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## Expansion of the hydride chemistry –new materials based on mixed anionic hydrides

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Three unprecedented mixed anionic hydrides were synthesized. Here we present the first representatives of the materials classes of the phosphate, borate and lastly the sulfate hydrides. The compounds were analyzed by the means of X-ray and neutron diffraction. The abundance of Hydride next to the complex anions is proven by vibrational spectroscopy and  $^1\text{H}$  MAS NMR spectroscopy in combination with DFT-calculations, proving the unprecedented abundance of hydrides next to the complex oxoanions.

**Primary authors:** MUTSCHKE, Alexander; Dr KUNKEL, Nathalie (Technische Universität München); Dr WYLEZICH, Thomas

**Presenter:** MUTSCHKE, Alexander

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