

# SpaceChem



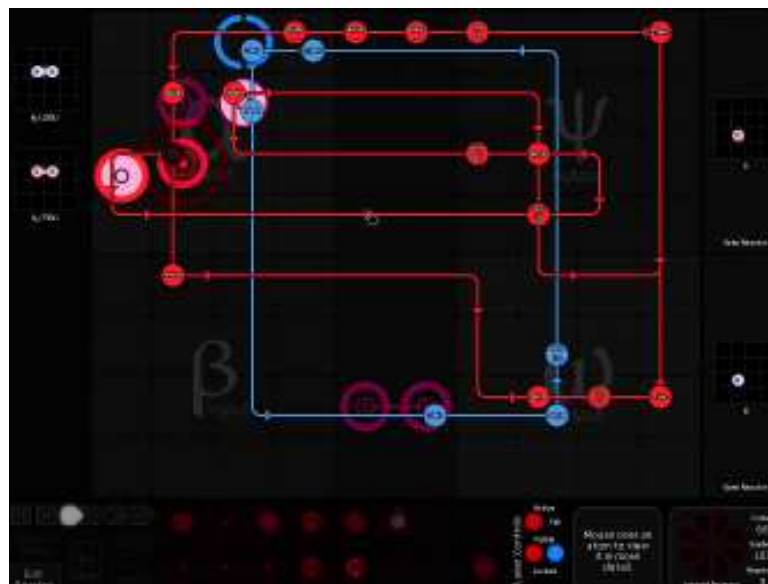
Make transitional chemicals, shuffle atoms and play with bonds in this elemental puzzler. **Alex Cox** dons his regulation safety goggles.

## In brief...

» Well-presented puzzle game of loop alignment and component shuffling. See also: *Atomix*, *Pathological*.

Some people write code for fun, and there's a reason why: designing and refining loops is more than just a business exercise – it's an art form. *SpaceChem*, ostensibly a game about shuffling component atoms around and forming them into complex chemicals, is the most blatant programming allegory we've ever seen in gaming. It doesn't just hint at programming conventions, it grabs them, paints them neon and wraps them into a puzzle game so satisfyingly deep, complex and arty that the mere act of playing it makes you proud that you even tried. We'd go as far as to suggest that a couple of weeks with *SpaceChem* could realistically turn you into a better, more logical programmer: not bad for a mere puzzle game.

Your first few assignments as a rookie in the *SpaceChem* corporation are pretty basic. You'll use the game's pair of coloured circuits to conjure up, say, a couple of hydrogen atoms from



» Follow this (working) circuit with your eyes, beginning with the red 'start' node (top-right). Stare hard enough and you'll understand how *SpaceChem* works.

## “Writing tighter code in SpaceChem does wonders for the ego.”

one input, an oxygen atom from another, and combine them before spitting them out of an output node. During your early runs, you'll teach yourself – with just the barest assistance from the game's tutorials – how to trigger inputs, synchronise the paths, grab and drop atoms, and

avoid clashes between your inevitably intersecting loops.

Then, once you've finished your task, there's a kick in the crotch: a graph showing how efficiently others have managed to do the same thing. Thought your loops were tight? Psh, some other engineer has managed it in half the clock cycles, using a third of the instructions. There's rarely any call for explicit efficiency in *SpaceChem*'s mission outlines (or, for that matter, much exposition beyond the well-written but ultimately separate story of the insanity of milling chemicals in space), but falling behind other humans takes a chunk out of your pride. As with programming, writing tighter code in *SpaceChem* does wonders for the ego.

a carefully manicured package. Its graphics are neat and functional, its atmospheric music brilliantly composed and the escalating level of challenge presents a near-perfect learning curve. For a puzzle game, its uniquely intellectual nature puts it in a sub-category of its own.

The only real drawback is the loneliness: family and friends will look on with bemusement at your intricate creations, just as they would a tightly knit Python loop. It doesn't matter how proud you are of your abilities – only fellow engineers will understand. **LXF**

## LINUX FORMAT Verdict

### SpaceChem 1006

**Developer:** Zachtronics Industries  
**Web:** [www.zachtronicsindustries.com](http://www.zachtronicsindustries.com)  
**Price:** \$15 (£9.50 approx)

<b>Gameplay</b>	10/10
<b>Graphics</b>	8/10
<b>Longevity</b>	10/10
<b>Value for money</b>	10/10

» Long life, balanced challenge and immense satisfaction. What more could you ask of a puzzle game?

**Rating 10/10**

## Features at a glance



### Empty space

On the surface, your job looks simple: one chemical pipe in, one pipe out.



### Reactor town

In reality, it takes three reactors working in harmony. Or fewer...

## Chemical reaction

Later challenges see you receiving multiple chemicals from a single input, using several reactors to fashion many complex chemicals from a number of sources, or using your gas-routing skills in a tower defence-style setting. These difficult concepts mean you can't just wade into a new level; there's thinking, and serious planning, to be done.

*SpaceChem*, in short, is brilliant. It presents an exquisite challenge in