

Appeal to Pope Francis

To the Holy Father, Pope Francis,

As scientists and professionals involved with waste management and attending the XXI IUPAC Conference of the Committee on Chemical Research Applied to World Needs (www.iupac-rome2016.it) held in Rome April 6-8, we wish to thank You for the statements in Your recent Encyclical 'Laudato Si' which deal with fighting poverty in the developing world and fighting overconsumption and lack of sustainability in the developed world. We further support Your call for our countries to move towards a circular economy.

The lack of a circular economy becomes most visible when we observe the massive quantities of waste we produce and huge waste of resources and employment opportunities this represents. There is no question in our minds that the vast majority of people around the world are in favor of waste reduction, reuse, recycling and composting. However, the wrinkle comes when we look at the ways we deal with the residual fraction. Here we reach a sharp divide between two different approaches. Both approaches greatly reduce the flow of this material to landfills but in very different ways. One approach seeks to destroy or incinerate this fraction (i.e. make it disappear); the other would separate and study this discarded material (i.e. make it visible) and seek ways to eliminate its production with better industrial design. We identify with this latter approach.

We would like to see our communities saying to industry, "if we can't reuse, recycle or compost these products and packaging, industry shouldn't be making them." In support of this we would like to see the most creative minds in society, in our universities and in industry challenged to "design waste out of our system." In essence we need to add a fourth R (Re-design) to the familiar "3 R's" of "Reduce, Reuse and Recycle". Re-design underlines the need to combine both community responsibility (the 3R's) with industrial responsibility (Re-design) in this movement towards Zero Waste. In this movement towards re-design we see a very special role in the application of Green chemistry, which would use natural materials (including agricultural waste products) as starting materials in chemical manufacture to replace the dwindling supply of fossil fuels. We believe that the harnessing of our most creative minds could reduce the use of toxic and persistent chemicals and re-design one-way packaging and throwaway products. We believe that such efforts will produce three dividends: a) Locally, it will move our communities closer to Zero Waste; b) Nationally, it will move our countries closer to a circular economy and c) Globally it will move our planet closer to sustainability.

So Holy Father we request that You use Your inspired voice to challenge our scientists, engineers and industrial designers to lend their skills to help achieve zero waste. We also would ask You to speak out against the building of any more incinerators in Italy and worldwide. We ask this to ensure that the world moves in the direction You outlined in Your encyclical and is not side-tracked by this wasteful technology.

This is particularly true in countries like India, Brazil, Colombia, and others where millions of poverty-stricken families are earning a living from recovering discarded resources, which would be devoured by these machines. These people can now collect recyclables and organics door-to-door in government recognized co-operatives. This not only gives these people respect and safer working conditions but also means that their children can get an education.