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CORRECTION

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Correction: A novel polymer containing phosphorus–nitrogen ligands for stabilization of palladium nanoparticles: an efficient and recyclable catalyst for Suzuki and Sonogashira reactions in neat water

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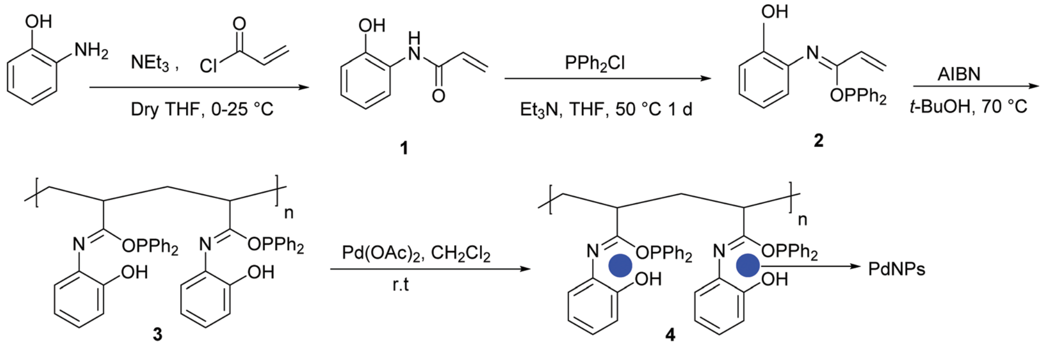
Correction for 'A novel polymer containing phosphorus–nitrogen ligands for stabilization of palladium nanoparticles: an efficient and recyclable catalyst for Suzuki and Sonogashira reactions in neat water' by M. Gholinejad, *et al., Dalton Trans.*, 2015, **44**, 14293–14303.

The authors regret that the second step in Scheme 1 of the above mentioned paper was incorrect, this has been corrected below and the characterization supporting the identity of compound **2** is presented herein. This correction does not affect the discussion or conclusions of the original article.



Scheme 1 Steps for the preparation of polymeracrylamide containing phosphorous ligand (**3**).

The ^{31}P NMR spectrum of product **2** showed a chemical shift for ^{31}P at 36.7 ppm (Fig. 1).

The ^{1}H NMR spectrum of compound **2** showed a single peak at 9.64 which is related to a phenolic proton (Fig. 1a). Adding a drop of D_2O to the sample, resulted in removing the phenolic hydrogen signal at 9.6 ppm and confirmed that the compound has a phenolic proton (Fig. 2b). The presence of the hydroxyl group was also confirmed by FTIR showing a related peak at 3347 cm^{-1} (Fig. 3).

The ^{1}H NMR spectrum of the product shows three multiple signals at (5.7–5.8), (6.3–6.6), (7.5–7.7), and (7.8–8.0) ppm that may be coupled with the ^{31}P nucleus. To investigate this issue, we compared the original ^{1}H NMR spectrum with its ^{1}H{^{31}P} spectrum. Results indicated removal of the small splitting caused by the phosphorous group in the above mentioned area (Fig. 4).

Procedure for the preparation of polymer **3**.

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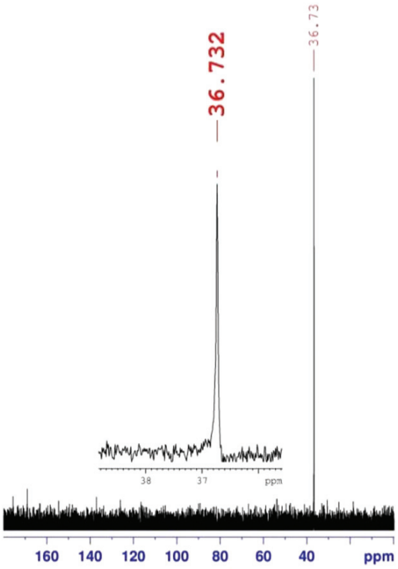

Fig. 1 ^{31}P NMR of 2-((1-((diphenylphosphino)oxy)allylidene)amino)phenol.

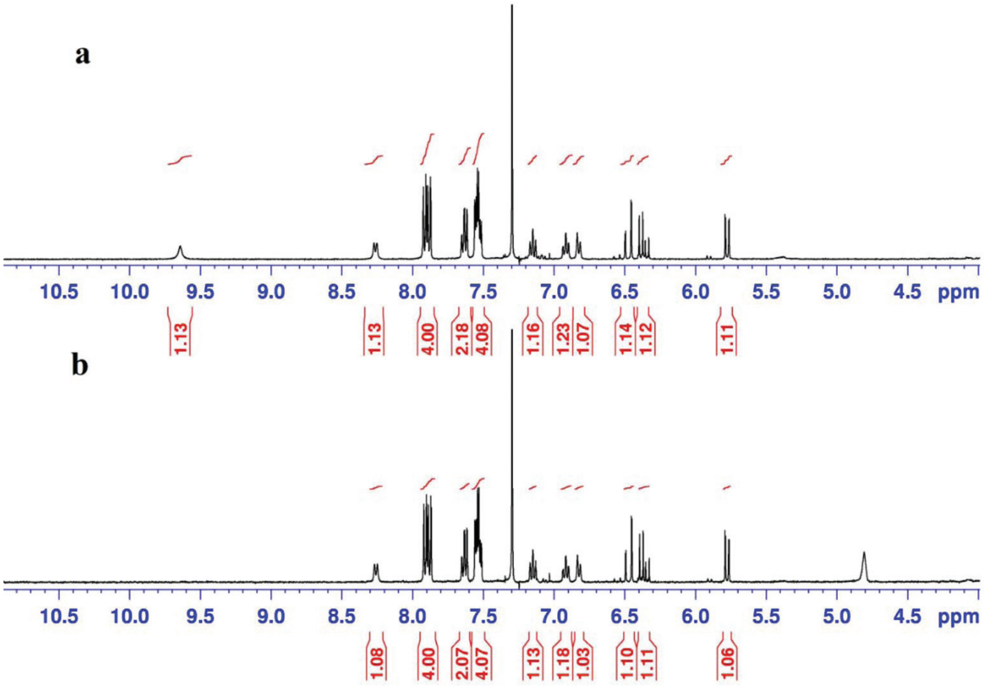

Fig. 2 ^1H NMR of 2-((1-((diphenylphosphino)oxy)allylidene)amino)phenol in $CDCl_3$ and in the presence of D_2O.

Acryloyl chloride (1 mmol, 0.08 mL) was added to a flask containing a solution of 2-aminophenol (1 mmol, 0.11 g) in dry THF (5 mL) at 0 °C under an argon atmosphere. Then, Et_3N (1 mmol, 0.14 mL) was added dropwise at 0 °C and the mixture was stirred for 2 h at room temperature. Afterwards, the reaction mixture was filtered to separate the triethylammonium chloride salt produced. To the resulting solution, chlorodiphenylphosphine (1.1 mmol, 0.2 g) and Et_3N (1 mmol, 0.14 mL) was added and the reaction was stirred for 24 h at 50 °C. Then, solvent was evaporated and the desired product was purified by plate chromatography. For polymerization of the obtained monomer, the phosphinite monomer (2) (5 mmol, 1.7 g) was dissolved in *t*-BuOH (5 mL) and AIBN (0.008 g, 0.5% w/w) was added to the mixture under argon protection. The mixture was stirred for 24 h at 70 °C under an argon atmosphere. Then, *t*-BuOH was evaporated and the obtained pale yellow solid was washed with H_2O (10 mL) and hexane (30 mL) and dried in an oven for 24 h at 80 °C.

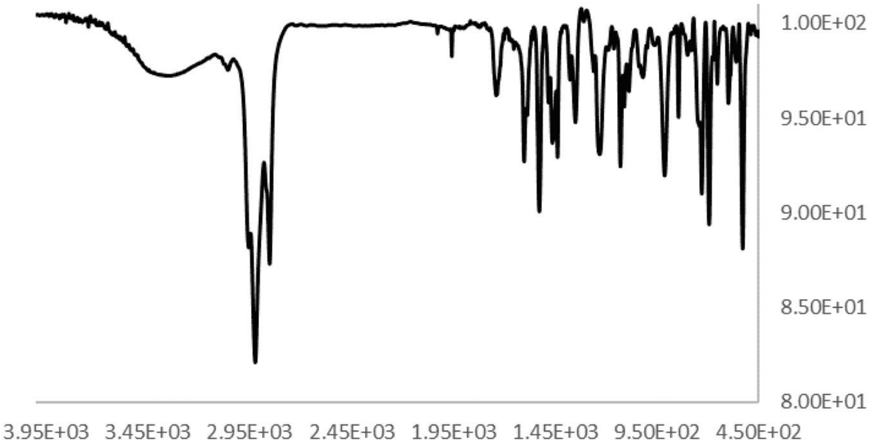

Fig. 3 FT-IR spectrum of 2-((1-((diphenylphosphino)oxy)allylidene)amino)phenol.

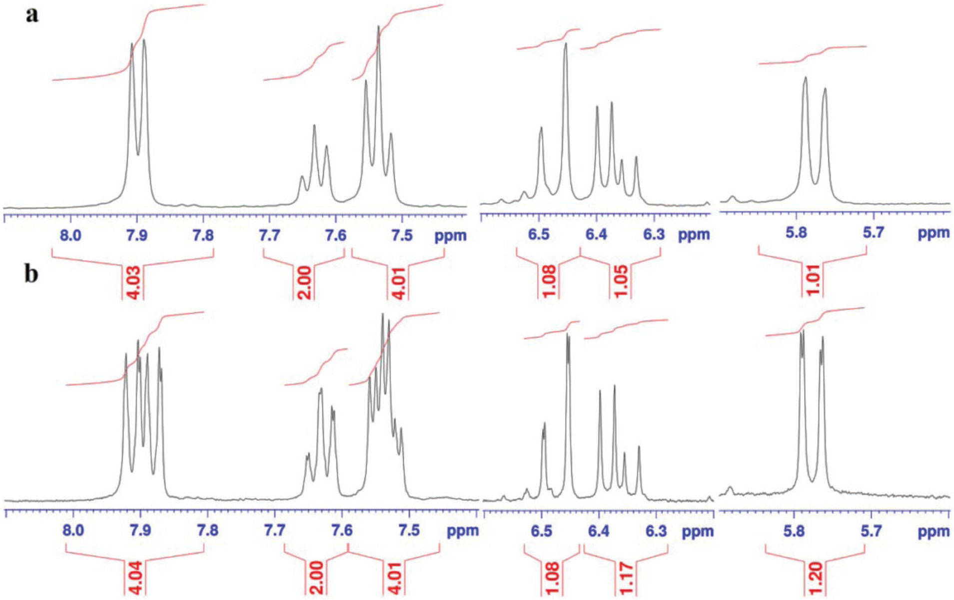

Fig. 4 Expanded ^{1}H NMR (a) and ^{1}H{^{31}P}(b) of 2-((1-((diphenylphosphino)oxy)allylidene)amino)phenol.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.