CLAIMS

1. A nozzle (50; 50B) for conveying a plasma stream from a plasma generator to a reaction chamber, said nozzle comprising:

a conduit extending between

an inlet (51A) arranged to receive said plasma stream and

an outlet (53B) arranged to fluidly couple with said reaction chamber, said plasma stream being conveyed by said conduit between said inlet and said outlet in an axial direction, characterised in that said nozzle is thermally-conductive and is arranged to receive liquid water and to use the hot temperature at which the nozzle (50) is running to convert liquid water into water vapour , said nozzle having

a plurality of apertures (54B) therein, said apertures being positioned circumferentially around at least one of said nozzle and said conduit and arranged to deliver said water vapour in said axial direction for mixing with said plasma stream (90).

2. The nozzle of claim 1, wherein said conduit is defined by a wall (52) defining said apertures therein and said apertures are arranged to deliver said water vapour into said conduit for mixing with said plasma stream when transiting therethrough.

3. The nozzle of claim 1 or 2, wherein said apertures are arranged to deliver said water vapour for mixing with said plasma stream when transiting into said reaction chamber.

4. The nozzle of any preceding claim, wherein said apertures are orientated to deliver said water vapour axially into at least one of said conduit and said reaction chamber.

5. The nozzle of any preceding claim, wherein said conduit comprises a restriction operable to generate turbulent flow to mix said water vapour with said plasma stream.

6. The nozzle of any preceding claim, wherein said inlet is arranged to receive said plasma stream together with an effluent stream.

7. A plasma abatement apparatus comprising the nozzle as claimed in any preceding claim.

8. A method for:

conveying a plasma stream from a plasma generator to a reaction chamber using a nozzle according to claims 1 to 6, said method comprises

heating liquid water with said nozzle to convert the liquid water into water vapour, and

delivering said water vapour through said plurality of apertures in said axial direction for mixing with said plasma stream.