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**One-pot synthesis of zeolitic imidazolate framework-8/poly (methyl methacrylate-ethyleneglycol dimethacrylate) monolith coating for stir bar sorptive extraction of phytohormones from fruit samples followed by high performance liquid chromatography-ultraviolet detection**

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**Highlights**

- ZIF-8/poly (MMA-EGDMA) monolith stir bar coating was in situ synthesized by one-pot polymerization.
- The preparation process is simple-to-operate and low-cost.
- A method of ZIF-8/monolith-SBSE-HPLC-UV was proposed for analysis of phytohormones in fruits.
- It is sensitive and selective towards polar phytohormones.

**ABSTRACT**

In this work, zeolitic imidazolate framework-8 (ZIF-8)/poly (methyl methacrylate-ethyleneglycol dimethacrylate) (MMA-EGDMA) composite monolith was *in situ* synthesized on stir bar by one-pot polymerization. Compared with the neat monolith, ZIF-8/poly(MMA-EGDMA) composite monolith has larger surface area and pore volume. It also exhibits higher extraction efficiency for target phytohormones than poly(MMA-EGDMA) monolith and commercial polyethylene glycol (PEG) coated stir bar. Based on it, a method of

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