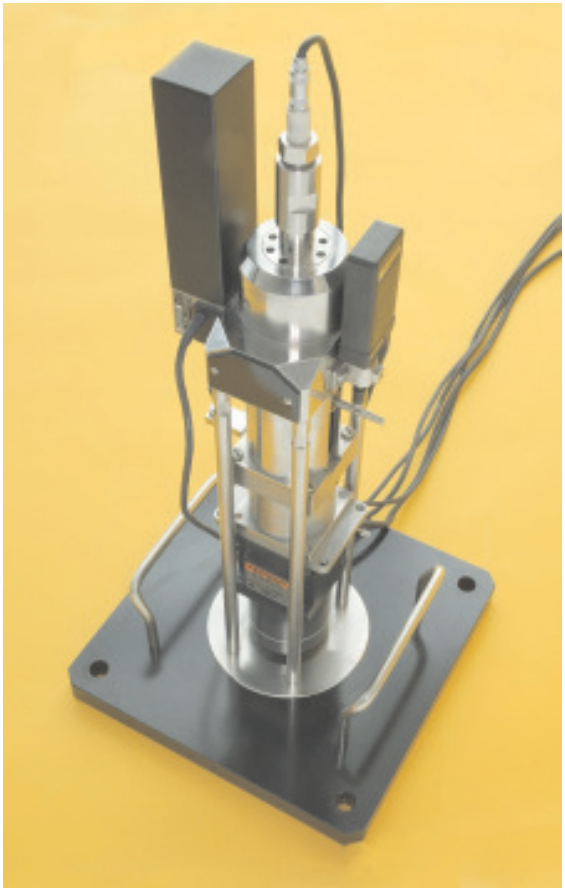

Micro PVT

For determining the physical, rheological and thermodynamic properties of fluids by measuring the change in volume of a sample under applied pressure and at different temperatures.

- ☐ Measures Pressure, Volume and Temperature
- ☐ 0.1 to 5,000 bar (72,500 psi)
- ☐ Temperature range: −10°C to +150°C
- ☐ Sample volume just 10 ml
- ☐ Lightweight: 10 kg

The MicroPVT has been developed to determine the physical, rheological and thermodynamic properties of fluids by measuring the change in volume of a sample under applied pressure. These measurements can be performed at a range of temperatures to provide the volume pressure relationship as a function of temperature.

The MicroPVT Analyser is a small sized, light and safe measuring unit. Based on the V(P) data one can calculate:

- pressure function
- relative volume
- specific volume
- Density
- derivatives aV / 0P and 0P / 0V
- compression ratio
- bulk modulus
- strain relaxation times

The fully program-driven system can carry out both infinite-slow compression (isothermic) and quick compression close to adiabatic. This makes the MicroPVT System the only system available which can cope with such small volumes of sample (less than a teaspoonful) yet provide a full sweep of physical and rheological properties.

With an operating pressure and temperature range of 0.1 to 5,000 bar and -10 to 150 °C the MicroPVT Systems capabilities become endless in the field of scientific research and in petroleum testing.

The MicroPVT will enhance its usefulness at the well site, not only because it uses such small volumes of sample, but it can provide a pressure volume curve within twenty minutes for "quick-look" PVT data.

Weighing less than 10kg and working with a sample of less than 10 mls the MicroPVT can be used in the laboratory or the well site.

The MicroPVT can be used to investigate **hydrate formation** and **paraffin content**.

Linking the MicroPVT with a second unit can provide a **high pressure capillary viscometer**.

The MicroPVT can be used to measure **wax crystallisation temperature and pressure** on live fluids and on petroleum products.

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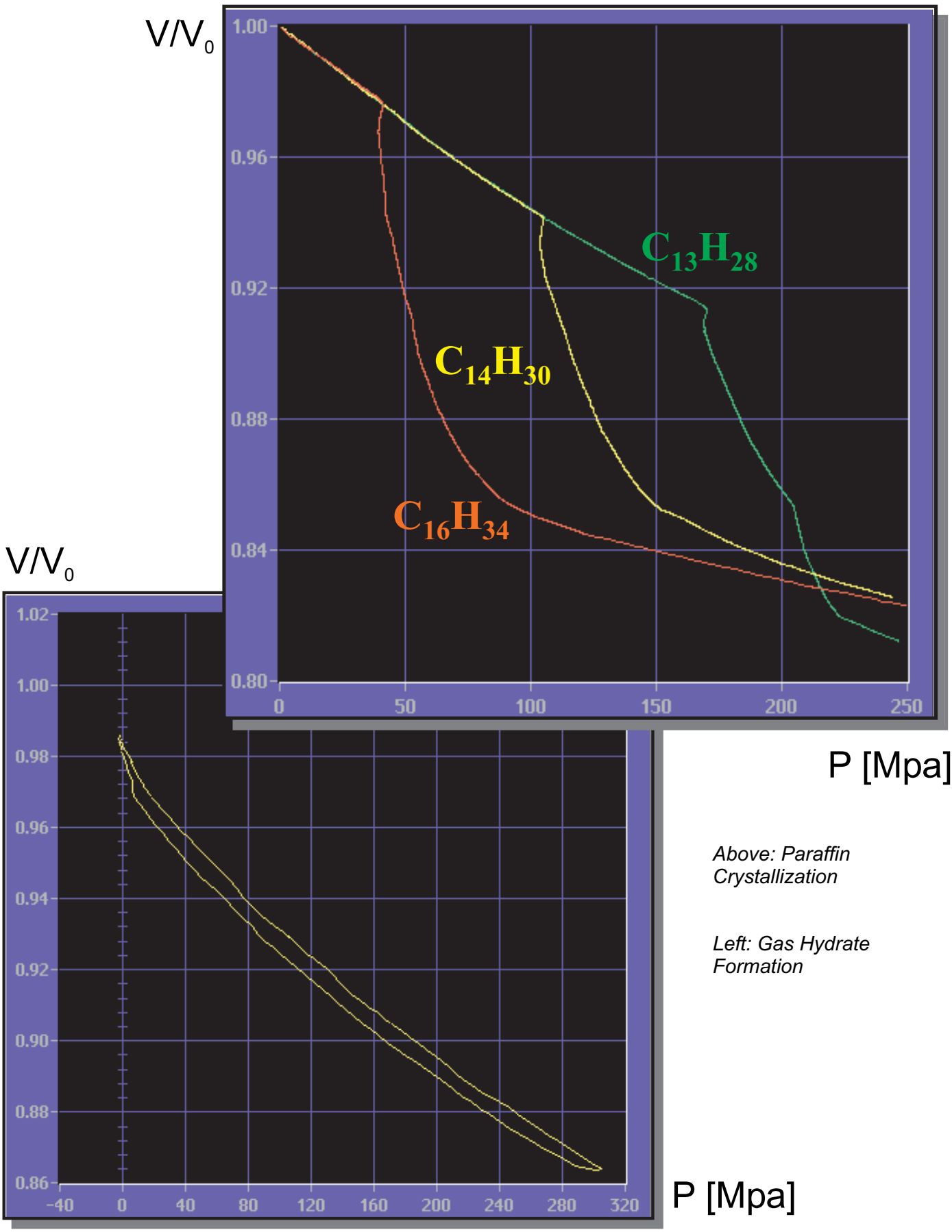

Above: Paraffin Crystallization

Left: Gas Hydrate Formation

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