Paul Olivier

Colleges attended and degrees:
M.A. Religious Studies, magna cum laude, 1973, Faculty of Theology, Louvain, Belgium
PH.D. Religious Studies, summa cum laude, 1992, Faculty of Theology, Louvain, Belgium
Professional positions:
Director and president of Braem Mineral Separation NV (Belgium) 1987-1993
Director and president of Engineering, Separation and Recycling NV (Belgium) 1993-1996
Director and President of E.S.R. Ltd. Co. (USA) 1996 to 2011
Author:
The Universe is One, Towards a Theory of Knowledge and Life, University Press of America, with Foreword by Isabelle Stengers: ISBN 0-7618-1437-X
Patents:

- Heavy media separation process and apparatus therefor November 23, 1993: US 5263590
- System for treating solid particles in a medium March 5, 1996: US 5495949
- Device and method for the continuous treatment of waste by means of fly larvae. June 1998: US 5759224
- System and process for separating and recovering/recycling solid wastes and waste streams. February 2000: US 6024226
- Method for bio-conversion of putrescent wastes May 21, 2002: US 6391620
- Method and apparatus for bio-conversion of putrescent wastes. November 2002: US 20020177219
- Apparatus for bio-conversion of putrescent wastes June 17, 2003: US 6579713
- Disposal apparatus and method for efficiently bio-converting putrescent wastes August 24, 2004: US6780637

Paul Olivier began his career in mineral preparation in 1981, and he sold throughout the world more than 50 separators for the reclamation of abandoned mine lands. In 1986 he invented a unique bi-directional dense medium separator which was first applied to the separation of a variety of root vegetables. The accuracy of separation here was so noteworthy that it drew the attention of the plastic and non-ferrous metal recycling industries.

In 1990 the first of eight large automobile and industrial waste recycling centers was set up. This technology was not only used to recycle non-ferrous metals, but it was also used to prepare an organic stream clean enough to be used as an alternative fuel in cement kilns. The largest recycling companies in Western Europe, - NV Galloo, CFF Recycling and GDE Guy Dauphin Environnement - have all bought this unique dense medium process. He later set up in 1997 a 25-million US dollars separation facility at Chaparral Steel in Midlothian, Texas.

In 1995 several trials were conducted in Belgium on 30,000 tons of municipal solid waste free of food waste, and once again, the results were noteworthy. A trash bin free of food waste separated with roughly the same accuracy as automobile and industrial waste. But the problem of what to do with source-separated food waste remained.

In 1997 while visiting his sister in Louisiana, Olivier saw a compost bin that she had set up in her garden. There he saw thousands of larvae, some as long as 25 mm, eating food waste and reducing it to almost nothing within a period of just a few hours. These larvae were later identified as larvae of the black

soldier fly, and when Olivier understood their migratory behavior in their mature prepupal form, he set about designing several types of bins to exploit this behavior.

In 2002 he invented the round bioconversion unit commonly referred to as a biopod. This device enables mature larvae to neatly self-harvest into a bucket without any mechanical or human intervention.

In 2009 Olivier began designing top-lit updraft gasifiers for the gasification of rice hulls, coffee bean husks, and other types of agricultural biomass. His designs have focused on placing this technology in the hands of households and small commercial enterprises.

In Vietnam Olivier designed and tested mesophilic storage units for source-separated biodegradable residential waste. This simple technology, in combination with scavenger recycling, makes it possible for as much as 90% of the waste currently going to landfill to be profitably recycled. He also introduced to Vietnam true thermophilic composting using the simple and inexpensive technology of a compost fleece or cover. He worked with the Hue University of Agriculture and Forestry in a program to recycle fruit and vegetable waste by means of lactic acid fermentation.

Since most of rural Vietnam is not connected to sewage treatments plants, he is promoting the use of urine-diverting toilets. He is also developing several methods to extract nutrients from human urine. He is setting up sites where pig farmers can recycle pig waste by means of larvae and red worms. This enables pig farmers to recover from this waste a significant percentage of the nutrients needed to nourish their pigs. With the additional input of fermented vegetables and vegetable waste, the pig farmer is able to operate in complete independence from feed companies.

Throughout all of his environmental endeavors, Dr. Olivier has always been self-employed. He has never been on the payroll of a company or university. He has never received grants or subsidies in the development of any of the environmental technologies he has promoted. Up until now he has always been able to utilize profits from one venture to fund research on behalf of the next. In a sense this has not been difficult achieve, for he has always viewed waste, in all of its many forms, as our single greatest resource.