

June 2019

Synthetic Chemistry Labs Benefit from Waterless Condenser

Asynt reports upon a new scientific evaluation** of their **Condensyn waterless condenser** by the Technological University Dublin (TU Dublin) in the key areas of performance versus Liebig water condensers, water savings potential and flood prevention.



Driven by concern over numerous lab flooding incidents in their synthetic chemistry labs at both undergraduate and postgraduate levels from the use of Liebig water condensers, TU Dublin were drawn to evaluate Condensyn waterless condensers.

For commonly used low-boiling solvents such as acetone and ethanol - the Condensyn was shown to provide superior performance to the water-consuming Liebig condensers.



TU Dublin

estimated over the course of an undergraduate laboratory session; a condenser would typically be used for 2 hours. This results in a total water consumption figure of at least 264 L per student pair, with each lab session catering for approximately 10 groups, and using approximately 2,640 L of water with a standard Liebig condenser unit. The report concludes that implementation of Condensyn waterless condensers will save 420,000 L of water in the undergraduate labs per

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annum, which equates to €970 of savings for TU Dublin – Tallaght Campus. They also predict even greater potential water-savings in the post-graduate research lab. where reactions often can be run for many day's duration.

Dr John Moran,

a technical officer at TU Dublin commented "These waterless Condensyn units will result in significant environmental benefits through reduced water consumption, cost savings from massively reduced water consumption and eliminating potential damage due to water leaks from standard Liebig condensers. By using the Condensyn units in the undergraduate teaching labs, our investment will be recouped in under three years, with water savings alone".

For further information

on the **Condensyn waterless condenser** please visit <https://www.asynt.com/product/asynt-condensyn-air-condenser/> or contact Asynt on +44-1638-781709 / enquiries@asynt.com.

TU Dublin (<https://www.tudublin.ie/>)

is Ireland's first [technological university](#), formed by the recent amalgamation of the [Dublin Institute of Technology](#), the [Institute of Technology, Blanchardstown](#), and [Institute of Technology, Tallaght](#). The institution has a continuous unbroken history stretching back to 1887, with the establishment of the first technical education institution in Ireland, the City of Dublin Technical Schools.

Asynt

is a leading supplier of affordable products, consumables and services for chemists in industry and academia. With staff of trained chemists - Asynt can draw upon this in-depth applications knowledge to provide a high level of customer support for its DrySyn Heating Blocks, Controlled Lab Reactors, Synthesis Tools, Evaporators, Circulators, Temperature Control Systems, Vacuum Pumps and Lab Safety Equipment.

** The scientific evaluation was run in conjunction with Lennox Laboratory Supplies (www.lennox.ie) – official Asynt distributor for Ireland.

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