Process Development of a Novel Taste Modulator

Jean-Francois BASSET*, Eric WALTHER, Herve MOSIMANN, Harvey RANDALL, Simon LINDER, Maurus MARTY

*Corporate R&D Division, Firmenich SA, rue de la Bergère 7, 1242 Satigny, Geneva (Switzerland) E-mail: jean-francois.basset@firmenich.com

Abstract:

A manufacturing process of a taste modulator¹ was developed containing a 4-aminoquinoline core. The discovery synthesis reported¹ suffered from major limitations in order to be manufactured in kilogram scale. To overcome the use of a large excess of tin (IV) chloride, ² a two steps strategy *via* enamine synthesis with alkyl acetoacetate and aminobenzonitrile was performed. The resulting enaminonitrile gave the desired aminoquinoline under basic condition.

- [1] Firmenich International SA US2012/41078, 2012, A1
- [2] Veronese, A. C.; Callegari, R.; Ali Salah, S., Tet. Lett., 31, 1990, 3485-3488.



Dr Jean-Francois Basset is currently a senior scientist in the R&D department of Firmenich S.A. Geneva (Switzerland). Jean-Francois obtained his Master's degree at the Ecole Nationale Supérieure de Chimie de Mulhouse (France) in 2006. He then moved to Imperial College, London to carry out his PhD studies under the supervision of Prof. A.G.M. Barrett. In 2011, he started an industrial postdoctoral position at Firmenich S.A Geneva and then in 2012 transferred to Firmenich Inc. (New Jersey) where he developed new automated high throughput screening methodologies. In 2017 he moved back to Firmenich S.A. Geneva to be part of the next generation processes team.