

# Recipe 2.1.1. Building molecule expression

## Table of contents

1 Problem.....	2
2 Solution.....	2
3 Discussion.....	2
4 See Also.....	2

## 1. Problem

You want to create new molecules from expression.

## 2. Solution

ChemicalFacade provide a way to create a molecule from expression of others molecule or formulae:

```
import org.expsy.jpl.core.mol.chem.ChemicalFacade;

Molecule molecule =
    ChemicalFacade.newMolecularExpressionBuilder()
        .plus("CH3").plus("NH4").build();
// CH7N
System.out.println(molecule);

Molecule otherMolecule =
    ChemicalFacade.newMolecularExpressionBuilder()
        .plus(molecule).plus("NH4").build();
// CH11N2
System.out.println(otherMolecule);

Molecule sameFirstMolecule =
    ChemicalFacade.newMolecularExpressionBuilder()
        .plus(otherMolecule).minus("NH4").build();
// CH7N
System.out.println(sameFirstMolecule);

Assert.assertTrue(molecule.equals(sameFirstMolecule));
```

## 3. Discussion

## 4. See Also