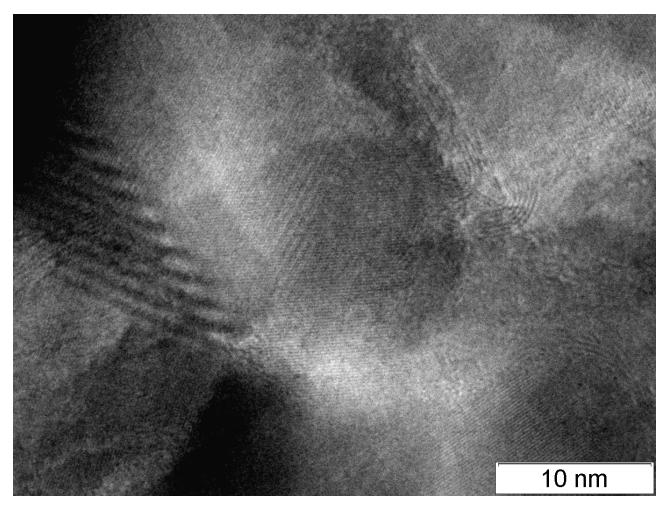


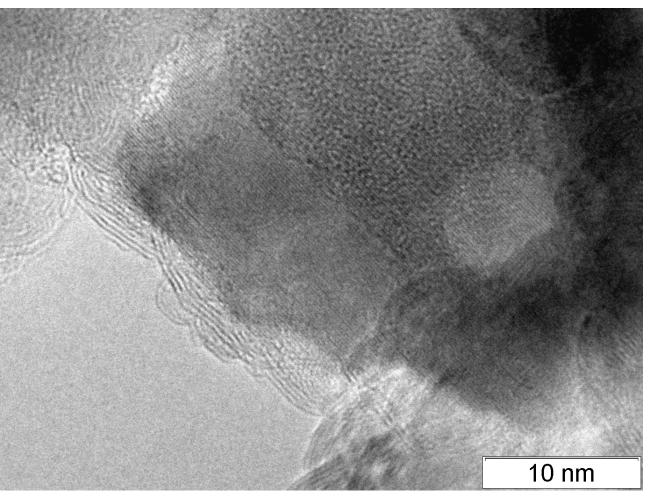












9 BTF plastified. Annealed at a temperature of 520 $^{\circ}\mathrm{C}$

Density: 1.66 g/cc

Mass: 17 g

