New alkyl derivatives phosphine sulfonate (P-O) ligands. Catalytic activity in Pd-catalysed Suzuki-Miyaura reactions in water

Two novel bis(o-methoxyphenyl) phosphinoalkylsulfonate (P-O) ligands have been prepared through a new and sustainable synthetic route; they are air stable as well as water soluble and have been applied in Pd-catalysed Suzuki-Miyaura cross-coupling reactions in neat water in conjunction with microwave heating.