

Developing Virtual Engineering Laboratories

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Figure 1 (to accompany the project abstract at <http://www.nottingham.ac.uk/teaching/search/title/developx784/>)

The screenshot displays a web-based interface for a virtual engineering laboratory. It is divided into three main sections:

- Left Panel (HELP - Microsoft Internet Explorer):**
 - COLOUR CODE**
 - Rig (Grey)
 - Gas (Yellow)
 - Water (Green)
 - Kerosene (Brown)
 - Air (Cyan)
 - Acid (Purple)
 - Glass column (Light Grey)
 - Ceramic column (Orange)
 - Sample and drain points (Blue)
 - NAVIGATION**
 - Keyboard**
 - MOVE = Arrow Keys
 - PITCH/YAW = Ctrl + Arrow Keys
 - PAN = Alt + Arrow Keys
 - Initial View = Page Down
 - Mouse**
 - MOVE = Left Button
 - PITCH/YAW = Middle Button
 - PAN = Right Button
 - SELECTION**
 - Mouse**
 - Info = pick 3D component
- Center Panel (VRML - SPLITTER! - Microsoft Internet Explorer):**
 - Header: **VRML-EXPLORE IN 3D**
 - Image: A 3D model of a complex chemical rig structure with various colored components (yellow, green, brown, cyan, purple, orange, blue) and a central purple spherical vessel.
 - Header: **HELP**
 - Image: A horizontal strip of small thumbnail images showing different views or components of the rig.
- Right Panel (CHEMICAL RIG COMPONENTS):**
 - Header: **CHEMICAL RIG COMPONENTS**
 - Section: **DRÄGER TUBE**
 - Image: A photograph of a Dräger tube, a type of gas detector.
 - Text: "Click image for larger view"
 - Text: "The Dräger Tube"
 - Text: "Ammonia 5/a"
 - Section: **Application Range**
 - Text: "Determination of ammonia (NH₃) in air and technical gases."
 - Text: "Measuring range 5 to 70 ppm"
 - Text: "Number of Strokes (n) 10"
 - Text: "Time of Measurement approx. 1 Minute"
 - Text: "Standard Deviation ± 10...15%"
 - Text: "Colour Change yellow - blue"
 - Text: "Extension of the Measuring Range"

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Figure 2 (to accompany the project abstract at <http://www.nottingham.ac.uk/teaching/search/title/developx784/>)

